S(He)

by
Kari Parker

A PROJECT

submitted to

Oregon State University

University Honors College

in partial fulfillment of
the requirements for the
degree of

Honors Baccalaureate of Science in Industrial Engineering
(Honors Scholar)

Presented January 13th, 2015
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AN ABSTRACT OF THE THESIS OF

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Industries such as science, technology, engineering and mathematics (STEM), continue to employ fewer women compared to men. These professions that are traditionally considered more masculine sustain gender-imbalanced work forces and are also unattractive to women at an academic level. This thesis explores the hypothesis that performance can be a powerful instrument when used to expose the social issues surrounding women in the STEM industries. The research on this topic confirms the existing gap between genders in this industry and the benefits of closing this gap. A study is performed exploring the possible reasons for the ongoing gap as well as the symptoms of perpetuating gender inequality in STEM. In order to discover possible remedies, an additional analysis on the impact of various forms of media is documented. The results of this research inspired a potential solution in the form of a comedic monologue, in hopes of raising awareness about the current issues experienced by women studying or working in STEM.

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INTRODUCTION

A rather uncomfortable awakening

Freshman year, I walked into ME 101 at Oregon State University ready to take on everything that college could offer. When I stepped through the door of that huge lecture hall and looked around at all of the other students, I began to scope out the best seat in the house for my first lecture. Yet, as I was stood there scanning the room hoping, praying I would find a friendly face, I noticed something. I was the only woman in the room. Suddenly, I felt out of place. Checking my schedule I discovered that I was indeed in the right classroom, so I began to ascend the stairs to an open desk. As I quickly hiked to my seat, it felt like almost everyone's eyes were on me. The attention was overwhelming. It felt like half of my male classmates were eyeing me as if I were a piece of meat freshly cut off the cow hanging in the window of the butcher's shop. The other half of them looked at me as if I were a foreign species of human that they had never seen before. And this is how my college journey began.

Thankfully, I did not end up being the only woman in the class, but since there were merely three of us out of about 150 mechanical engineering students, we were forced to address every stereotypical bias a woman could possibly face. Examples of these characteristics include things like being delicate, being submissive, and being maternal. From the day we were born, society expected us to live up to these ladylike labels; however, we were blind to their existence until we found ourselves immersed in the classic "old boys club" of engineering where men dominated every situation and every encounter. Each class period brought a new experience for us, and each experience brought new challenges. As my female colleagues and I dealt with the challenges of being a significant minority, I began to see that there were a variety of options for

us to choose in order to combat these stereotypes. On one end of the spectrum was the choice to abandon all forms of femininity and try to hide in the majority of the class that comprised of men, whose cleanliness habits left much to be desired; however, at the other end of the spectrum, we were expected to flaunt our delicate female attributes and flirt our way through class. Unfortunately, another common decision was to escape these difficult choices altogether, hang up the towel and transfer to a different major. To me, this meant giving into the biases and the voices that tell us "we can't." Thankfully, I chose none of these, and I met a few other women in engineering who also chose not to surrender to the immense pressures we faced as women in such a strongly male-dominated field. As we struggled to find balance between the two extremes of either suppressing our femininity or flaunting it, we quickly became friends, bonding over the same battle. We chose to stare each stereotype in the face, grit our teeth, and prove it wrong. Though these tests of resolve have influenced my education in both positive and negative ways, I couldn't help but wonder why female engineers are still fighting these battles.

I grew up with the impression that the women who came before us had already paved the way and we could live peacefully in an equal society that valued both genders. Despite the significant progress we've made throughout history - including major struggles like women's suffrage - women are still a staggering minority in technical fields such as science, technology, engineering, and math (STEM). Why is this? What are the challenges that women face that prevent them from entering and excelling in these fields? These are the questions that drove me to explore this subject.

As society has progressed, there have been many attempts to raise awareness about women and minorities through various media, such as news articles, movies, and novels. Growing up in the theatre, I have witnessed many masterful pieces that have served to artistically

and satirically expose the struggles of women. Examples of these would be *The Taming of the Shrew* by William Shakespeare and the theatrical version of *The Scarlet Letter* by Nathanial Hawthorn. These plays are powerful tools used to reveal stark realities, such as oppressive cultures and stifling traditions that have haunted women throughout history. Theatre productions have been enjoyed by diverse audiences for centuries and have influenced many modern forms of entertainment. Due to the theatre's timeless nature and success in reaching large and varied audiences, I have chosen to use the same method in order to provoke society to continue progression on the road towards gender equality.

This thesis evolved from my own experiences and research on gender inequality, and it creatively illustrates why women are still a small fraction of the population in STEM. This research depicts the story of our struggle as women in technical industries, and the performance piece in the form of a monologue serves to offer a fictionalized representation of what we think, what we feel, and what we do in order to break free from the typecasts, the pigeon-holes, and the labels that women have worn as shackles for centuries. Because "not recognizing when it's happening means accepting: 'I am not competent.' It means believing 'I do not deserve this job.'" [1]

MOTIVATION & BACKGROUND RESEARCH

While the impetus for exploring this thesis is grounded in five years of first-hand experience as a female engineering student, there is a wealth of research that explores recent topics on gender inequality. These topics study why women are struggling specifically in technical industries as well as other male-dominated professions. Recently, there has been more public awareness about current gender issues due to increased coverage in the media through commercials and advertisements; however, despite such efforts, women continue to struggle in these fields. This thesis will explore the hypothesis that performance can be a powerful instrument when used to expose the social issues surrounding women in the STEM industries. In order to analyze the current state of these industries, two research questions were posed to guide the formulation of this thesis. First, even though society is becoming more alert to the issue of gender inequality, many do not recognize it still exists - could this be due to the subtle forms in which it manifests? Second, strong masculine traditions continue to plague STEM professions - are these traditions preventing the culture from being more welcoming to women?

Facing the Facts

While those who are not employed in male-dominated professions might not be aware of gender inequality, the gap between genders in STEM industries is currently evident. One article appropriately titled "Stemming The Tide" states that "Women comprise more than 20% of engineering school graduates, yet only 11% of practicing engineers are women, despite decades of academic, federal, and employer interventions to address this gender gap" [2]. These numbers are stark - not only is it disappointing that there are so few women graduating in engineering, but only about half of that percentage chooses to embrace the profession.

Although the reality of this gap clearly resonates with many of the women who are completing their undergraduate degrees in engineering at institutions such as Oregon State, there are others in society who have identified that gender inequality in the STEM professions has become a significant issue requiring immediate remedy. According to the President's Council of Advisors on Science and Technology, "Economic projections point to a need for approximately 1 million more STEM professionals than the U.S. will produce at the current rate over the next decade if the country is to retain its historical preeminence in science and technology" [3]. As more and more new technology is being developed, the demand for technical professionals such as engineers, computer scientists, and programmers will continue to increase.

On a purely competitive level, the disparity between genders in STEM occupations needs to be treated as a serious issue if the U.S. aims to continue to be on the edge of the evolution of technology. An article titled "More Women in Science" featured in the journal *Science* stated that "Although there have been major advances, academic institutions are still not fully utilizing the pool of women scientists they have produced" [3]. In order to attract more women to study in STEM majors and promote retention beyond academia, Oregon State University has designed and funded special initiative programs. For example, OSU has a unique department dedicated to women and minorities in engineering. Their website discusses the goals of the department to train and retain more women in the fields of STEM: "Young women and minorities have very few role models in the field of engineering…We want to connect them at an early age with people they can relate to who have become successful engineers, to illustrate in a very real way what's possible in an engineering career" [4]. Data from the OSU 2013-2014 annual report verifies that collegiate programs like these have been successful: "Since 2004, the total undergraduate population within the COE [College of Engineering] has increased 187% while

COE women have increased 248%" [5]. Despite the progress made by these and similar programs for women, their implementation is still relatively novel in academia. While further development of such programs could improve the representation of women in STEM, tackling these issues will require many, varied solutions.

A study performed by the Proceedings of the National Academy of Sciences discusses the problems surrounding the increasing demand for graduates in STEM fields, and how society can solve it: "To help close this formidable gap, the report calls for the increased training and retention of women, who are starkly underrepresented within many fields of science, especially among the professoriate" [6]. If more women choose to enter these fields and in turn train and mentor others who aspire to be just like them, then it is more likely that representation will increase and women would no longer be a minority. Peggy Drexler, a well-known author who often writes about gender issues for Forbes magazine, opened one of her recent articles by stating that "Studies show that historically women have reported a more difficult time finding mentors than men do" [7]. It is clear that professional environments need more women, especially women who will mentor other women to continue in fields such as STEM beyond academia.

By stepping back and examining the world beyond our universities, it is evident that the number of female leaders is miniscule compared to the overwhelming number of male leaders. One book discussing gender inequality in the work force that has become widely popular is *Lean In*, by Sheryl Sandberg, the COO of Facebook. She states that "the blunt truth is that men still run the world" [8], and according to the International Labor Organization, the facts indeed support her opinion - out "of 195 independent countries in the world, only 17 are led by women" [9]. These leaders are the people charged with the responsibility of guiding the world's future; children, students, and professional adults rely on them to cultivate society, yet less than 1% of

national leaders are women. What examples do women have to model their careers by if our leaders are so prominently male? Catalyst, a website dedicated to expanding opportunities for women, compiles annual statistics from *Fortune* magazine and the results repeatedly demonstrate how the business world is also suffering from a disparaging dearth of female leaders. "Women currently hold 5.2 percent of Fortune 500 CEO positions and 5.4 percent of Fortune 1000 CEO positions" [10]. While history may tell of the heroic women who pioneered gender equality and successfully infiltrated the fields that were traditionally only suitable for men, these statistics suggest there is much more work yet to be done.

The small number of female leaders is indicative of larger gender divides, including the number of women in STEM industries. Therefore, the importance of training new STEM professionals and employing their knowledge and skills in the technology industry is vital to the progression of society. The world needs more women in professional and technical industries, which is evidenced by the profitability of having more women leaders: "profits at more diverse [companies that strive to become gender-equal] companies were 56% higher" [11]. Increasing the number of female contributors in business can also help improve the bottom line - "This isn't just a problem for individual women, but for the economy as a whole… companies with the most women board directors earned, on average, a 26% higher rate of return on investment capital than those with the fewest" [11]. Unfortunately, communicating these clear advantages is no small feat. With the recent advances in communication technology (including social media, television, and the ubiquity of texting), it would seem that raising awareness about gender inequality issues should be as easy as initiating the next viral meme or video. However, the inherent complexity of gender inequality issues renders no one solution an easy fix, and women

in technical industries may find themselves threatened – not necessarily by male colleagues, but

society as a whole – for bringing gender inequality issues in technical industries to light.

Research Questions: Why are there still so few women in STEM?

As personal experience and previous research has alluded, there are still staggeringly few

women in STEM fields, and the reasons for this discrepancy are worthy of exploration. The first

possible reason that women decide not to pursue a career in a technical industry is subtle sexism

- sexism that is not overt and is not easily recognizable by women or coworkers. The

characteristics of sexism in the world today are difficult to expose because it has become so

engrained, beyond recognition, deep into the human psyche. "Subtle sex discrimination is often

not noticed because most people have internalized subtle sexist behavior as normal, natural, or

acceptable" [12]. For example, consider this scenario.

"A father and his son are in a car accident. The father is killed and the son is seriously

injured. The son is taken to the hospital where the surgeon says, 'I cannot operate, because this

boy is my son.'" [13]

Most people instinctively think the surgeon is a man. However, the solution to this brainteaser,

which normally takes people a few minutes to ponder, is that the surgeon is a woman – the boy's

mother. Sexism has become camouflaged, hiding behind what society deems to be normal

behavior. In December of last year, Rivers and Barnett, the authors of *The New Soft War on*

Women, published an article in the *LA Times* stating that "Gender bias hasn't vanished; it's just

gone underground. Stubborn stereotypes about what women can't do are operating in surprising

ways" [14].

The undetectable mechanisms of sexism today are possibly more impactful than the more blatant sexism that was commonly known in the past, as it is difficult to clearly identify the sexist behavior. In "most cases, it isn't conscious discrimination against women. It's just that the stereotypes we all have in our heads about what men and women can or can't do are incredibly deep-rooted" [14]. These biases are found deeply ingrained in both genders: "Both men and women hold biased attitudes based on old stereotypes, and they often don't even realize it. Women who are its victims often don't see it coming, and men often don't believe they are discriminating, even when they are" [11]. The subtle nature of gender inequality causes many women to puzzle over why they feel undervalued at work and wonder if they even belong in STEM industries. This could be why so many women flee these fields instead of battling what seems like everyone's natural biases against them.

Another major adversary working against the gender equality movement is the general disposition of the culture in technical industries. Studies have shown that one of the most significant reasons that prevent women from entering and remaining in STEM is the overwhelmingly masculine atmosphere common to these industries. In a recent study aimed to identify potential biases towards women in science, faculty members from research-intensive universities were selected to rate application materials of a student applying for a lab position at their university. The student being rated was randomly assigned as being either a man or a woman, but the application was otherwise identical. The results heavily favored the male applicant and baselessly discredited the female applicant. "Faculty participants rated the male applicant as significantly more competent and hireable [sic] than the (identical) female applicant" [1]. The study also indicated the gender of the faculty member did not have any effect on how they rated the student - both genders were biased against the female applicant. The study

continues to say that the "participants also selected a higher starting salary and offered more career mentoring to the male applicant" and that the "analyses indicated that the female student was less likely to be hired because she was viewed as less competent" [6].

This study paints a discouraging picture of the biases that continue against women. When they enter an industry they have to prove their worth while their male coworkers are already deemed worthy of the position. Figure 1 is a depiction of the results of this study, which clearly portrays the disparity between the ratings of the male verses the female lab student.
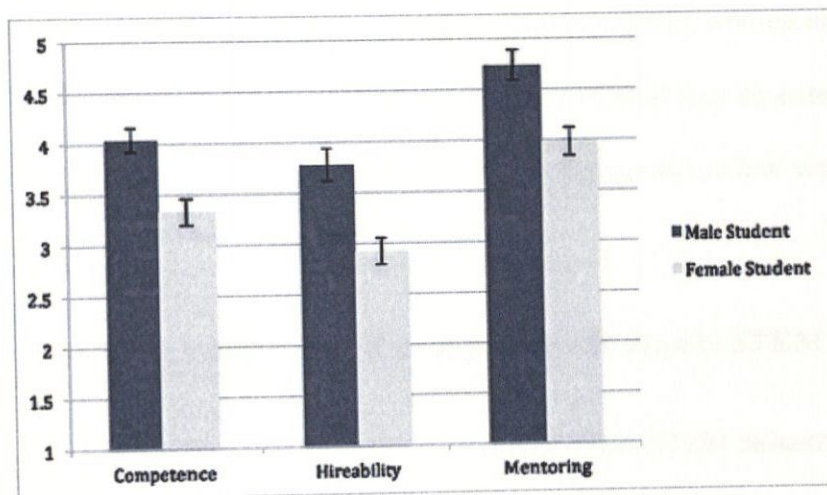

Figure 1: Discrepancy Of Male/Female Student Ratings, Moss-Racusin et al. [6]

In all three categories of competency, hire-ability, and mentoring, the female student was given a score lower than that of the male student. Studies such as this indicate that when women enter scientific or technical industries, the cards are already stacked against them. These biases have been instilled in us regardless of gender, corrupting the cultures of the STEM industries, helping to dictate the treatment women commonly receive in those professions.

Another overt factor that highlights how sexism is still present in society today is the persistent wage gap between women and men. The American Association of University Women recently reported "women in every state experience the pay gap, but some states are worse than others." In 2013, the best place for equal pay was Washington D.C., which only awarded women only 91% of the salaries paid to men. The worst state, Louisiana, only paid their women just 66% of the average male salary. The deficiencies are clear and sadly have been proven to grow as a woman ages and attempts to climb the corporate ladder [15]. These numbers do not pose an enticing motivation for women to enter the professional realm, let alone STEM fields. These are the facts: subtle sexism is still present and very difficult to recognize, women are less likely to be hired biased purely on gender, and women will be paid less even if they do enter technical industries. Given these truths, it is very much apparent why there are so few women involved in STEM fields.

Symptoms: What are the consequences of having so few Women in STEM?

Due to the overwhelmingly masculine atmosphere in the STEM industries, a rather chilly climate has been cultivated in regards to women, deterring them from entering or advancing in technical professions. A few examples of these inauspicious elements are the lack of equal pay and support for professional mothers, such as maternity leave and childcare. The article "Stemming the Tide" states that in a recent survey of over 5,500 women who had graduated in engineering, "the workplace climate was a strong factor in their decisions to not enter engineering after college or to leave the profession of engineering" [2]. This unfriendly attitude is deterring women from entering and remaining in technical industries, and is persistent in today's society.

"Stemming the Tide" strives to understand this pervasive climate and determine the root causes for it. Those who vacated the industry "left because of working conditions, too much travel, lack of advancement, or low salary" [2]. Others who chose not to enter the industry stated "it was because of their perceptions of engineering as being inflexible or the engineering workplace culture as being non-supportive of women" [2]. It is not likely that women are mistaken in this regard and are simply sensitive to social cues; The results of studies such as the aforementioned lab student hiring study illustrates that this is not the case, and it is instead a larger, much more significant cultural problem. Women who are already active members in STEM fields have found that even the academic world nurtures the biases against women. This is demonstrated by not providing women with "the opportunity to become engineering faculty because it is presumed that women will not have the time to serve as effective members of the professoriate given their family obligations" [16]. The research expresses many different possible reasons women are not motivated to become engineers, scientists, or mathematicians because the culture in these majors and professions are not accommodating and often are unfriendly towards women.

Another common consequence of having so few women in STEM is the prevalence of what is called "superwoman syndrome," where women, in response to both subtle and overt sexism, will attempt to be exemplary in all facets of their daily lives. Ward discusses in her article about female faculty in male-dominated fields that many women experience the feeling of being burnt out because they take on too many responsibilities and consequently leave their engineering professions as a result of assuming the superwoman role [17]. The "myth of doing it all" is one way many women deal with the sexist labels that stress them to excel in all areas of their lives in order to be seen as valuable assets to society [8]. When a woman succumbs to the

pressure and attempts to master the role of both technical engineer who excels at work and dutiful wife who performs all the traditional female duties of housework and childcare, she has legitimate grounds for feeling exhausted. It is interesting to note that this desire to be a "superwoman" occurs despite a man's lack of obligation to excel in these areas.

The superwoman syndrome is only one symptom caused by a larger society that continues to perpetuate gender inequality. It promotes subtle sexism because it encourages women in STEM to just be diligent and embrace all the biases towards their role as women on top of all the labels forced upon them by the technical industry. Therefore, a woman suffering from this syndrome and the people around her may not be able recognize the cause for her fatigue because she has been taught to work hard and persevere in the hope that she will be successful.

On the other end of the spectrum, some women choose to disguise their femininity and assimilate deep into the stereotypical culture of their technical professions. "The boys club" is a term that is often used to describe any chauvinistic group of men who work exclusively with each other and actively discriminate against interests that threaten their own. Unfortunately, women have faced difficult challenges resulting from being omitted from these imposing organizations. In order to combat these challenges and break into the so called "boys club", many women have tried to disguise themselves, consciously or otherwise, with more stereotypical masculine traits. The research on current gender issues in STEM substantiates this argument by analyzing women who have been masquerading as "one of the boys," but short of being born a man, are rarely awarded for these efforts. Another woman quoted in the article "Stemming the Tide" stated how she felt about the pressures to act more masculine: "At my last engineering job, women were fed up with the culture: arrogant, inflexible, completely money-

driven, sometimes unethical, and intolerant of differences in values and priorities. I felt alienated, in spite of spending my whole career TRYING TO ACT LIKE A MAN" [2]. Smart women who have been in the technical industry have noticed that being a man has advantages because men naturally - based on our cultural biases - seem more suitable for the job and therefore gain favor in those positions. In order to combat these stereotypes and advance in the STEM professions "women have come to identify more with masculine personality traits and society has come to view women of today and tomorrow as more masculine than the women of the past" [18].

However, a conflict arises when "women are still expected to fulfill prescriptions of feminine niceness" [18]. Now society expects technical women to assume all of the character traits of a man *and* a woman in order to be successful, which consequently causes women to either be perpetually perplexed by these contradictions or flee these conflicts and leave the industry. While some women choose to dress up in the persona of a technical man in order to overcome the biases that prevent them from being accepted, others take it a step further and aggressively compete with their male coworkers to prove themselves. One recent female engineering graduate volunteered that "You have to be a bit TOUGHER when you are around the guys, you feel you have to do better than them to be accepted" [2]. Some women in STEM try to mimic stereotypically boyish behaviors – such as argumentativeness, cockiness, interest in proving strength - in order to be accepted as "one of the boys." However, the denial of feminine characteristics and assumption of male traits s not a long-term solution for equalizing gender representation in STEM fields, as this behavior fundamentally undermines the female gender.

The subtle style of sexism today and the lack of fair opportunities have constructed a formidable psychological blockade preventing women from permeating STEM industries. Consequently, the symptoms that have materialized due to this barrier include hostile

environments where women have to choose to either abandon all signs of femininity and act like a man, or succumb to the pressure of "doing it all" and embrace the impossible life of a superwoman. These should not be a woman's only options. In order to transform hostility into acceptance and support, a significant cultural shift must happen within STEM fields. So how can a woman embrace her femininity, refuse to be a superwoman, and thrive in the technical world? One answer could be raising awareness about gender issues in these fields and revealing why it is so persistent. This heightened awareness will spotlight the ways in which sexism is manifested, and will enable a discussion where women in technical industries find strength in knowing they are not alone. While there are many different means through which to tackle this problem, this work will explore the potential impact of a performance piece as a tool for raising awareness and ultimately eliminating gender inequality in STEM industries.

Methodology – Performance as a Tool for Social Change

Throughout history, the means by which humans share information has evolved significantly, incorporating the needs and style of the present economy. Today, technology has made the distribution of information to most of the world relatively easy, and the average person has near-unfettered access to massive amounts of new information. However, information meant to influence larger societal issues must be not only widely disseminated, but also must be successful in persuading its recipients. Successful communication can be quantified and analyzed to determine the impact that the information has on the public. Impact can be measured through multiple different metrics, from the number of views a page has on the internet, to the number of copies sold. Commercials, books, plays, and monologues are all creative ways to spread information, and before a performance piece could be presented as an option to motivate

bridging the gender gap in the STEM industries, an analysis was performed on the works of other activists in this field, and the impact of these pieces.

Commercials and advertisements may be one of the best tools a company can use to communicate with their audience. Whether they are trying to exploit the audience by intriguing their inner desires in order to entice them to purchase new products, or simply promoting an idea, the marketing industry holds a powerful position in today's culture - that is why their messages can be so effective. One example of a new advertisement that has harnessed current gender issues to sell a product is the "Princess Machine" by Goldieblox. This upbeat commercial portrays little girls building a Rube Goldberg machine (with their pink tools), and has almost 2.5 million hits. This commercial was a huge success and even won a spot on the advertisement list in the 48th annual Super Bowl, which, according to the NFL, was televised to a record-breaking average of 111.5 million people. A column in the Professional Engineering magazine analyzed the commercial by Goldieblox and other toy retailers alike saying that as a nation the U.S. needs to "stop limiting children's interests by promoting some toys as only suitable for girls, and others only for boys" [19]. Children can be impressionable, and as they are typically bombarded with messages that only some toys are appropriate for one gender and not the other, there is sufficient reasoning to believe that those attitudes will only fester and grow as the child becomes an adult. Thankfully, Goldieblox is not the only company who is trying to stop this negative cycle.

In the stages beyond childhood, targeting women from adolescence to late adulthood, a popular commercial by Pantene candidly addresses the labels society applies to professional women and the double-standards they often fall victim to. The first commercial in their campaign titled "#shinestrong" illustrates a man acting in a position of authority in the office calling him the appropriate and respected label as "boss", but when a woman fades into the same

exact scenario she is labeled, with a derogatory tone, as "bossy." As the commercial continues to display men and women in identical situations with contradicting labels, the audience can easily forget they are watching a commercial about shampoo.

Due to the success of this commercial (it currently has almost 47 million YouTube views), Pantene created another commercial called "Not Sorry" which demonstrates the many different situations where women are constantly apologizing. Situations such as contributing ideas in meetings, asking for help at home, or making room for others in public, seem to be common circumstances where women really have no need to apologize for anything but continue, unconsciously, to do so. To this date, this commercial has been hugely impactful, with almost 16 million views and growing. As these commercials become more popular, the advertisement industry impacts more and more people each day. Although these commercials may be frank, their direct approach to society's biases towards women is a powerful apparatus which divulges the stereotypes that plague many girls who desire to be "techy" and many women who function in the professional realm.

Another more classic form of communication is through books and novels. These can be either abstract about the issues their authors are discussing or quite direct, but throughout history books have had a powerful impact on how humanity formulates opinions. Sandberg, the author of *Lean In*, is just one example of a modern woman who was fed up with the discrimination in her profession and chose to speak out, saying "I believe that if more women lean in, we can change the power structure of our world and expand opportunities for all" [8]. In order to find a solution, we as a society need to be aware that gender inequality has not been completely remedied by historical feats and that it still readily exists today. *Lean In* has sold over 1.6 million copies and quickly rose to #1 on the New York Times Best Seller list where it stayed for over a

year [20]. Sandberg's instant success is likely due to her revolutionary statements on the gender gap in professional settings. Sandberg eloquently reveals the stark reality of sexism today, strips it down to the core of its inner workings in the human mind, and leaves it hanging bare out in the open for everyone to see. Sandberg went on to write a special edition of *Lean in for Graduates,* which incorporates "a dozen members of the community [who] have contributed their own personal stories of overcoming obstacles – from negotiating a first salary to learning to sit at the table to conquering their fears" directed toward giving young women a leg-up in entering the workplace [20]. Sandberg and other influential authors and speakers have the power to affect popular opinion, which in turn affect the progression of society, and when this power is exercised properly, change is possible.

Another influential author who has shaped the way people view current gender issues is Dr. Valerie Young. In her latest book, titled *The Secret Thoughts of Successful Women,* Valerie discusses how many people, especially women who are well accomplished in the professional world, experience insecurities about their success and often wonder if they really deserve everything they have worked for. Dr. Young is an internationally known speaker and her book has won many awards including citations in well-known publications such as *The Wall Street Journal, The Oprah Magazine,* and even *The Oregonian.* However, the kind of victories her book has achieved are defined by the readers that she has affected: "In the few short months since *The Secret Thoughts of Successful Women* has been out I've received dozens of emails from people telling me what a difference the book has made in their lives" [21]. A review by Susan Pinker who is a psychologist and celebrated author stated that Young's novel is a "calm measured book that quells that nagging inner voice that says you're not good enough, smart enough, or prepared enough to succeed" [21]. Motivating women to lean in and shrug off the

imposter syndrome, authors such as Young and Sandberg have begun to expose modern sexism and offer solutions for those whose lives and careers are suffering from the common symptoms sexism breeds.

Although commercials and books are both powerful tools that can and do influence social change, a more personal exploration of this information lies within the intimate experience of live performance. Throughout history, many playwrights have harnessed the power of the theatre, and their aims often have been to present a social critique. One example of this is *Pygmalion* by Robert Shaw. This play has had many different adaptations since it was written in 1912, but the most famous version of it is the Broadway musical and Hollywood film, *My Fair Lady* [23]. *Pygmalion* was based on a story from ancient Greek mythology, where an artist fell in love with the sculpture he created of a beautiful woman, and after fervently praying to the goddess Aphrodite, the sculpture came to life [23]. Shaw's version of this story brings to light the spunky individuality of a woman named Eliza while exploiting her dependence on the men who culturally rule her world, through the character Mr. Higgins. "Like Pygmalion, Higgins congratulates himself on "creating" a woman, but unlike the lovelorn sculptor, he refuses to treat her any better than he treats anyone else" [23]. The impact this play has had on the public is spread out over a century through theatrical, musical, and film adaptations, with Eliza's amusing story of enduring and ultimately overcoming a male-oppressed society entertaining and provoking attention to this day. The Internet Broadway Database lists that it has been recreated almost once every decade with hundreds of performances as the original version and thousands of performances as *My Fair Lady* [24].

Another famous theatrical piece that does not necessarily discuss the issues of gender equality, but still uses performance to present an impactful social critique is *The Laramie Project*

by Moisés Kaufman. This play is a compilation of interviews conducted in Laramie, Wyoming after the brutal death of a homosexual boy named Matthew Sheppard. Kaufman's work was awarded a slot in *Time Magazine's* Top Ten Plays of the year. Northwestern University recently recreated this drama and their website describes it as "the breadth of the community's reactions to the crime is crafted into a fascinating theatrical collage that explores the depths to which humanity can sink and the heights of compassion of which we are capable" [25]. The influence this play has had on the progression of society is immeasurable, but the mother of the victim, Judy Sheppard, wrote in a letter to Northwestern University how she believes that "plays are invaluable educational pieces about how hate impacts society." She continues to acknowledge that the more people who perform this play, the more people will see it and be affected by it. "Each individual company that produces these pieces brings a fresh perspective to the issues and more minds and voices to the discussion" [26]. Even Kaufman, himself, detailed a letter to Northwestern University, explaining that "your generation has a real, tangible opportunity to change things...by doing this play, you... are making a statement against oppression and so many things that are wrong with our culture" [27]. This is one important purpose of the theatre: to correct the moral compass of society and bring about change by creatively exposing the social issues surrounding those who are oppressed.

Monologues, as defined by the *Princeton Encyclopedia of Poetry and Poetics*, are "the conception of one person speaking alone, who may or may not have an audience" [28]. They are types of plays or parts of plays where one person is the focus of the entire production or for a significant portion of the piece. Monologues can be exceptionally compelling to the audience because it allows the author to expose the raw emotions of a character, particularly those suffering from social oppression. One example of this is the final speech made by Kate (the

eponymous "shrew"), at the end of Shakespeare's *Taming of the Shrew.* Since the early 1900's

this play has been performed over 200 times across the U.S [29]. It has been recreated into many

different types of performances including the 1948 musical *Kiss Me Kate* by Bella and Sam

Spewack, which was performed by the theatrical couple Lynn Fontanne and Alfred Lunt [29]. A

more modern version of Shakespeare's play is the popular movie "10 Things I Hate About You"

[30]. The impact of this play is still growing to this day, and Kate's final monologue has become

an influential component of this thesis. Kate's overly submissive final speech has raised

controversy and motivated many to produce the play in order to explore what her true intentions

are. She appears to no longer be a shrew and has indeed transformed into the stereotypical

subservient, doting woman. Many see Kate's speech as a surrender to her master Petruchio while

others say that "her final speech is 'a statement, not on behalf of how great men are, but on

behalf of our inability to change things'" [29]. Other productions of this play have dramatized it

so much that they have turned "play into 'social warfare'" [29]. As critics and audiences alike

will continue to debate the underlying meaning of Kate's final monologue, the public is

encouraged to further ponder the significant issues in the play regarding gender thus continuing

to spread their impact.

The Vagina Monologues by Eve Ensler is another example of how impactful monologues

can be. These monologues are based on a collection of interviews from women about their

private parts, and they explore the social implications of women's bodies in a crass and

humorous way. *The New York Times* said Ensler's monologues are "probably the most important

piece of political theatre in the last decade" [31]. In a review by Charles Isherwood from *Variety*

magazine, he described his convictions about Ensler's monologues as "An indelible theatrical

experience, which is both a work of art an [sic] an incisive piece of cultural history, a poem and a

polemic, a performance and a balm and a benediction" [32]. In a book titled *Giving Faithful Testimony: Theatrical Performance, Mormon Women's Sexuality* the author, Peterfeso, discusses the impact that Ensler's play has specifically had on Utah Valley University. "Ensler's play helps open discussion and invites women to talk about experiences they would otherwise keep silent. Communicating through talking and discussing fuels the…goal of raising awareness" [33]. The production of this play at Utah Valley State College - a campus of about 23,000 people - began to cause political conflict, but right before the play opened on campus in 2004 *The College Times* featured the President of the Gender Studies Club stating the consequences of not discussing these issues - "The less we talk about these issues as a community, the more difficult it is for individuals to talk about their own experiences" [33]. *The Vagina Monologues* have had a significant impact on society are deeply influential to women who have suffered and are still suffering oppression.

Every one of these commercials, novels, plays, and monologues have captivated their audience in meaningful ways. Their success can be measured by the tangible impact they each have had on society (page views, copies sold, and number of performances), and their authors have been praised for their daring attempts to enact social change. Due to the triumphs that these types of media have obtained, awareness about social issues can be seen as the initiating step to achieve social change. In order to raise awareness and enact a revolution to combat the biases against women in STEM, a performance piece related to women in engineering was created for the conclusion of this thesis.

CHARACTER ANALYSIS

So we indeed have a problem. How do we fix it?

On the following pages of this thesis, you will find a satirical monologue that utilizes two characters to create a split personality inside the protagonist. All though a monologue traditionally features one single character, this split personality serves to illustrate the struggle that women can fall victim to inside their own psyches as they battle the stereotypes of being a woman working in an overwhelmingly masculine world. The title of the monologue, *S(He)*, provides the audience with the first hint about the main character(s) of the play, and it portrays the first glimpse of the hidden masculine features that reside in many feminine labels.

Meet her

Our female protagonist is a spunky high achiever whose current singular focus is to get a job at the top engineering company in her hometown. She has battled through years of academia, overcoming the challenges and biases previously discussed in this work, and she cannot wait to enter the STEM industry and make something of herself. She has prepared herself to be in the best position possible by interning with the company for which she is interviewing during the previous summer and by taking on many diverse and important projects. She tries to be confident in her abilities; however, she is always afraid that she did not quite do enough, did not quite spend enough time, and did not quite do her best. As the monologue plays out, she even entertains the thought that maybe she does not even belong there, maybe she has just been faking it this whole time, or maybe she should even abandon her femininity. While it may seem that she is following the trend of any recent college grad, her aspirations transcend beyond the menial desires of the average twenty-something year old (such as spending money and partying). As a

female engineering student, she is poised to take on all the professional world has to offer and she is eager to show all of her newly honed skills on the job. However, she has just one small problem: Him.

Meet Him

Although the male antagonist is functionally a separate character from our female antagonist, he acts as a mask she hides behind in order to be accepted by society. Influenced by the research that indicated societal pressures on technical women to be both masculine and feminine, she created him in order to feel accepted and valued. Because he inhabits the same body she does, he serves as a tool for her to get where she wants but he is not the easiest person to work with. His character was developed by my own personal experiences and the experiences shared by my colleagues. He embodies the stereotypical male engineer who has just graduated college and thinks he already has the world stashed away in his pocket. While he is exceedingly confident in himself, he often errs on the side of arrogance because he knows he already belongs in a man's world. It is his right. He is a man; therefore, he gets a free pass into the "boys club" often found in the STEM fields. Therefore he acts more carefree than she does. While this may be true, his overconfidence and his lack of social awareness becomes an issue in the face of her ambitions because they appear to be stuck together, and he knows that she needs him to survive in this world statistically dominated by men. He is the bane of her existence, but he is also the crutch she leans on in order to be accepted. His character serves to symbolize how men and women do not recognize the subtle biases in the STEM culture that work against the struggles of gender equality, and he threatens her enthusiasm by reminding her that she should abide by traditionally feminine gender roles. She has a box and she should stay in it.

S(He)

Two heads are better than one.

Scene 1

In walks a man/woman around the age of 25, He/She looks as if He/She has been split in two.

He/She has a stereotypical girly side but the other is very masculine and each function as

separate characters throughout the play. They are aware of each other and often interact with

each other but there is tangible conflict between them.

He/She also looks like He/She has just woken up. Her hair is a mess one side half in curlers and

the other His is partly matted and partly sticks straight out.

He/She looks at their phone and is suddenly alarmed:

BOTH. The interview is in an hour!

Turning to the female side of towards the audience, she runs back and forth across the stage in a

momentary panic unsure of where to start. She begins counting all of the things she must do

before the interview on her fingers.

SHE. O.K. I need to iron my shirt, make coffee, comb my hair, do my makeup, feed the fish,

review my resume, decide what shoes to wear, re-assess my talking points, brush my teeth, eat

breakfast, put on deodorant... Oh no, I am almost out of deodorant. Ok so plan B... more

perfume, wait, not too much perfume though. Wouldn't want to devastate my interviewer with the new Kardashian aroma! And gosh there was one more thing, I know I am forgetting!

She pauses tapping her foot looking frustrated. Turning to the male side of Him/her, He yawns, stretches, and slowly shuffles to the other side of the stage, He scratches his head and turns towards the female side where she was just standing and says:

HE. Woah, girl, calm yourself! We don't have thaaaat much to do before the interview, and the fish is dying anyways. But first... coffee.

He begins to make coffee like he would do every day and gets distracted by the paper for a few seconds to check how his favorite sports team is doing. Mumbling something about the Seahawks, he grabs his coffee cup and proceeds to the mid-left of the stage which will serve as the bathroom area. He rinses his face, grabs a little bit of water and runs it through his crazy hair, making it acceptable looking and sighs grabbing his coffee again.

He then turns to the female side facing the opposite way as if walking through the mirror in the middle of the stage. She is still fussing about everything. She is trying to do too many things at once; she attempts to drink coffee while brushing her hair all the while glancing back and forth at her resume reviewing certain things she begins to talk to the male side opposite the mirror:

SHE. How can you be so so so... chill?! The interview is in like 45 minutes!!! I swear if you make us late for this interview I will rip you...

She pauses thinking of all the evil things she might do to him if they are late… she checks their watch and quickly snaps out of her plotting fantasy.

SHE. O.K. so I have to remember ALL the things I did on my internship. I can talk about that coding project. Or should I talk about my leadership position on the soccer team? I wonder if they will ask me about my sales experience. I doubt it; they probably wouldn't want to hear about silly stuff like that. (*Pauses and thinks of something very frustrating looking at his side of the mirror*) Oh geeze I really hope they don't ask about that awkward situation we got ourselves into last summer. I'm not trying to complain, but you literally stole most of my work on the capitol project last summer.

HE. Oh, brother not this again. (*Rolls eyes*)

SHE. I just still can't believe you got away with it.

HE. Seriously? Stop whining about it. Our boss would have never given us funding for that project if I hadn't borrowed your research and pitched it to him myself. He always thinks your ideas are too big, too ideal, but mine are more practical.

SHE. But it was MY research, MY work, MY document, that you snatched and put your own name on it. I know we were successful with it because our boss likes you better, but it still feels like I got jipped.

He scoffs sipping his coffee and responds.

HE. Who cares? It's not like you put THAT much work into it. And we got the funding anyways, I don't see the big deal.

She chooses to let it go and ignores him while doing her makeup. As she puts on her mascara she suddenly notices she has a huge pimple.

SHE. You have got to be kidding me. A pimple? Now? Of all the times to get a huge pimple it HAAAAD to be today. Of course, this would happen to me. Ugh, do I pop it? Do I leave it and try to cover it? Oh! I know Pinterest said the other day you can try using baking soda and toothpaste…

She turns to the male side, he sighs, checks his breath, approves, checks his watch grabs his resume and his phone and goes to sit down on the couch.

HE. I have so much extra time. Why did we get up so early? We always get up way too early because of worry wart over here. Should only take a few minutes to get there. There isn't really any pressure anyways I am definitely going to get this job. [*Sarcastically, as if to psych himself up*] No one out there has the resume I do, nor the brains, and did I mention my dashing looks? Hopefully, it's a chick who is interviewing me… in a skimpy tight red dress, even better. Those are always easy targets, all I have to do is compliment her and say something smart that is totally

beyond anything she could possibly understand like... I invented a nuclear quantum physics reactor that could travel to the moon and back, and that's it I'm in! All though, I probably should have showered… Oh well.

He grabs his cologne and enthusiastically sprays himself all over. She coughs from all the fumes and waves her hand.

SHE. Did you have to put on so much? You're going to suffocate whoever is interviewing us!

He ignores her and sits down with resumes in his lap. He looks at them momentarily and then puts them down and begins to play games on his phone. Getting up from the couch He turns to the female side and she says:

SHE. I don't know how you can be so confident about this interview. There are probably so many other people interviewing for this job. Aren't you the slightest bit worried? I am…but then again, you always seem to have the advantage in these situations. It's like my friend said: "When a man enters the workforce he is automatically assumed competent, but when a female enters the same workforce, she has to prove herself competent." I always feel like I need to prove myself. But maybe that's a good thing! Don't you remember what that recruiter said to me last year?

"I am looking to hire women, why? Because they will naturally work harder because they have something to prove."

Turning to the male side and sitting back down on the couch he responds sarcastically:

HE. "But it's true..."

Standing back up turning to the female she argues:

SHE. Well! I... I have to! If I don't work my ass off to prove that I am just as smart and capable as you are then no one will think I'm worth anything.

Turning to the male side and sitting back down on the couch he responds:

HE. Oh come on, don't get your panties in a wad. It's all in your head anyways! Remember that exam we had in thermodynamics? You stressed yourself out and studied for weeks, all I had to do was look over the notes the night before and I still got the same grade as you... But then again you are a woman and a pretty typical one at that.

SHE. Excuse me? What is that supposed to mean?!"

HE. It just means you're emotional, hormonal... crazy. Us guys don't have that problem, were all brains.

SHE. Emotions aren't a weakness. I don't even think you're capable of experiencing real true emotions...that's probably why you don't have a girlfriend!

(He scoffs and scowls aggressively at her, desperately trying to think of a witty come-back.)

SHE. *(continues)* Emotions lead to social awareness, like that one time during our internship last summer when I brought Mr. Drake flowers because he was out for weeks with his wife who was ill. Remember … that got us not only the lead position on our project, but I am pretty sure that's why the company called when they had the job opening last week. Because of that tiny reminder that we actually cared when all of the other guys in the department kept judging him for being 'moooody'.

HE. I highly doubt the company called because of a freakin flower… They called us because they miss my ideas and they can't run the place without me, oh and probably because and got a birdie golfing last summer.

Turning to the female side, she pauses frustrated looking back at him, and then the phone's alarm goes off.

BOTH. Ah! The interview! We're going to be so late!

She quickly gathers up things, mumbling to herself about her shoe choice and begins to run out the door. At the last minute the male side turns and says:

HE. Stop worrying so much, we're going to be right on time.

END SCENE 1

SCENE 2

The scene opens in the waiting room of an office where He/She will enter. Her male side is holding a simple black binder with Resumes and she is holding a cute bag that matches her outfit that holds resumes (like a purse).

He/She enters and stands outside the office door. She stands looking at the door takes a deep breath as if to steady herself and then turns to the male side, who looks bored, rolls his eyes, and pulls them (her side reluctantly) through the door. Walking to the desk where an invisible receptionist is sitting, He begins speaking.

HE. Why Hello, there Ma'am. I am here to interview for the engineering position… Yes, that's right I just graduated… with honors. And of course I am the one who got that birdie golfing last summer. That's me! Oh… my electric engine didn't end up fitting in the machine?… Oooops guess it was just too powerful for the product to handle. Speaking of… what time do you get off?

She interrupts at this point. She can't take anymore and shoves him aside:

SHE. Excuse him please, but all we need to do is check in for the interview. I know I am fashionably early, but I was hoping to see how everyone's holidays were?… Oh good to hear! I'm glad our capital project closed smoothly. I was afraid the plans I left for the team wouldn't

be enough to complete the project without me! Well, it was good to see you, please let them know that I am here but to take their time.

She sits down and arranges herself and her things, checks the time and sighs lightly. Turning to the male side, He impatiently taps his foot and begins to speak to the female side quietly as if it is happening inside their head.

HE. I wonder how much they are going to offer me. Should be a pretty penny since I already interned here last summer. I mean that's pretty much why I chose to study engineering, *(jokingly)* that and to get away from pesky emotional women like you.

SHE. Oh will you shut up already. We haven't even interviewed for the position yet, let alone gotten a job offer for it yet. *(Sighs)* All though while we're thinking about it, I wonder if they do hire us what they will offer me and what they will offer you. I am a much harder worker and am way more qualified for the job, but you look and act like you fit in here... Ugh, maybe I should have just married rich.

HE. I have an idea! Why don't you try putting away your girly attitude, girly outfit, and girly emotions, and then maybe people will take you more seriously! People may not even notice you're a chick anymore.

Turning to the female side, she stops and ponders. What would life be like a guy? Could I even possibly just hide my femininity?

SHE. But I don't want to be one of the boys! I like being a woman. AND I certainly smell better! You have to stop… your making me even more nervous. (*Messing with her outfit*) I already feel out of place enough. I just hope no one else senses that I am just acting the part… like some sort of faker. I wonder how many people are interviewing for this position.

Suddenly they both look up because their names have been called and it is time to interview.

BOTH: Yes! That's me!

They both get up and enter the door where they will be interviewing

END SCENE 2

SCENE 3

The final scene opens up as they are just exiting the door where the interview was held. They close the door behind them and showing very little emotion they walk center stage facing the audience.

BOTH. Well that went…

SHE. Really well!

HE. That's not what I was going to say, but OK. Guess were going the positive route.

SHE. Now who's being the worry wart?

HE. Seriously though, that was awful. They ripped me a new one when they asked about the electric engine that I designed last summer. And that little weasel, Marcy, tattled on me "borrowing" some of your work for the project.

SHE. SOME of my work? You stole ALL of it. ALL 8 weeks' worth! Justice has been served my friend.

HE. Whatever. (*Crosses arms and turns away*)

SHE. I don't know why but I feel good about the interview. They generally seemed to like my resume and were even interested in my sales experience! I don't know why I was so worried. All though, I thought you were going to blow it for us when you started hitting on one of our interviewers.

HE. Hey, my line about taking data for the spring constant of my mattress usually always works… at least makes the ladies laugh a little. She probably wasn't even straight… looked a little butch to me maybe.

SHE. Are you kidding me? She could have filed for sexual harassment and you don't even work there yet! You're just [butt hurt] that she clearly was not as into you as you were into her. I am glad I took over the interview from that point on or we probably would have gotten kicked outta there.

HE. I really don't understand why they liked you so much. You must be a good actress or something, because seriously, you're so...

SHE. What? I'm so... what? Me? Yeah, that's exactly why they liked me. That and I can actually communicate with them on a personal level. You, you just hit on them and tried to sound smart. But you sounded like an ass! And I wasn't acting for the record. I was 100% honest with my resume and you were what... 10... maybe 15% honest? Ha, she even called me Superwoman!

HE. Well, you are intimidating, but Superwoman? Really? You? Why?

SHE. Because I worked 20 hours a week, took a full load of classes, got great grades, and even found time to stay fit and volunteer throughout college.

He. Woah. Chill woman! There is no spit your entire resume at me. Seriously, stop freaking me out!

She. Fine, what did you do?

HE. Well… I played a lot of video games, got OK grades, drank a lot of beer, and had a really great time. But you were so so… so stressed out all the time.

SHE. It's called ambition…

HE. Whatever, you're no fun.

SHE. Maybe not "your" definition of fun, but I am better at one thing that's for sure: multi-tasking.

HE. OK, I will give you that one, buuuut the boss did mention that you looked like you were doing too many things at once. Typical girl….

SHE. But that's what I am good at! And maybe that's because I am a "giiiiirl". What matters is that the project got completed, thoroughly, and on time. And did that happen?

HE. Yes, I guess so.

SHE. My methods may be different. I may be more emotional, but I am more caring. I may be more social or "chatty" as you would call it, but I am a great leader. I may be girly, but I am more than capable.

HE. Ugh, I wish you would just stay in your box, and stop trying to take over a man's job!

SHE. (*Enraged*) A MANS JOB? What defines a MANS JOB!?

HE. You know, boy stuff, technical data, and numbers, computers and stuff! Go back to your sewing machine - you don't belong here.

SHE. I don't belong *here*? Really? After all we have accomplished together you can't even see that? And what sewing machine? I don't even know how to sew!

HE. You know that one that Mom gave you for Christmas in high school? You should have used it…

SHE. But I don't even like sewing. I had asked for a skateboard!

HE. What, is it too "girly" for you!? You never know, it could have landed you that rich husband!

SHE. (*Loses her temper*) I don't want a rich husband! I don't need a man at all! I am not some stereotypical demure bimbo who has to base all of her worth on how well she can stitch things! I am worth more than that! (*growing sad*) I know Mom wanted me to use that sewing machine, I know she hoped I would like it, I know it was her last hope of making me a "proper lady", but she didn't realize that's just not who I am.

Phone rings. It's the company calling. She talks to them for a minute, says "Thank You" and hangs up.

HE. Aaaaaaand?! What'd they say? Did WE get the job?!

SHE. No. I did, I got the job. (*Pointing to herself*)

HE. (*Huffs*) Probably, just because you're a girl. But doesn't matter, you're still stuck with me anyways. Where you go, I go.

SHE. No, No I am not stuck with you. I don't want you here. I don't need you. I don't even know why you were here to begin with. (*Begins taking down her hair on the male side and grabs some lipstick*) I am done pretending to be someone I am not. I can succeed on my own. And I can do everything you can do, maybe even better.

(*Lights out*)

END SCENE 3

CLOSING REFLECTIONS

The answer

Being a woman in the world today - especially one in STEM - is like being a bottle of fine wine. Everyone has biases towards you, and everyone wants to tell you how much you are worth. Personally, I think this is a depressing way of defining a gender. We are capable of so many things, from being a loving mother to running a large corporation, but we still have work to do in order to break free of the stereotypes that our culture continues to harbor. This thesis may be unconventional and uncomfortable; however, trying to be a professional woman in the STEM today is also unconventional and uncomfortable. Even as a college undergraduate, I have first-hand experience feeling limited, feeling exploited, and feeling like I don't belong.

The motivation for this thesis bloomed from the massive amount of research that demonstrates that many people are still unaware of gender inequality - "Sexism is an ugly word, so many of us are only comfortable identifying it when explicitly misogynistic language or behavior is exhibited" [1]. While progress has been made against more obvious gender discrimination, the subtle biases towards professional women have dramatically impacted our society. We cannot continue to be silent about gender issues in STEM because then we are only showing tacit approval of them: "But this shows that you do not need to use anti-women language or even harbor conscious anti-women beliefs to behave in ways that are effectively anti-women" [1]. As a collegiate undergrad in STEM, I have already felt the pressures of these stereotypes that both authority figures and my peers harbor toward my gender.

The research illustrates a dismal situation in that women are striving to overcome simply to be view as equal to men. We still do not have equal pay and we still do not have equal

representation. Why is this? It is not because the opportunities aren't there. It is because most women are choosing not to take them due to unwelcoming cultures and ignorant environments that are ill-equipped to help us promote social change.

It is time we take charge of our future and do everything we can to increase the representation of women in technical fields and in leadership roles. Recent efforts, such as actress Emma Watson's recent speech to the UN for her "He for She" campaign, implore men to help further illuminate women's issues and to act to reduce gender discrimination [34]. I desperately hope that my efforts to create this play will be relatable to those who share my struggle. Because after all, I firmly believe that we no longer need to be frightened of the biases against us and we should not hide behind them, but nor should we deem them acceptable. When my female classmates and I graduate in a few months and enter the industries of science, technology, engineering, and mathematics we will have proven to ourselves, our male cohorts and the academic world that we can do everything they can do, maybe even better.

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