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A nerd is commonly defined as someone who is “socially inept” or “bookish.”

While this term generally has a negative connotation, in some social circles nerd has been reclaimed as a positive attribute. However, there is much more to nerds and nerd subculture. Using theories on identity, presentation, and gender, I analyze how nerds and nerd culture have transitioned in society. For women, this includes battling the notion of being a “fake geek girl” and other preconceived ideas about women in nerd subcultures. Ten women who self-identified as nerds were interviewed about their experiences being a woman in a typically male-dominated nerd subculture and how those experiences may have shaped their gender performance. I found that these women began identifying as a nerd at a young age, and during that time, it was not an attractive label. The nerd label eventually developed into a term of pride. I also found that women often did not think much about their gender presentation, but some did appear to conform to the masculine hegemony present within nerd communities. Others maintained their own personal identity even when the ideals of nerd culture and personal traits were incongruous.

PWNING IT: VOICES OF NERD WOMEN IN
A MALE-DOMINATED SUBCULTURE

by

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CHAPTER I

INTRODUCTION

Once, in Sicily, sitting outside at a restaurant on a pier, I had the pleasure of explaining to a native Italian the difference between a nerd and a geek. Although she was fluent in the English language, she still had difficulty understanding the nuances of the words and when it was appropriate to use each. Although, after many years, I should not necessarily remember this simple exchange, it is, however, something I remember fondly, and since then I have found myself wanting to know more about nerds and nerd culture.

While many who are native English speakers are unaware of subtleties of the word nerd, most recognize that, historically, nerd culture was comprised of socially marginalized men. Recently, however, women have become more prominent within the subculture and may be actively restructuring the meaning of being a nerd.

History

The word “nerd” is a fairly recent addition to the English vocabulary. Since the true origins of the word are unclear, there are differing theories as to how “nerd” developed. Some believe the term derives from an American slang word, “nerts.” During the 1920s to 1930s, “nerts” was defined as “nonsense” and also used as a more polite interjection for “nuts” (Merriam-Webster 2016; Boyd 2014). Today, an exclamation of “Nuts!” as an expletive surely seems tame; however, in the 1920s, the use of a word that was also known as slang for testicles quickly became too vulgar to be used in polite

society (Boyd 2014; Dvorak 1987). Therefore, “nerds” became the alternative. If “nerd” does indeed derive from “nerds,” the initial negative connotation is apparent.

There are some that believe “nerd” comes from the alternate spelling “nurd,” which is a combination of “nut” and “turd” (Dvorak 1987). Others put their trust in the Second Barnhart Dictionary of New English, which states that “nerd” originated in 1965 (Dvorak 1987). This dictionary indicates “nerd” is an alteration of the previous slang meaning for “nert,” which means “a stupid or crazy person.” People who were college students in the 1970s may believe that “nerd” comes from “knurd,” which is drunk spelled backwards (Boyd 2014; Dvorak 1987). Accordingly, a knurd was someone who made straight A’s and was always sober, the complete opposite of drunk (Dvorak 1987).

No matter which origin story of “nerd” is correct, the first documented appearance of “nerd” was in 1950 and came from a surprising place. In his book, *If I Ran the Zoo*, Dr. Seuss introduced the world to the “Nerd,” an exotic creature that is brought to the zoo as a source of entertainment. When questioned by a reporter about the use of the word, Theodor S. Geisel (a.k.a. Dr. Seuss) said that he had forgotten all about the character he created (Dvorak 1987). Geisel adds, “Perhaps it comes from ‘Nerdfogel,’ which I’m sure you know all about” (Dvorak 1987:91). Doing a little digging, I discovered that “fogel” means “bird” in German. Perhaps this was one more attempt at sharing fun and silly rhymes (as I like to believe), or perhaps he was insinuating that the words he created were all in good fun.

Despite the motives behind Geisel’s creations, the evolution of “nerd” from a fictional creature to a derogatory descriptor was short. In 1951, a *Newsweek* article

referenced a more contemporary definition of “nerd”: “In Detroit, someone who once would be called a drip or a square is now, regrettably, a nerd” (Quail 2011; Westcott 2012:462). A square is defined by the Oxford Dictionary as: “A person considered to be old-fashioned or boringly conventional in attitude or behavior.” This usage of “nerd” to mean “square” is more akin to what people understand as a nerd today. Indeed, by the 1970s, the popular television show *Happy Days* helped to spread the notion that a nerd was a societal outcast. Arthur “The Fonz” Fonzarelli would often use “nerd” to describe someone who was studious or “square” in order to emphasize that being high-achieving and abiding by the rules was not “cool” (Quail 2011).

By the 1980s, the nerd stereotype had hit its peak. Pocket protector wearing, computer programming nerds were the epitome of “uncoolness” (Lapacek-Trout 2014). Nerds were often pitted against their social opposites, the “jocks” (Quail 2011). According to the Oxford Dictionary, a jock is commonly known as “an enthusiastic male athlete or sports fan, especially one with few other interests.” Lapacek-Trout (2014) observes that intelligent people are viewed by society as having social and economic power; those that lack this trait will begrudge intelligent people and treat them unfavorably. Movies such as *Revenge of the Nerds* (1984) or *Weird Science* (1985) showcased the dynamic between these two groups, as well as the associated high intelligence and ultimate social failings of “classic” nerds (Quail 2011; Kendall 1999). By this time, “nerd” had come to be known as how it is defined as by the Oxford Dictionary today: “A foolish or contemptible person who lacks social skills or is boringly studious” or “A single-minded expert in a particular technical field.”

Is this broad definition enough to understand the essence of what it means to be a nerd? What separates the nerds from the geeks of the world? Nerd researcher David Anderegg ([2007] 2011) has defined some of the traits he believes depicts a nerd. Anderegg ([2007] 2011) contends that there are Five Foundations of Nerddiness; nerds are: A) unsexy, B) interested in technology, C) uninterested in their personal appearance, D) enthusiastic about stuff that bores everyone else, and E) persecuted by nonnerds who are sometimes known as jocks. Nerds who embody each of these foundations and conform to nerd stereotypes, I shall hereby dub as “True Nerds.”

Although these five foundations do plenty to distinguish nerds from the other socially inept fray, it can be argued that some of these defining factors also correspond to what are thought of as “geeks.” While today “geek” is defined by the Oxford Dictionary as “An unfashionable or socially inept person” or “A knowledgeable and obsessive enthusiast,” “geek” origins date back as far as the 1510s according to the Online Etymology Dictionary. Believed to be derived from Dutch/Low German *gek/geck* meaning “a fool, dupe, [or] simpleton,” *geek* was still known as being a sideshow performer or “freak” until as late as the 1970s. The Online Etymology Dictionary specifies that by 1983, *geek* had become slang among teenagers to describe those who were “outcasts” or not socially adept and who also were interested in technology and computers.

Somehow “nerd” and “geek” evolved to become nearly synonymous among everyday users. However, there still seem to be some key differences. As Anderegg ([2007] 2011) notes, “A ‘geek’ is a person who obsesses in one area or another, whereas

a ‘nerd’ is a highly intelligent person who is very scholarly and does well in many domains such as math, science or computing.. Nerds are more associated with obsessive knowledge” (p. 23). While both words may have roots in being understood as a person of low intelligence, - “a stupid or crazy person” or “a simpleton” - it was only “nerd” that became associated with a higher level of intelligence.

The difference between “nerd” and “geek” is further separated by intriguing data from computer programmer Burr Settles (2013) who analyzed 2.6 million Twitter posts (tweets). Settles (2013) described his findings by saying, “In broad strokes, it seems to me that geeky words are more about stuff (e.g., ‘#stuff’), while nerdy words are more about ideas (e.g., ‘hypothesis’). Geeks are fans, and fans collect stuff; nerds are practitioners, and practitioners play with ideas.” Indeed, it appears as though nerdy words revolve around education and high-achievement, while geeky words involve a cultural subset (Appendix A).

Based on Anderegg’s ([2007] 2011) clarifications, being interested in computers as an extension of science and math subjects easily became part of nerd identification. As they became more prevalent in society, computers seem to have naturally integrated into the concept of a nerd. The correlation between the growing prevalence of modern computers with the increasing usage of “nerd” is evident (Westcott 2012). Since video game systems emerged from continued computer engineering, the correlation between nerds and the playing of video games seems reasonable. Even so, until recently, “nerd” remained a negative description of anyone displaying key socially prohibited characteristics.

The Rise of the Nerds

According to former *Star Trek: The Next Generation* actor Wil Wheaton (N.d.), “It’s awesome to be a nerd.” Although the definition has not changed, those in “nerd culture” have attempted to reclaim the word to evoke pride in their identity. Indeed, the term “nerd” has certainly become a complimentary and welcome description in many circles. In fact, nerd culture has ostensibly become a force of its own. Aspects of nerd culture, which were once subjects of ridicule, are now flourishing in mainstream society. Movies based on comic books have record box office sales (Schrodt 2016). Comic book conventions see higher and higher attendance rates each year (Sherman 2017). There are also televised video game competitions and the popularity of watching others play video games online is immense (Dawson 2016).

With the popularity of nerd culture comes the popularity of nerdy people. Though, that usually means the predominance of only a certain kind of nerd. When asked to picture a nerd, most people conjure an image of a straight, white male (due to our heteronormative society, it is assumed he is straight). He will most likely be skinny with large, rimmed glasses. He will probably look something like the character Lewis from *Revenge of the Nerds*.

Lewis possessed all the stereotypical characteristics of a nerd: male, white, heterosexual, and middle-class (Robinson 2014; Lapacek-Trout 2014; Quail 2011; Kendall 2011, 1999). These are the dominant traits of nerds in nerd culture. Acceptance and status are typically assigned to those who best fit the stereotype, but being male and displaying masculine traits seem to indicate the highest status in these types of heavily

male-populated subcultures (Vasan 2011; Lumsden 2010; Leblanc 1999; Kanter 1977).

Women, on the other hand, are often subjugated based on their femininity.

A History of Nerd Women

There have seemingly always been nerdy women, but their efforts and contributions have long been overshadowed by their male counterparts (Williams 2015; Tretkoff 2008a; PBS Online 1998a; PBS Online 1998b). Women have progressed areas of science, math, and computing/engineering for hundreds of years (Williams 2015; Tretkoff 2008a; PBS Online 1998a; PBS Online 1998b).

Émilie du Châtelet, in the eighteenth century, became known for her French translation of Isaac Newton's book *Principia*, which contains basic laws of physics. However, her own experiments and studies led to her understanding that energy is proportional to mass times velocity squared ($E \propto mv^2$), instead of only mass times velocity ($E \propto mv$) as Newton proclaimed. Her translation with this commentary was not published until ten years after her death. She has been largely forgotten by mainstream history, but her achievements have more recently been brought to light in certain circles (Tretkoff 2008a).

In the 1840s, Ada Lovelace expanded on Charles Babbage's Analytical Engine, or general-purpose computer. Realizing it could be capable of more complex applications, she wrote an algorithm that would allow the computer to perform such intricate calculations. Her work was published under her initials instead of her full name. It was not until the 1950s that her contributions were "rediscovered" and she was given the title of "first known programmer" (Biography.com 2018).

Stellar Atmospheres is the name of one of the most important theses in the world of astronomy (Williams 2015). Written by Cecilia Payne in 1925, it outlines her discovery of what elements make up the sun and other stars (Williams 2015). While many have described her work as having “profoundly [changed] what we know about the universe” or being on par with “giants” such as Copernicus, Newton, and Einstein, it is unlikely that people recognize her name, let alone the magnitude of her contribution (Williams 2015).

Several other women have made history but have historically been looked over in favor of male achievements. Rosalind Franklin’s work with x-rays showing the double helix nature of DNA was shared, without her knowledge, to James Watson and Francis Crick, which gave them the evidence they needed to submit their findings before she did (PBS Online 1998a). Without Henrietta Leavitt’s many discoveries in astronomy, the work of her contemporary, Edwin Hubble, would have been impossible (PBS Online 1998b). While there has been recent recognition for the works of Agnes Driscoll and Grace Hopper, there are several unheard of female codebreakers, often known as “human computers,” whose efforts were crucial during different points in history, such as WWII or the Cold War (Carr 2017).

More recently, women are being recognized for their contributions, but are still not becoming “household” names. Radia Perlman, for example, is known as “The Mother of the Internet” due to her work in developing the networks and technology used to enable functionality of today’s internet (Lemelson-MIT Program N.d.). Nevertheless, the top several Googled websites for “who developed the internet” either do not mention

Perlman at all or espouse the merits of “The Fathers of the Internet,” Robert E. Kahn and Vint Cerf as well as Tim Berners-Lee, who invented the World Wide Web.

Although not often recognized, women have had significant roles in the development of nerd culture. In this study I will be focusing on the hegemonic masculinity of nerd culture and how women express their gender within male-dominated, nerd communities. Understanding how these women navigate their identity as nerds could contribute to the discourse on how gender is performed in male-dominated subcultures and how people self-categorize.

CHAPTER II

REVIEW OF LITERATURE

There are many influencing factors to obtaining a nerd identity and how it is presented. In this review, I examine the effects that differences in education can have on identifying as a nerd and the potential to continue into “nerdy” subjects. I also analyze how other women either have or have not adapted their gender presentation into male-dominated subcultures. Based on this analysis of these other subcultures, I introduce the concept of a “True Nerd” and his role in various areas within the subculture.

Nerd Education

Although the label of “nerd” may be a badge of honor for some - based on the association of intelligence - for others it is still a hurtful name. While many adults’ self-esteem may not be affected after being called a nerd, children and adolescents can have a very different experience.

In grade schools today, it appears as though the social treatment of nerds is actually more akin to the negative, 1970s view of nerds (Rentzsch, Shultz, and Schroder-Abe 2011; Adler, Kless, and Adler 1992). Boys in elementary school who are athletic and tough or have a high sophistication of interpersonal communication skills tend to be popular, while those who are effeminate, not athletic, who display a high academic performance, or are not adept at social skills are seen as nerds (Adler, Kless, and Adler

1992). However, these characteristics of what separates the “cool kids” from the “nerds” morphs slightly as the children progress into the higher grades.

By the eighth grade, adolescents seem to value less effort or more modesty in academics, along with sports and sociability, to be considered cool (Rentzsch, Schutz, and Schroder-Abe 2011). Even those labeled as nerds, who exert a high amount of effort in academics, can be considered “popular” if they present themselves as modest, sporty, or sociable (Rentzsch, Schutz, and Schroder-Abe 2011). Status can also be achieved through attractiveness, a “good” sense of style, involvement in ritualized behavior (i.e., school spirit), certain body language or demeanor (i.e., laid back), or occupying socially acknowledged, high-status spaces (Milner 2004).

Once in high school, established peer groups become a consideration in what classes students want to take (Frank, Muller, Schiller, Riegle-Crumb, Mueller, Crosnoe, and Pearson 2008). Teens often choose classes in order to be with someone in their friend group. Students also begin to make academic decisions in preparation for their future. Students that invest in their education in lower grades continue to do so to secure marketability to certain colleges or for future career paths. For males, these classes often included math and science courses, subjects that are thought of as nerdy (Frank et al. 2008). It is believed that these men will continue on to fulfilling and profitable occupations in these nerdy subject areas.

This establishes the most likely educational and social course of a male nerd from kindergarten through high school. However, the path of a female nerd is quite different. In elementary school, girls are judged rather inconsistently from boys. While boys tend to

value attributes of strength and disregard for academics, girls place more importance on family background, or how much money a girl's family had, physical appearance, and social manipulations, such as precociousness and exclusivity (Adler, Kless, and Adler 1992).

A girl labeled as a nerd is not popular among the "cool" girls. In fact, girls from grades six to nine would be more likely than a boy to call a traditionally unattractive female a nerd (de Klerk 1992). Surprisingly, girls at this age did not suffer stigma for performing well academically (Adler, Kless, and Adler 1992). Around this age, girls also often became friends with others who put in the same amount of scholastic effort (Adler, Kless, and Adler 1992). Although female adolescents who excelled scholastically are not often subject to negative perceptions by their peers, girls who exert what is thought of as too much effort into their education are thought of negatively and retain the label "nerd" (Rentzsch, Schutz, and Schroder-Abe 2011). Stereotypically, females' success is likely to be attributed to effort and the success of males to ability (Rentzsch, Schutz, and Schroder-Abe 2011).

When deciding on high school courses, girls look to their peer groups for guidance on taking nerdy classes, such as math and science (Frank et al. 2008). A reason for this may be that girls' self-esteem seems to dramatically decrease during puberty, far more than the self-esteem of boys the same age, and these adolescent girls may be looking for support and approval from their group of friends (Leblanc 2006). On the other hand, these peer groups may be basing their decisions on their parents' biases of appropriate female behavior.

Traditionally, boys are perceived as being more talented in areas such as math, science, and technology (Hanson, Smith, Kapur 2000). Therefore, it is presumed that girls should stick to areas other than male-dominated subjects. Unless there is a strong area norm of girls actively taking science, math, and technology courses, there is a good chance that factors of gender socialization and peer groups will deter high-achieving girls from continuing to further their education in these topics (Charles 2011; Frank et al. 2008; Steinke 2005).

Otherwise, girls that do push forward with an education in science, math, and technology during high school are often reluctant to be in classes where they are one of a handful of girls and worry about being labeled as a nerd or computer geek (Hanson, Smith, and Kapur 2000). These girls tend to have lower confidence and self-efficacy about pursuing these “nerdy” subjects (Steinke 2005). This socialization through grade school further perpetuates negative stereotypes not only of nerds but of nerd women.

Women in STEM

Once in college, nerds of all genders perpetuate established social patterns and usually move forward into pursuing traditionally “masculine” degrees in science, technology, engineering, and math (STEM) (Sassler, Michelmore, and Smith 2017). Even though women initially begin participating in STEM, these areas continue to be male-dominated and can be unwelcoming to women.

Leaks in the pipeline.

As female nerds continue along the education to career pipeline with STEM subjects or careers, they seem to become more and more of a minority. In 1997, the

numbers of males and females who declared math majors were about equal, while 46 percent of females completed their undergraduate degree and 22 percent completed the Ph.D. degree that year (Hanson, Smith, Kapur 2000). Of the science and engineering degrees awarded in 1997, 33 percent of Ph.D. degrees were given to women, and by 2010, the percentage of women holding bachelor's degrees in science and engineering was 50.3 percent (Sassler, Glass, Levitte, and Michelmore 2017; Lee 2002). Yet, there is not the same level of representation of women in careers that there is in STEM subjects (Sassler et al. 2017; Sassler, Michelmore, and Smith 2017; Charles 2011; Lee 2002; Rosser 2001; Hanson, Smith, and Kapur 2000). As of 2013, only 12 percent of engineers in the United States were women (Sassler et al. 2017).

Unfortunately, it seems as though there is a significant discrepancy between the number of women who major in STEM and those who end up in a career in STEM. Some argue this difference is due to the continued belief in, enactment of, and celebration of gender stereotypes (Charles 2011). Others believe that men and women have different social psychological practices, and therefore, men prefer these subjects over women (Lee 2002). These ideas and behaviors support the concept of a “leaky pipeline” in STEM subjects (Sassler, Michelmore, and Smith 2017; Lee 2002).

The “leaky pipeline” is a metaphor for women who were on track for an education or career in STEM to drop out, not be recruited into, or not remain in these majors or occupations (Sassler et al. 2017; Sassler, Michelmore, and Smith 2017; Lee 2002). There are several explanations for the “leaky pipeline” including, but not limited to: biological differences in men and women, lack of girls' academic preparation for these majors or

careers, girls' poor attitude toward science, or science being irrelevant to many girls (Blickenstaff 2005). Other arguments include: scientific pedagogy favoring male students, a "chilly climate" for girls/women in science classes, cultural burden on girls/women to conform to ideas of traditional gender roles, or an overall worldview of science being inherently masculine (Blickenstaff 2005). Though each theory has its support and criticisms, the "leaky pipeline" translates to many nerd women not occupying space in traditionally nerdy arenas.

Some reasons why.

Women in STEM continue to be seen as transgressing in a masculine domain (Foor and Walden 2009). Many programs have been put into place to attract women and girls to these subjects (Rosser 2001). For example, Engineering Criteria 2000, designed by the Accreditation Board for Engineering and Technology (ABET), is a program that seeks to develop an evaluation criterion for engineering programs that emphasizes objectives which are usually only assessed in humanities and social sciences. The goal is to attract more women into the engineering field and for women to possess more self-efficacy in engineering (Rosser 2001). There have also been more efforts made to create more inclusive course designs in other STEM areas as well as efforts to eliminate sex bias from school textbooks (Blickenstaff 2005). Despite these efforts, women in STEM are still in the minority.

While there may be multiple causes for this marginalization of women in STEM subjects, devaluation of women is often cited as one reason why women do not stay with careers in these fields (Kendall 2011; Varma 2007). When asked for reasons why they

were considering leaving the computer science field, some of the women interviewed by Varma (2007) provided the following answers:

[Male students] think that we aren't anywhere as good as they are. They are all extremely egotistical;' 'It is challenging because you have to combat a stereotype. ... men do not see that we are just as competent and just as capable as them;' 'I think [male faculty] are not patient when it comes to answering questions from a female student. ... If a female is asking for help with her programme, he gets frustrated easily when she doesn't understand certain things. And if he is helping a male student, he spends more time and he is less likely to get frustrated;' 'Usually the women that study computer science are thought of as either bisexual or real ugly. ... They feel you don't have anything to offer;' 'In the lab when a pretty girl walks in they just assume she is an education major. And when they find she is studying computer science they are shocked' (p. 371).

In STEM, as in most organizations, there is a gendered substructure that reflects masculine values and tends to "privilege the work of men, facilitating their recruitment, promotion, and workplace rewards, while limiting women's opportunities" (Sele 2012; Demaiter and Adams 2009:32).

Indeed, according to Demaiter and Adams (2009), women in male-dominated professions experience a "double-bind" where "they must demonstrate so-called male characteristics like toughness and aggressiveness, but simultaneously appear somewhat feminine, to avoid being derogated or criticized" (p. 34). Some women adopt the masculine culture so far as to become a "conceptual man" (Demaiter and Adams 2009). Negotiating this vague identity seems influential in the success or failure of women in the current STEM climate.

In Demaiter and Adams's (2009) research, nine out of the eleven successful women in IT interviewed indicated that they "felt equal to men in the IT workplace."

These same women, however, also reported no gender-related problems but went on to provide evidence to support that gender was, indeed, an issue at times (Demaiter and Adams 2009). This reluctance to acknowledge the role gender plays in shaping their workplace environment is similar to other women in male-dominated areas (Demaiter and Adams 2009). Sometimes these women even blamed themselves for barriers they came up against instead of viewing them as a systematic circumstance (Demaiter and Adams 2009).

Nevertheless, barriers for women in technology are well documented. A study of Swedish IT consultants found that, in terms of competency, ascribed masculine traits are celebrated while feminine traits were devalued (Demaiter and Adams 2009). Similarly, a study from Denmark indicated that primary school children do not associate females with computer competency (Elkjaer 1992).

Along with this negative image of women in the communities, some argue that the masculine culture of IT fields and other STEM fields, lack of role models, and lack of professional encouragement have prevented the participation of women in these subjects and careers (Demaiter and Adams 2009; Kendall 2000; Elkjaer 1992). Women who do enter into these majors and careers have indicated success by adopting masculine characteristics into their identity performance (Sele 2012; Demaiter and Adams 2009).

Adopting masculine characteristics may be what allows women to successfully transgress into male-dominated subcultures, as women in IT have indicated (Demaiter and Adams 2009). However, there are issues in other male-dominated subcultures that correlate to the experiences of women in nerd communities.

Women in Male-Dominated Subcultures

Within each subculture, the behavior toward women varies. Women in corporations have seemingly dealt with the most mainstream treatment based on gender, but there are differences in other subcultures such as racing, metal, and punk that could share similarities with the experiences of women in nerd culture. To learn more about what treatment women encounter in nerd culture, I explore these different subcultures and the women who occupy such male-dominated spaces.

Women in corporations.

Women in STEM continue to experience many issues and stereotypes of their identity just as women in corporations have done for many years. When women began to become commonplace in corporations, there were a number of benefits but also problems. Not only did women experience statistical discrimination based on the small number of women in the corporation, there was also discrimination based on the “female sex role” to which these women were expected to conform (Kanter 1977). Many women began in companies as a secretary to a male executive. Not only was this dynamic metaphorical, it was also material. Although there were noticeable contrasts in privileges, rewards, and status between the secretary and the executive, there were also differences in these areas among women in different secretarial positions.

Marriage-like secretaries were considered to be higher status positions than the factory-like secretaries (Kanter 1977). Executives were assigned marriage-like secretaries that facilitated many of the supportive roles a wife was customarily expected to fulfill,

while the factory-like secretaries were sets of skilled laborers repeatedly keying documents for the corporation (Kanter 1977).

The marriage-like secretaries were seen as not only doing their own work, but also accumulating status and power for their male boss through their achievements (Kanter 1977). This involved, among other things, a demand for loyalty under the patrimonial control. Secretaries could obtain recognition by investing in their boss instead of the company (Kanter 1977). By becoming a “work wife” and prioritizing their boss over the organization, these secretaries often secured their position within the company, while working in a climate where wrong moves could result in termination (Kanter 1977).

In addition to being a “work wife,” many of these women were literal wives and/or mothers. Discrimination abounded for women who needed any time off for family or pregnancy (Kanter 1977). Single women were not promoted for several years in case they “fell into marriage,” while married women were not seen as viable for promotion since they would most likely be having children and would potentially prioritize their family obligations above their work responsibilities (Kanter 1977). Companies often enforced traditional gender roles, and therefore, family commitments were not an issue for men in the workplace (Kanter 1977).

Soon, women increased in number in corporations, and today women make up 47 percent of the labor force (Semuels 2016). Unfortunately, very few women go on to run companies (Kanter 1977). Women only account for 27 out of the top 500 CEOs of the top U.S. and European companies (Semuels 2016). As with women in STEM, the lack of

higher status women may be due to some exclusionary practices against promoting women to management positions (Demaiter and Adams 2009).

Part of the reason women in corporations were often not promoted was the understanding of a “masculine ethic,” or traits assumed to belong to men that were effective for management, such as a tough-minded approach to problems, analytic abilities, ability to set aside personal emotions in the interest of accomplishing a task, and a cognitive superiority in problem-solving and decision-making (Kanter 1977). Women who were timid and self-effacing often excelled at their secretarial job, but these traits were not seen as management material; in other words, they did not display traits required of the “masculine ethic” (Kanter 1977).

If women were promoted, they were typically given authority over less risky projects or more stable departments (Kanter 1977). By doing this, the company received accolades for promoting a woman, while reducing the risk of financial loss to the company (Kanter 1977). The “masculine ethic” was such a prominent notion that neither men nor women wanted to work for a woman (Kanter 1977). This sentiment rings true today as well. According to a Pew research survey, most people indicated they did not care if they worked for a man or a woman, but of those that did list a preference, women mostly preferred working with men by a margin of almost two to one (Khazan 2014).

One possibility why women prefer working with men is the stereotype of the “mean and bossy woman boss” (Kanter 1977). Negative conceptions of the “mean and bossy woman boss” are: she is too jealous; she likes to remind people that she is in charge; she takes things too personally and is, therefore, not businesslike; she supervises

too closely; she finds more fault and is too critical; and she screams to impress people (Kanter 1977).

Clearly, neither women nor men would prefer to end up working for that stereotype of a woman. Unfortunately, there are other stereotypes or “role traps” regarding how men label and treat women with whom they work. Roles such as the mother/Madonna, seductress/whore, pet/kid sister, and iron maiden/virgin aunt all cast women in performances relating to their position around men instead of being seen as their own entity in business (Kanter 1977).

Most women in corporations assimilated to the ideas and culture of their surroundings rather than resist assigned gender roles (Kanter 1977). This may have led to the development of women as tokens within the company. The threat of the minority of women in the corporation being able to take away the power of men or their ability to challenge the status quo and resist hegemonic masculinity makes the majority of men strive to reinforce the dominant perspective (Kanter 1977). Some of the ways men in corporations can reinforce dominance is by creating loyalty tests for their secretaries, interrupting women while speaking, or proffering sexist or derogatory remarks (Kanter 1977).

Without any external pressures on the masculine majority to change, this sort of tokenism can become a self-perpetuating system (Kanter 1977). Thankfully, there is increasing awareness and examples of productive programs, such as those in STEM, that are gaining momentum, but there is still a significant way to go for equality (Semuels 2016).

Women in racing.

Institutionalized areas are not the only place that women resist hegemonic masculinity. Cars and racing have long been a male-dominated area in both popular and alternative cultures. However, women have also resisted adhering to accepted gender roles through their participation in this male-dominated subculture (Lumsden 2010). Like the treatment of women in corporations, women in this subculture engage in a sort of tokenism since they “[have] the power to dilute [men’s] masculinity” (Lumsden 2010:4).

The “boy racers” of Aberdeen, Scotland establish “rules of engagement,” which define the behaviors, style, and practices which make someone authentically part of the group (Lumsden 2010). “Girl racers” must embody these masculine practices in order to be accepted into the racing culture (Lumsden 2010). Although they adopt a “masculine doctrine,” “girl racers” incorporate their femininity into their car modifications and driving style (Lumsden 2010).

“Girl racers” feminize their cars through the use of colors (i.e., pink), teddy bears, pillows, and tidiness; there are also women racers who “bring careful driving to the streets” (Lumsden 2010:6). Although these feminine touches are not considered as traditionally masculine, they are accepted by “boy racers” for legitimate women racers, but the introduction of this femininity into this space may also signify a decrease in status of the “girl racers.”

Once considered a legitimate racer, these women are under constant scrutiny from the masculine hegemony. “Girl racers” are examined just as much as their cars to determine if they are perpetuating the “masculine doctrine” of the culture (Lumsden

2010). This persistent inspection means that the “girl racers” must occupy an indeterminate space between the masculine subculture and mainstream femininity (Lumsden 2010). As with the women of IT, they are in a “double-bind;” they are both sexual object and masculine racer (Lumsden 2010).

According to Lumsden (2010), it is in the “boy racers” best interest to deal with the ambiguity of femininity in a masculine space by reinforcing sexist tendencies to maintain their control of the dominate hegemony. The “girl racers” acquiesce to their role as sex object in order to maintain their position and participation in this subculture. To engage in this masculine subculture, “girl racers” accept and reinforce the same hierarchies of power and status that have been established by the “boy racers,” while also being subjected to it themselves.

On the other hand, to be considered authentic, “girl racers” regularly delegitimize the alternative femininity of the “bikini girls”/“babes,” girlfriends, or other female passengers, known as “peripheral participants” (Lumsden 2010). These other women have not adopted the “masculine doctrine” and, therefore, cannot be considered legitimate racers. The “others” threaten the validity of “proven” “girl racers,” are thought of as “less than” in the eyes of the subculture, and do not have the same status as the authentic racers (Lumsden 2010). Masculinity in racing is also enforced through the devaluation of certain “boy racers.” In Aberdeen, racers who were not working-class and drove more expensive cars (i.e., Porches and Ferraris) were considered to be more effeminate and were described as “mummy’s boys” or homosexual by both the “boy racers” and the “girl racers” (Lumsden 2010). By demeaning any sort of femininity other

than what is expressed through legitimate racers, “girl racers” perpetuate the “rules of engagement” set up by the dominate male racers. Although these “girl racers” have rejected mainstream femininity, they have done so only to embrace established masculine gender roles. In this way, “girl racers” have assimilated into, rather than transgressed on, the established hegemonic masculinity of the racing culture (Lumsden 2010).

Women in metal.

Much like the racing subculture, certain music subcultures have women participants who transgress the mainstream view of femininity. Women in the death metal and heavy metal scene view being a part of the metal subculture as empowering by freeing them from restrictions of mainstream society (Vasan 2011). In this subculture, they are able to be aggressive, loud, and authoritative while in everyday situations, this sort of behavior would be deemed too masculine for women (Riches 2011). However, to obtain these benefits, these women must also adhere to the masculine hegemony of the subculture (Riches 2011; Vasan 2011). Women dress in military style clothing or clothing with grotesque images, listen to aggressive music, and headbang or participate in mosh pits (Riches 2011; Vasan 2011).

However, these women may either knowingly or unknowingly be engaging in a social cost exchange in order to be a part of the subculture (Vasan 2011). While these women understand that there are undesirable attributes of this subculture, the benefits of being in the metal scene outweigh the negatives.

Tolerating sexist/misogynistic bands and lyrics is one objectionable issue that women endure to be part of the metal subculture (Vasan 2011). One interviewee

rationalizes this phenomenon by stating, “If I get upset about it, I’m giving it more power than it needs to have” (Vasan 2011). Nevertheless, this passive stance is not active resistance to the masculine hegemony of the metal scene. However, there are ways that women metal fans actively support metal’s dominant hegemony.

According to Vasan (2011), “While women who masculinize themselves remain on unequal footing with men in the scene, they tend to have more clout and respect than women who dress provocatively.” Women who display normative femininity are sometimes viewed as usurpers that are resisting masculine identities and “diluting the validity of the genre and what it represents” (Riches 2011). This is at odds with the legitimized women in metal, and often feminine women are harassed or “despised” because of their display of femininity (Vasan 2011).

As seen with the “girl racers,” women in metal subcultures reject their own femininity to embody a masculine identity, further preserving the masculine hegemony of these subcultures. Unlike “girl racers,” however, women metal fans are able to “shrug off the stereotype of the ‘sex object,’” but it is accomplished by denying their femininity completely (Riches 2011).

Some women see the performance and participation of the metal scene as a large appeal to this subculture. In this arena, they are able to be free from appearance, consequences of behavior, and negative attitudes (Vasan 2011). Women sometimes find freedom through headbanging and mosh pits. Women in these physical areas subvert traditional views of womanhood through this violent performance and gain status and respect from other fans (Riches 2011). These violent, physical acts are also sustained as a

masculine activity through the recognition and validation given by the masculine hegemony. Therefore, the acts of headbanging and moshing by women are simultaneously resisting and affirming gender norms in the metal community.

Negotiating identity and status in metal is not always an easy task for women. Some women are not content with being only fans; they want to be a part of making the music. However, it is difficult for women to be seen as legitimate performers by male metal fans. One interviewee of Vasan's (2011) listed excuses she had heard as to why she was not appropriate for various metal bands,

'Women are too emotional'; 'We want someone who doesn't have a family'; 'Your husband's gonna get in the way and he's probably gonna have a problem with this.' You know, it's almost always like the same thing you might hear back in the 60s at work... it's a status quo... (p. 343-344)

Indeed, these reasons for a woman not being in a band are similar to reasons that women would not be promoted in corporations. Although most women are no longer limited by such oppressive ideals of women, it seems these stereotypes are still prevalent in male-dominated subcultures (Lumsden 2010). Another stereotype is that of the "frail woman who needs to be protected." Men often feel the need to physically protect legitimized women in metal from harm or from sexual advances of other men, but some will sexually assault the provocatively dressed women (Riches 2011; Vasan 2011). Some women become annoyed that men will not interact with or hit them in the mosh pits (Vasan 2011). These stereotypes of women aide the dominate hegemony in keeping women as "accepted outsiders" and not full-fledged members of the subculture.

Women in punk.

Another male-dominated area of music that women have transgressed into is the punk scene. The original ideation of punk music and the punk subculture was to communicate an established set of ideas about war, sex, religion, racism and classism (Leblanc 1999). To embody punk was to embody a resistance to and criticism of mainstream views, but those in punk were largely men (Leblanc 1999). Upon acceptance of women into punk culture, deviation from the mainstream, as in the metal scene, allowed women the chance to actively resist stereotypical gender roles by being aggressive, rude, assertive, or destructive. (Batt 2014; Leblanc 1999).

The mainstream view of punk women is that they mostly fit the “angry female” trope; they drink, smoke, have sex, are dangerous, unfeminine, and inappropriate (Batt 2014). Still, instead of giving in to stereotypes or completely yielding to the dominance of the masculine subculture, punk girls negotiate the space between masculinity and femininity and end up developing a strong sense of self (Leblanc 1999).

Since punk culture is supposed to reject mainstream stereotypes of gender roles, women in punk music, although few in number, had large influences on the subculture.

One of the most famous punk stars is Patti Smith who

existed beyond the gender binary, and created her own voice using symbols from both male and female behaviors... She rejected ideals of what a woman could or could not be, and tended to function beyond the constraints that most other women in her time were bound by (Batt 2014:54).

Acts such as Bikini Kill or The Raincoats worked against the objectification and exclusion of women and racial minorities through their music and activism (Batt 2014). These strong women became role models for the new generation of punk women.

Although punk culture is more accepting of women and femininity, there is still a persistent masculine hegemony that dictates the rules of the domain. According to Leblanc (1999), “On the one hand, punk gave us [all] a place to protest all manner of constraints; on the other, the subculture put many of the same pressures on us as girls as did the mainstream culture we strove to oppose” (p. 6). Men in the punk scene were often not supportive of women defining their own gender norms.

As part of the masculine hegemony, it was expected for women to be not only “one of the guys” or a “virtual boy” but also to remain attractive and sexually available, much like contradictory situation of “girl racers” and women in IT (Batt 2014; Leblanc 1999). The idea that women should remain sexually available sometimes led to sexual harassment of punk women by men within the subculture (Batt 2014; Leblanc 1999). In contrast, punk women have mostly rejected subjugation by men and forged their own gender roles, but many have also accepted and conformed to other hegemonic stereotypes (Batt 2014; Leblanc 1999).

Similar to racing and metal communities, once punk women have proven themselves as legitimate punks, other women who display traditional femininity are seen as not being true punks (Leblanc 1999). They are criticized for being defined by mainstream gender roles and viewed as “little girls” who come for the “cute boys” (Leblanc 1999). Alternatively, if accepted punk women were determined to be too

promiscuous, they were labeled as “sluts” or “whores” by both men and women (Batt 2014; Leblanc 1999). The feminine girls are often shut out of the community by female punks since they threaten the authenticity of women in punk subculture (Leblanc 1999). As Leblanc (1999) summarizes, “Ultimately, the masculinity of the subculture imposes contradictory standards for female punks’ behavior and effectively isolates girls from each other” (p. 105).

Punk women often wore men’s clothes but feminized them (Leblanc 1999). Unlike the women in metal who did not feminize the masculine clothes they wore, women in punk actively resisted the norms of both femininity and masculinity by taking control of their own gender presentation (Leblanc 1999). Possibly because of this ambiguous gender presentation, men in punk often try to reestablish their dominance over women. Interrupting women while speaking, not taking women seriously, or using their physicality to both protect and contain women are some ways that men attempt to reassert their dominance in the punk community (Leblanc 1999). These men, and women who do not resist these antics, are reinforcing a masculine, mainstream definition of gender and, therefore, masculine domination of punk culture.

The “True Nerd” Culture

Nerd culture is both similar and divergent from these other male-dominated subcultures. Nerds are both rejected and accepted, masculine and feminine, and objective and subjective. These dichotomies are essential to understanding interactions of power and status within nerd culture.

Culture.

The Oxford Dictionary defines culture as, “The ideas, customs, and social behavior of a particular people or society;” a subculture is “A cultural group within a larger culture, often having beliefs or interests at variance with those of the larger culture.” This understanding of culture and subculture is sufficient for the exploration of women in various subcultures, including those in nerd culture. According to Kelly (1998), in the United States, there is not only scientific culture, one of rationality and observation, as well as artistic culture, a culture of books, music, and painting, but there is now a third culture – a nerd culture – a pop-culture based in technology. Although programmable computing devices have been around since the early 19th century, it wasn’t until the 1950s and the development of transistors and integrated circuits that computers, as they are thought of today, became more visible in society (Trueman 2015). Being interested in computers as an extension of science and math subjects naturally became part of nerd identification. Indeed, technology today has become a staple in mainstream culture and the scientists behind innovative technology have become essentially rock stars (e.g., Bill Gates or Steve Jobs). With the emergence of aspects of nerd culture into the mainstream, there appears to be some resistance from certain types of nerds to allow others into “their” space.

White, heterosexual spaces.

Nerd spaces are often stereotypically divided. The main occupants in communities of nerds are white, heterosexual, middle-class men (Robinson 2014; Woo 2012; Quail 2011). The dominant presence of these stereotypical nerds can often lead to

discrimination (intended or unintended) against those who do not meet the image of the “ideal” nerd, which often include, in addition to women, racial/ethnic minorities, nonheterosexual individuals, and people with lower incomes (Quail 2011).

Nerd dominated occupations appear to be white male dominant. The perception that nerds are not black may linger in the occupational success of graduates with nerdy degrees, such as computer science (Kendall 2011). According to Kendall, “For minorities, academic success in computer science does not seem to translate to computer programming jobs” (p. 520). There is seemingly a comparable “leaky pipeline” for ethnic and racial minorities as with women and girls. Within nerd culture, black nerds and women nerds are often seen as subordinate to their white, male counterparts (Quail 2011). However, Horvat and Lewis (2003) found that the academic success of black students was often linked to effectively managing that success among their black peer groups rather than “acting white.” Their research found that successful black students were also able to maintain their black identity in their peer group (Horvat and Lewis 2003). Academically prolific black students were often labeled as “acting white” by others outside of their peer group, but these successful students resisted both white culture’s expectation of them to fail academically well as the expectations from other black students to “act white” (Horvat and Lewis 2003).

However, whiteness continues to be a predominant aspect of nerd culture. Online, minorities are able to navigate these white spaces well as long as they adhere to nerd etiquette, thus making whiteness the default characteristic of online nerd areas (Quail 2011; Kendall 2000). Additionally, teenagers who identify as nerds were found to often

reject rap, slang, and other aspects of African-American culture (Kendall 2011; Quail 2011). Nerd teenagers use language to emphasize an extreme version of whiteness, which portrays “advanced literacy, extensive education, and high intelligence” (Quail 2011:464). These aspects of the portrayal of nerds is decidedly middle to upper-class.

Indeed, knowledge acquisition and possession of expendable time and income are often keys to status in nerd culture that those in poverty cannot attain. Studies show that socioeconomic status influences success of students in academia. Children of families on welfare are twice as likely to fail out of school, but with an increase in variety of reading materials available at home, children’s test scores and length of schooling increased (Lacour and Tissington 2011). Also, families and communities of lower income areas are less likely to place value on a formal education (Lacour and Tissington 2011).

Along with effects of class on formal models of knowledge acquisition, a considerable amount of time and money are required to obtain knowledge of nerdy interests. The purchasing and playing of games or buying tickets to and attending comic conventions can be a hefty investment to those who do not have the extra hours or funds to spend on such activities. Typically, the people that do have the necessary resources to devote to various aspect of nerd culture are white males (Robinson 2014; Woo 2012).

Nerd culture is also heterosexually dominated. Women are often depicted as sexually appealing based on masculine ideals (Lapacek-Trout 2014; Robinson 2014; Cardiel 2012; Sele 2012). Men that exhibit aspects of femininity that is not traditionally ascribed to nerds or those who garner insinuations of homosexuality/queer sexualities are likely excluded in nerd communities (Nilsson 2011; Kendall 2000, 1999).

“True Nerds.”

Here, I introduce the concept of a “True Nerd.” A “True Nerd” is one that not only embodies the definition of a nerd completely, but also presents as a stereotype of a nerd. Thus, by definition and stereotype, Lewis from *Revenge of the Nerds* is a “True Nerd.”

Although white, male, heterosexual, middle-class nerds are the majority, “True Nerds” can be different genders, races/ethnicities, sexual orientation, or classes depending on the localized area but not in “traditional” nerd culture (Kendall 2001, 2000, 1999). Within the social structure of nerd communities, it appears power lies almost entirely with men who have adopted a “cultural whiteness” (Kendall 2011, 2000). Women too do not often have this sort of influential power and, therefore, are rarely seen as “True Nerds.” Hence, the dominant attributes, white, male, heterosexual, and middle-class, represent “True Nerds” culturally. Characteristics of “True Nerds” hold enough power and status to give the possessor the ability to effectively determine what, or who, is and is not considered nerdy.

“True Nerds” often become the “gatekeepers” of nerd culture. “True Nerds” curate subjects, ideas, and products that they accept into nerd culture and reject everything else (Woo 2012). Often, one value that “True Nerds” curate is knowledge. “True Nerds” not only know about things, mostly dealing with technology, but are more likely to be able to know “trivial” facts about origins, timelines, or certain ingenuities that went into specific subjects, ideas, or products. Other nerds may be interested in curated subjects, but usually trust and rely on the opinion of “True Nerds” based on the “True

Nerd's" perceived legitimacy and status based on superior knowledge or technical prowess (Robinson 2014; Woo 2012). Therefore, as these "True Nerds," sometimes thought of as "alpha nerds," reject traditionally feminine subjects, ideas, and products, they reinforce their own status and power.

Although the media portrays more general dominant aspects of nerd culture, there are several different subsets of nerd culture that operate independently from the whole. Each of these subsets and each local community have their own set of "True Nerds" (Robinson 2014; Woo 2012). Therefore, what is considered nerd culture tends to vary much more than other subcultures such as racing, punk, or metal (Vasan 2011; Lumsden 2010; Leblanc 1999). Nevertheless, the stereotype of nerds and nerd culture

can act as a barrier to women and girls, because it sends the message that the specific interests associated with nerds are just for men. This inhibits women's ability to claim the label authentically for themselves and inhibits others from accepting a woman's identification with nerd interests (Robinson 2014:13).

Although "True Nerds" may curate different subjects, ideas, or products into subsets of nerd culture, there are some common themes within the overall nerd subculture that are influenced by male-domination and hegemonic masculinity.

Status and Power

Traditionally, nerds are thought of in relation to a lack of power in society since part of the definition of a nerd is that they are persecuted by others. While nerds are typically considered as "outcasts" or lower on a social hierarchy, the nerd subculture also supports the traditional masculinity that rejects it. As Quail (2011) describes, "The hip/square relationship is used to bolster cool masculinity but not to demonize the square.

The two work together, almost to confirm that a variety of masculinities are possible” (p. 462). This dialectic between hip/cool males and square/nerd males is abundant in popular culture; even the dynamic between *Star Trek*’s Captain Kirk and Spock, a classic nerdy duo, supports a hip/square dialectic where these males work together to enforce their separate types of masculinity (Quail 2011). By bringing nerd culture into the mainstream, nerds are being reconfigured as a type of cool masculinity where the contrast to jocks is seen as an asset rather than a negative trait (Quail 2011).

Certainly, where jocks are seen as unintelligent and physically aggressive, the intellect and nonviolent nature of nerds should indicate a leaning towards diversity and inclusiveness in nerd culture. However, men in subcultures often maintain the status quo by endorsing traditional masculinity and snubbing femininity, and this is no different in nerd culture (Vasan 2011; Lumsden 2010; Leblanc 1999; Kanter 1977). Research illustrates that because nerds exhibit some feminine qualities, such as nonviolence, lack of sports ability, or lack of sexual prowess, they often view their masculinity as superior to those of traditional men (Cross 2015; Massanari 2015; Kendall 2011).

While nerd men do not have the mainstream social status of other men, they are able to display the power and status of masculine ideals through role-playing games. Playing games such as *Dungeons and Dragons*, one of the most well-known nerdy games, offers male players the chance to interact in a fantasy world where they have physical and social domination over women (Kuperberg 2002). Storylines often include women being depicted as subservient to men, players being rewarded for displaying strength or acts of violence, and players being able to rape female characters within the

story (Kuperberg 2002). While male *Dungeons and Dragons* players have cited interest in these sorts of games as a way to be able to escape societal alienation or “how much [their] life sucks,” role-playing in a fictional environment allows them to enact control when they feel powerless in their real lives (Kuperberg 2002). Gaming allows nerd men to “try on” other forms of masculinity that they do not actively display in society.

Technology

Today, role-playing games and tabletop/board games are considered nerdy, but video games are becoming less and less nerdy as they are pushed further into the mainstream. Indeed, this association with gaming may be part of what propelled nerds into conventional society. Today, gadgets that were once considered nerdy are now widely accepted as quite ordinary. Present day culture has entered a technological age where laptops and smartphones are commonplace, and consumers are excitedly awaiting affordable virtual reality systems.

The first video game was developed by a physicist named William Higinbotham in 1958 (Tretkoff 2008b). The game was a simple tennis game played on an analog computer (Tretkoff 2008b). Today, video game consoles can fit in a pocket and games can be played simultaneously with others around the world. Video games seem to be inherently nerdy as they are the offspring of science, technology, math, and engineering. Access to technology and development of games toward a more general audience has led video games to become a major form of mainstream entertainment (Novy-Williams 2017). In fact, the number one most subscribed channel on YouTube is PewDiePie, a Swedish male gamer and comedian whose success is based on uploaded videos of him

playing video games while providing commentary (Lynch 2017). At the time of this writing, his subscriber count was 61,278,677¹. PewDiePie as well as several other YouTube stars have used video gaming commentary to make their mark on the world (Lynch 2017).

Along with the rise of video game commentary online, there is also competitive video gaming, known as E-sports, which are worldwide, tournament-style competitions where teams of gamers attempt to claim victory by beating other teams of players (Molina 2018). Some of these tournaments are televised on popular cable television shows. ELEAGUE is a television series on TBS that broadcasts professional gaming competitions, much like national sports (i.e., MLB or NBA), but on a global scale (ELEAGUE 2016). As of 2016, zero out of sixteen gaming teams of five had a woman player. Not one team from any country had a female player (ELEAGUE 2016). An explanation for this occurrence may be that women are not seen as legitimate video game players by male gamers. In ways that women in STEM majors or careers might be put off such subjects or fields based on the discrimination by the masculine hegemony, so might gamer girls be reluctant to join a highly competitive, male-dominated competition.

Online Nerd Communities

Technology such as the internet is now firmly mainstream, but there are still various websites where nerds with more expertise with computers and technology can

¹ PewDiePie's YouTube.com profile page, accessed March 13, 2018, <https://www.youtube.com/user/PewDiePie>.

communicate with other nerds. Using such websites, men are often more forceful about maintaining a dominant hegemony in online nerd culture.

Kendall's (2000) work on the pseudonymed "BlueSky" website reveals that men in online nerd culture often display masculine traits through heterosexual sexualized remarks about women. As Kendall (2000) notes, "In each of these conversations, mere mention of a woman provokes the formulaic question, 'Didja spike her?'" (p. 264). These offhand jokes affirm women's status as sexual objects within nerd culture (Kendall 2000). Kendall (2000) goes on to state, "Nerdism in both men and women is held to decrease sexual attractiveness, but in men this is compensated by the relatively masculine values attached to intelligence and computer skills. In women, lack of sexual attractiveness is a far greater sin" (p. 265). Men typically see nerd women as undesirable, "pasty skinned blubbery pale nerdettes" (Kendall 2000). The indication is that female nerds are white, overweight/obese, and lower than men on the social ladder in nerd culture (Kendall 2000). Online websites such as these permit nerds to carry out "revenge fantasies," similar to those in the *Dungeons and Dragons* role-playing game, where they gain power and move from a marginal position to one of dominance over their competitors (i.e., women) (Massanari 2015).

Men in online nerd communities, like other male-dominated subcultures, fear women as a threat to the masculine hegemony of the group. In these situations, they often use sexist remarks and attempt to enforce stereotypes of women to navigate the uncertainty that a woman in their territory can cause.

Such is the case with Anita Sarkeesian, a media critic, who publicly promoted a Kickstarter campaign that was raising money to develop awareness programs about gender stereotypes in video games (Poland 2016; Tomkinson and Harper 2015; Robinson 2014; Hicks 2013). However, the backlash she faced from the nerd community was swift.

Within hours of her Kickstarter going live, waves of misogynistic comments, from the standard threats of rape and dismemberment to barely ironic demands that she “get back to the kitchen,” rolled in. Her home address was found and posted publicly... The loosely orchestrated hate campaign came to a head when an amateur game programmer named Benjamin Daniel, using the pseudonym Ben Spurr, made a Flash game that encouraged players to beat up Anita Sarkeesian until her face was bruised and bloodied beyond recognition (Hicks 2013:88).

Another infamous online exchange in the nerd community is that of female video game celebrity and actress, Felicia Day and video game journalist, Ryan Perez (Tomkinson and Harper 2015). Perez took to the social media website Twitter to criticize Day; he alleged that she was a “glorified booth babe” (i.e., “attractive women hired to stand at convention booths”) as well as other misogynistic comments (Tomkinson and Harper 2015; Robinson 2014). Exchanges such as these further solidify the social hierarchy of nerd culture.

Hierarchy and Adoption of Masculine Roles

In male-dominated subcultures, social hierarchies place the most value on masculine attributes and the least value on expression of feminine attributes. The hierarchy of nerds is no exception, although, potentially, slightly altered. Since there are noted feminine attributes of nerds, nerd hegemony includes accepted womanlike characteristics as well as masculine qualities (Robinson 2014; Kendall 1999).

“True Nerds,” although they exhibit some feminine qualities, remain at the top of the hierarchy; they have substantial power and status, which allows them to determine different attributes of nerd culture. Following “True Nerds,” there are other men in nerd culture who do not have as much power and status but reinforce the decisions and ideals of the “True Nerds” (Woo 2012).

Women who have been accepted into nerd culture are next in this social hierarchy. Like many other women in male-dominated subcultures, some nerd women opt to assimilate into the masculine doctrine of nerd culture (Lapacek-Trout 2014; Robinson 2014). By doing this, they gain some status and power while also being recognized as part of the nerd community.

Accepted nerd women are often viewed as undesirable or masculine (Robinson 2014; Kendall 2000). According to Robinson (2014), “In essence, female nerds are depicted as ‘failing’ to conform to their positive ‘feminine’ qualities such as sexual desirability, and as ‘incompatible’ with ‘masculine’ nerd qualities such as intelligence and technical mastery” (p. 12).

Nerd women are often attracted to nerd culture because it appeals to their interests, but soon, as with other male-dominated subcultures, adopting the ideals of the masculine hierarchy provides them with a larger degree of status and power as those masculine ideals and hierarchy continue to be reinforced (Robinson 2014). Interestingly, of Robinson’s (2014) participants, 62 percent of the females identified with a female character in the media, while 48 percent identified with a male character in the media. In her research, “Overall, participants discussed their dissatisfaction with female

representation in nerd media. Women discussed stereotypical or tropified female characters in nerd media, their lack of clothing or emphasis on ‘sexy’...” (Robinson 2014:31) Indeed, Wonder Woman, an iconic figure in nerd media, is simultaneously presented as masculine autonomous hero and sexual fetish object (Berlatsky 2015).

Often, depictions of women in nerd media are often pitted against each other; “the attractive and savvy versus the unattractive and awkward” (Lapacek-Trout 2014). As Massanari (2015) states, “Spaces dedicated to geek culture and STEM interests (like Reddit) may exhibit the tendency to view women as either objects of sexual desire or unwelcome interlopers or both-making them doubly unwelcoming for women” (p. 332-333).

Lastly, there are the “con girls” or the “booth babes” who embrace their femininity within or around nerd culture but are not considered legitimate (Robinson 2014). Reminiscent of the racing and metal subcultures, these authentic nerd women may look down on these women because of their illegitimate status, thereby reinforcing the hegemonic masculinity of nerd culture. However, research conducted by Robinson (2014) indicated that 75 percent of respondents reported the most prominent aspect of women’s representation in nerd media was a sexy or sexualized appearance. Female fans who cosplay, or dress up as certain characters from nerd media, are reported to be sexually harassed often, presumably based on the “scantily clad” nature of the character’s costume (Robinson 2014). Female characters are often developed by men and animated in ways that reinforce the sex object status of women (Robinson 2014). In fact, until she married Leonard, popular character Penny from *The Big Bang Theory* was not given a

last name, and her original maiden name has never been revealed on the show (Smith 2015). It is possible her lack of surname indicates how much lower in “nerd status” her character is in relation to the nerds on the show.

However, there are some who believe that women are the ones who hold the power. Men’s Rights Activists (MRAs) exist in many groups but share the same belief that women hold social power and men are oppressed (Poland 2016). In 2014, MRAs on social media began one of the largest outpouring of sexism, racism, and misogyny, not just in nerd culture, but on the whole of the internet (Poland 2016). This movement is known as Gamergate.

“Gamergate began as an incident of domestic violence that spiraled into a vicious attack on marginalized voices in video game spaces and nerd culture more broadly, many of its participants were already primed for perpetrating abuse by prior abusive activity” (Poland 2016:124). It began as an incendiary blog post about a female video game developer who allegedly had multiple affairs in order to get higher ratings for her games (Poland 2016). The blog post was written by her ex-boyfriend and escalated into MRAs taking the opportunity to harass and belittle women and other minorities in video game and nerd culture (Poland 2016; Cross 2015).

The persecution of Sarkeesian online was one instance of the effects of the Gamergate movement. MRAs, however, insist that the discussion was about ethics in games journalism and promptly target and harass anyone who disagrees (Poland 2016).

Providing Proof

The one of the common issues tackled by MRAs is that of false rape accusations (Poland 2016). Although the exact statistic cannot be known, research conducted on this subject indicates the percentage of false rape accusations is low, between 2 percent and 10 percent (National Sexual Violence Resource Center 2012). Despite this small figure, MRAs combatively oppose those in many feminists and feminist groups who do support rape victims coming forward (Poland 2016). According to Poland (2016),

The other issues so frequently raised by MRAs follow a similar pattern: the identification of a problem, followed by deliberately obscuring its true causes, presenting skewed information or outright dishonesty, and ignoring the complex web of factors that play into the reality of the situation (p. 132).

One such pattern is the treatment and insistence of the “fake geek girl” (Appendix B).

“The “fake geek girl” is a female who is not actually interested in the nerd community, but is trying to get (male) attention by appearing geeky” (Robinson 2014). These women in nerd culture are often subjected to harassment and claims of not being a nerd, despite how they identify. Robinson’s (2014) study found that 82 percent of participants experienced a gender-based insult while participating in nerd media.

Portlandia, a comedy sketch show, made a fake “Nerd PSA” announcement that told women to stop acting like nerds if they are not nerds (Lapacek-Trout 2014). In the clip, the “actual nerd,” Brian, states, “A sexy girl who went and saw a second-week screening of *The Avengers* is not a nerd” (Lapacek-Trout 2014:14). In a comedy bit by Chris Hardwick, comedian and influential nerd figure, he vents his frustrations about

“hipster nerds” and how female celebrities who self-identify as nerds are thought to be pandering to the nerds who are in charge of the entertainment industry (Lapacek-Trout 2014).

Indeed, many celebrities have been seen wearing thick-rimmed spectacles (a classic of nerd attire) and in some circles it has become fashionable to be nerdy (Lapacek-Trout 2014). According to “actual nerd” Brian, he truly needs his glasses to see (Lapacek-Trout 2014). Conventionally popular females such as Eva Longoria and Gwen Stefani have admitted in interviews to exhibiting nerdy characteristics in their youth, while Megan Fox, Mila Kunis, and Rosario Dawson have also described themselves as nerdy (Lapacek-Trout 2014; Toulin 2006). Although the percentage of “fake geek girls” is unknown, based on the estimates of false rape accusations, the actual number is most likely low. That, however, does not stop nerds, both men and women, from rejecting women who cannot “prove themselves” as a nerd.

It appears that a common thread throughout most women in a male-dominated career or subculture is either the conformation or resistance to binary gender roles. Indeed, “girl racers” had to prove themselves by challenging “boy racers” to compete in races (Lumsden 2010). In punk, artists like Patti Smith only became accepted after they had proved themselves as punk artists (Batt 2014). Vasan’s (2011) work in the metal scene found that women gained more respect after adopting the masculine dress and behavior promoted in the subculture. One interviewee in the metal scene explained, “I think that very early on, and because I was a woman... I wanted to be taken seriously as a

fan... you have to really prove yourself, when you have a male audience... You have to prove yourself two times over” (Vasan 2011:343).

Various subsets of nerd culture insist on proof of knowledge before being accepted into the culture. Audiophiles, or people who appreciate listening to music and sound through high fidelity (hi-fi) stereo equipment, make up a nerd culture of “music lovers, record buyers and collectors, hi-fi show visitors, designers, and journalists” (Nilsson 2011:62). While the majority of audiophiles are men, there are some women who consider themselves part of this subculture (Nilsson 2011).

Status in this area is achieved through masculine performances. A pursuit to convince others of the best sound system, expertise in the mechanics of equipment and sound, and knowledge of brands and equipment are all considered to be status symbols as well as masculine traits (Nilsson 2011). Women in the subculture must prove that they are knowledgeable about hi-fi before they can be taken seriously as a fan (Nilsson 2011). While many audiophiles agree that the quality of sound is subjective, men often devalue the opinions of women audiophiles in order to resolidify their own status within the culture (Nilsson 2011).

Female nerds consistently report harassment by male nerds challenging the status of nerd women. As Robinson (2014) reports,

For example, a woman reported wearing a BioShock Infinite shirt while getting a drink at a coffee shop. A male customer challenged her understanding of the first-person shooter video game by saying, ‘you probably haven’t even played it.’ She had to ‘prove’ her knowledge of the game by telling him how it ends (p. 2).

Another example states, “If a female nerd claims to be a Batman fan, another nerd can check her “cred” by questioning her on 75 years of comics, 7 feature length movies, live action and animated television shows, stand-alone animated films, spin-offs, derivative works, and fan fiction” (Robinson 2014:54). No matter how much knowledge or interest a woman has in nerd culture, there is always the potential for her to be labeled as a “fake geek girl” (Robinson 2014). Knowledge is used as a form of “gatekeeping” in nerd culture, typically through “True Nerds” or male nerds who fear the inclusion of females in their space (Robinson 2014). Robinson’s (2014) study found that 78 percent of participants thought that there should be no threshold or that there is no threshold of knowledge in nerd culture. Unfortunately for women, how much or what knowledge is considered authentic is subjective to the “True Nerds” in that community (Lapacek-Trout 2014; Robinson 2014).

Navigating through nerd culture for women can be particularly difficult. Women who take up the label “nerd” must, either consciously or unconsciously, determine their level of resistance or conformity to the rules set by “True Nerds” in the culture. Therefore, I hypothesize that resistance or conformity to masculine hegemony and gender stereotypes may influence how women identify themselves within nerd culture and affect their gender presentation.

CHAPTER III

THEORY

I will use a social constructionism framework to analyze how identity, gender, and presentation of self were adopted by women in nerd culture. A social constructionist framework assumes that knowledge and experience of reality is the result of social processes and activities (Hacking 1999). The underlying connection between all social constructionist theories is an aim to raise consciousness of these ideas (Hacking 1999). I will focus on areas of identity such as stigma and labeling to hypothesize how women and girls might formulate their identity within a nerd subculture. Using concepts of “doing gender” and performances of self, I will also explore how these nerd women might negotiate a gendered subculture and how that might shape their own self-performance.

Identity

There are many theories and ideas on what shapes a person’s identity. A constructionist theory suggests identity is the accumulation of an individual’s social interactions. Nerd identities can be developed through constructionist philosophies as well as the identities of nerd women.

Identity development.

Identity, in a constructionist viewpoint, “is established within the perception of *self* as derived from thoughtful reflection on communicative interactions between oneself

and others from the societal environment” (Jackson II and Hogg 2010:740). Early on, girls’ opinions of nerdiness are informed through associations from impactful relationships. Influence from peers, school, and family often indicate that being a nerd is a negative attribute (Rentzsch, Schutz, and Schroder-Abe 2011; Adler, Kless, and Adler 1992; de Klerk 1992). The strength of these relationships can either encourage or discourage girls from wanting to be a nerd. Certainly, interactions in elementary and middle school are not usually conducive to girls exhibiting nerdiness (Rentzsch, Schutz, and Schroder-Abe 2011; Adler, Kless, and Adler 1992; de Klerk 1992). As noted by Jackson II and Hogg (2010), “Identities cannot develop without experiencing others through communication and then reflecting upon these social interactions” (p. 2). What girls learn of themselves through these exchanges is either enforced or discouraged through peer interaction in school and by the school itself (Bronfenbrenner 1977).

Not only can these immediate relationships affect if a girl views herself as nerdy, but other institutional factors such as race/ethnicity, sexuality, or socioeconomic status can also determine a willingness to transgress mainstream ideals to identify as a nerd (Bronfenbrenner 1977). It is important to note that the different levels of identity development, the intimate relationships of nerdy girls and the institutional factors that influence their lives, cannot be looked at independently of each other; the interrelationships among these social functions are imperative to understanding identification of the self (Darling 2007). Undoubtedly, every new social interaction allows an opportunity to embody or reject identity characteristics (Jackson II and Hogg 2010).

When, exactly, do these accepted identity traits become a nerd identity? I believe there are a few ideas at work here. According to Hacking's (2002) theory of dynamic nominalism, identities of people come into being as the identity itself is being invented. That is to say, how the naming of this identity came to be perceived by society (Hacking 2002, 1999). The observation of a "nerd" did not have any meaning socially until the label was presented in society along with its intrinsic attributes. Indeed, a nerd would not be associated with computers or video games if not for the time period in which the word was introduced. Therefore, the social identity of a nerd comes from the ascribing of certain traits as a part of "nerdiness."

Conversely, hooks (1994) explains, "[The] possession of a term does not bring a process or practice into being; concurrently one may practice theorizing without ever knowing/possessing the term, just as we can live and act in feminist resistance without ever using the word 'feminism'" (p. 61-62). These two seemingly contradictory ideas are, in fact, potentially congruent to understanding how nerd women come to identify themselves.

The practice of living and acting out behaviors free from a subscribed terminology can be seen as performing personal identity. Hooks (2015) describes and develops her understanding of ideas that may or may not already have a label in society. This conception of identity is particularly individualistic. However, if a label of these traits was readily available, preconceived notions about that label are then imposed on those who identify with that descriptor (Hacking 2002). Hacking (2002) states,

Indeed, the privileged act of naming often affords those in power access to modes of communication and enables them to project an interpretation, a definition, a description of their work and actions, that may not be accurate, that may obscure what is really taking place (p. 62).

This understanding involves the social powers and processes that affect personal labeling.

According to Hacking (2002), conceptions about identities or labels are only conceivable based on the society in which people live. “[The] outer reaches of your space as an individual are essentially different from what they would have been had these possibilities not come into being” (Hacking 2002:110). Therefore, thoughts, ideas, and behaviors are constructed based on known knowledge of the world.

However, divergent ideas, beliefs, and behaviors come from a place of disadvantage and exist outside of the mainstream, both in ideology and by lack of a label (hooks 2015). Once a label is attached to specific concepts, the characteristics exhibited by the individual can become incorporated into society under the attached label and can be known as such thereafter. Therefore, the label of nerd may or may not be influential to females in nerd society based on how they came to identify as nerds.

Stigma.

In the case of girls and women in nerd culture, the traits that are not welcome are those typically ascribed to femininity. Being female, then, becomes a stigma and something that must be negotiated (Goffman 1963). Link and Phelan (2001) quote Goffman (1963) to define a stigma as an “‘attribute that is deeply discrediting’ and that reduces the bearer ‘from a whole and usual person to a tainted, discounted one’” (p.364).

Truly, both displayed attributes and stereotypes of femininity seem to be deeply discrediting in nerd culture. However, a more updated definition from Link and Phelan (2001) shall be used, therefore, “stigma exists when elements of labeling, stereotyping, separating, status loss, and discrimination co-occur in a power situation that allows these processes to unfold” (p. 382). This conceptualization of stigma focuses on the structural relationships that continue to subvert women in nerd culture.

In education and career areas such as STEM, stereotypes of women can be used as reasoning to devalue the accomplishments or opinions of women (Sassler et al. 2017; Kendall 2000; Kanter 1977). Literature suggests that “perceptions of women’s competence and commitment to the labor force were shaped by “maternal profiling” . . . where women’s abilities were downgraded because they were all perceived as potential mothers” (Sassler et al. 2017:195). There are also biases in textbooks and television that depict women as “less than” their male counterparts (Blickenstaff 2005). Along with a masculine worldview of STEM and lack of role models within these fields, female nerds must be willing to not only bear the stigma of being an “outsider” of mainstream society, but an “outsider” in nerd culture as well (Blickenstaff 2005).

Why is it then, that men in nerd culture, who are “outsiders” and discriminated against in mainstream culture, come to discriminate against women in nerd culture? Although there are several, nonmutually exclusive explanations, Goffman’s (1963) theory of stigma appears worthy of exploration. Goffman (1963) states, “And since interaction roles are involved, not concrete individuals, it should come as no surprise that

in many cases he who is stigmatized in one regard nicely exhibits all the normal prejudices held toward those who are stigmatized in another regard” (p. 138).

These exercises of discrimination express the theory of stigma (Link and Phelan 2001; Goffman 1963). Ways in which nerd men rationalize animosity between or emphasize the inferiorities of women are ways in which they stigmatize femininity as an inherent flaw (Goffman 1963). Therefore, most displays of femininity are considered deviant (Becker 1997). Being labeled as a deviant comes with certain “consequences;” one of the most important being a change in the public identity of the individual (Becker 1997). Once labeled as a nerd, there are certain assumptions and treatments involved with that label, and once labeled a female nerd, there are even more ascribed stereotypes and treatments in addition to nerd stereotypes that may be enforced in society (Becker 1997).

According to Goffman (1963), stigmatized people can react to this label in three different ways: they can attempt to correct the objectional trait directly, they can indirectly rectify the trait, or they can “break with reality” and employ their own alternative interpretation of the stigmatized characteristic as part of their identity.

To directly remedy the “problem” of femaleness, women can assimilate to the masculine hegemony of nerd culture. This notion entails giving up virtually all aspects of feminine identity and conforming to the depiction of maleness in nerd culture. There are several theories, such as social cost exchange, that support this option being the most beneficial and convenient to nerd women (Vasan 2011).

As discussed with other male-dominated subcultures and previous research on nerds, this method of dealing with stigma is a viable option for women in nerd culture.

Indeed, some research has found that

[Real] members of subculture find identity in ‘being’ in a subculture rather than ‘doing’ a subculture. . . ‘Being’ in a subculture is a signal of real membership and is evident when members are ‘embracing the lifestyle and values’ of the subculture rather than insincerely putting on a front to look the part, or ‘doing’ the subculture. . . To authentically adopt an identity means to wholeheartedly accept the origins of the culture because it is your culture and you would not want any other because you don’t feel that you would be comfortable conforming to anything different (Lapacek-Trout 2014:39).

Logically, women who wished to be labeled and treated as authentic nerds would need to adopt the masculine hegemony in order to “be” a nerd. Those who only “do” nerdiness could be seen as interlopers and rejected by nerd men and women who claim to be authentic. The negotiation of identity of accepted female nerds may, in part, induce discord between recognized nerd women and stereotyped “booth babes.”

Indirectly “correcting” femaleness would require women in nerd culture to acquire enough knowledge about everything to be able to prove themselves whenever their legitimacy is contested. If a main identifier of nerdiness is intellect or knowledge, an indirect way to subvert any notion of nonnerdiness could be to know everything about everything.

Otherwise, nerd women can “break” with reality and live their own interpretation of what it is to be a nerd. Although this idea has not been widely researched, this reaction to stigma may be a catalyst for not only so many different subsets of nerd culture, but also the immersion of nerdiness into mainstream society. Perhaps, instead of trying to

assimilate into the “boys’ club” of nerd culture, women have finally started defining themselves not by or in relation to men. Even if women have started classifying stigmas as “nonstigmas,” they must still navigate in a culture that often does recognize feminine traits as stigmas.

Indeed, effects of media and hegemonic nerd culture can still negatively impact women who label themselves as nerds. Any discrepancy between women’s virtual identity (stereotypes) and actual identity (displayed attributes) in nerd culture is what Goffman (1963) refers to as “spoiled identity.” This can occur when the feminine stereotypes of women are pitted against the masculine attributes required of women in nerd culture. A spoiled identity effectively cuts a person from society and from the self, so they are left to stand, discredited, in front of an unaccepting world (Goffman 1963).

Nerd women with a spoiled identity, however, are not alone; there are usually others that either share the same stigma or who are sympathetic and privy to the life of the stigmatized individual – an honorary member of the stigmatized (Goffman 1963). Naturally, many women may experience this spoiled identity and find comfort and solace with other nerd women in similar situations or through male nerd alliances. These supporters and other deviants can potentially come together to make up a deviant community or subculture (Becker 1997; Goffman 1963).

As discussed, stigma of a label allows people to make certain assumptions and treat those labeled as nerd in a specific way. Unfortunately, creating a sub-subculture of “nerd deviants” does not protect members of that community against the stereotypes and treatment of using the label nerd. It can, however, help to change the understanding of

what nerd means in society, move toward different treatment of nerds, and lessen the stigmatization of nerds. Some research shows that those who self-identify with a stigmatized group are viewed as being more part of the group than those who were labeled by others in society (Whitson, Anicich, Wang, and Galinsky 2017). It was also found that those who self-label saw the label less negatively than those who were assigned a stigmatized label (Whitson et al. 2017). Female nerds “owning” their differences and stigmatized labels can reduce the discontentment associated with such identifiers and help members of the male-dominated nerd culture perceive the stigmatized characteristics less negatively (Whitson et al. 2017).

Gender Performance and Presentation

Women can negotiate a spoiled or stigmatized identity through the performance or presentation of their gender. Nerd gender performances can be seen as both a masculine and feminine display. Even so, there is a tendency to prioritize masculine qualities over feminine traits.

Doing gender.

When referring to gender, the definition used by Butler (1999) will be used. This understanding sees gender as being constructed over time through a “stylized repetition of acts” (p. 179). Therefore, gender is not based on any biological notion, but on the presentation of gender. Indeed, gender presentation is portraying certain characteristics in a social context, one which Goffman (1959) viewed as a performance of the self. Just as a thespian would act out a play for an audience, so also is gender performed. In fact, Goffman (1977) regarded social practices as producing “natural” differences in sex rather

than simply expressing them. He notes that although biological difference between sexes are mostly irrelevant, they have become of great importance to how people are socialized into different performance roles (Goffman 1977). In this view, gender and gender roles come from and are imposed on a person by society. Butler (1988), however, disagrees with this assertion. She suggests that “one is compelled to live in a world in which genders constitute univocal signifiers, in which gender is stabilized, polarized, rendered discrete and intractable” (p. 528). In essence, “there is no identity that precedes the social. There is, in other words, no natural ‘sex’ to which (social) gender is added” (Lawler 2014:127). “Doing gender” well can reassure society “that there is an essentialism to gender after all” (Butler 1988:528). In other words, gender is an enactment of a true, internal identity that is either punished for an incorrect performance or rewarded for being performed correctly in different social settings (Butler 1988; Brickell 2006). Gendered identities can also be seen as an ongoing process rather than a static trait (Lawler 2014). The notion of gender is constantly evolving, similar to other elements of interaction.

Language.

Butler (1999) contends that language is used to sustain gender within culture. Indeed, distinction between bodies begins at birth with the labeling of newborns as “boy” or “girl” (Goffman 1977; Nentwich and Kelan 2014). Society then continues to place labels on subsequent interactions with a description of “masculine” or “feminine,” and the performance of these correct or incorrect gender interactions is understood to be gender performativity (Nentwich and Kelan 2014).

Nerd is a masculine term. This is indicated by female nerds having to identify as a different, an “other,” type of nerd. This is illustrated through the use of a modifier for women in nerd culture. For instance, men are not referred to as “boy nerds” or “geek guys,” but women are identified using deviant, “othered” labels such as “nerdettes” or “geek girls” (Robinson 2014). Interests of nerds are also seen as inherently masculine. STEM subjects are often avoided by women who do not want to be viewed as masculine and women who do are perceived as transgressing in a masculine domain (Foor and Walden 2009; Steinke 2005; Kendall 2000). Audiophiles view experienced-based knowledge as a masculine aspect of their subset of nerd culture (Nilsson 2011). Men often refer to their equipment or cars as “she” and are even sexualized in the media (Lapacek-Trout 2014; Nilsson 2011; Lumsden 2010). Metal music and punk music are also thought of as music for men, especially with misogynistic lyrics that promote these ideas (Riches 2011; Vasani 2011; Leblanc 1999). Indeed, how things are labeled affect assumptions and perceptions within social circles and gendered language is no different.

Gender performativity.

The use of gendered language in nerd culture is apparent, but could the definition of a nerd be changing? Stereotypically, a nerd is male, and the culture is certainly male-dominated. As discussed, there are certain feminine attributes that are accepted in nerd culture, but, by and large, feminine traits are traditionally rejected by male nerds (Robinson 2014; Demaiter and Adams 2009; Kendall 1999). Thus, nerd culture maintains traditional views of masculinity and femininity. However, females transgressing into nerd culture could be having an impact on the meaning of what it is to be a nerd. As with other

women in male-dominated subcultures, women in such areas may want to redefine what it means to be a woman by displaying these masculine traits (Riches 2011; Vasan 2011; Lumsden 2010; Leblanc 1999). These alternative performances of gender could make it possible for audiences to reorder their thinking from gender as binary and from masculine traits being superior to feminine traits (Nentwich and Kelan 2014).

However, as a part of these alternative performances, women often experience a “double-bind” in nerd communities (Demaiter and Adams 2009; Lumsden 2010). In male-dominated professions, competence is associated with masculinity and women who embrace femininity risk appearing incompetent (Demaiter and Adams 2009). Sometimes females will reject this situation entirely by rejecting the masculine aspects of their personality. Research by Mendick (2005) showed that girls often denied that they were good at math, despite their success in math courses, because of the association of math as a masculine trait. In certain nerd cultures, women also experience a double-bind where any “unauthorized” display of femininity may result in claims that they are not nerds and may be subject to prove their authenticity (Robinson 2014). This serves to “gatekeep” the community and prevent “fake geek girls” from “diluting” what it means to be a nerd. However, “gatekeeping” efforts have not stopped women from participating in nerd culture. Women continue to perform their socialized, feminine identities in and around this subculture, potentially beginning a cultural shift away from the masculine identity of nerds.

An important part of social identity is the idea of a person’s habitus, or the ways people have been socialized to use their body in certain spaces (Lawler 2014). Bourdieu

(1990) surmises, as quoted by Lawler (2014), habitus is thought of as an “embodied history, internalized as a second nature . . .” (p. 146). How people learn to dress, position themselves, act, or judge the habitus of others are all part of this history that serves to emphasize the social differences and inequalities used to justify the subordination of others (Lawler 2014). Nerd media often conveys women dichotomously as either sexy or nonsexy, feminine or masculine, a nonnerd or a nerd (Lapacek-Trout 2014; Robinson 2014). Women in comic books or video games often are criticized for having “scantily clad” armor or clothing (Lapacek-Trout 2014; Robinson 2014). There are fashion blogs that instruct readers or viewers how to create a realistic replica of these female characters’ costumes or blogs for “interpretive” fashion, which is taking inspiration from character costumes and using everyday clothing pieces to “lightly” mimic the appearance of nerdy characters (Hunting 2015). Still, the habitus of women in nerd communities remains mostly within a masculine/feminine binary. However, it is becoming harder to distinguish a “nerdy girl” from the “girly girls.” As Sele (2012) notes, “Female nerds are a group that does not necessarily wear their passion and thus can appear less geeky and less socially awkward” (p. 11).

Performance and power.

As previously discussed, masculine hegemony of nerd culture plays a large part in the power dynamic and hierarchy in relation to the status of women. Connell’s (1996) theory on hegemonic masculinities indicates that “The main axis of power in the contemporary European/American gender order is the overall subordination of women and dominance of men” (p. 161). This subordination and dominance is found in schools,

corporations, histories, and cultures, but hegemonic masculinity is best thought of as the authoritative pattern of masculinity in society (Connell 1996). Both men and women can benefit through performances of these masculine traits (Connell and Messerschmidt 2005; Connell 1996). Since gender is not fixed, any sort of body could perform masculine behaviors. Women who assimilate into the masculine hegemony of nerd culture find they must do so in order to be seen as legitimized participants in nerd culture (Lapacek-Trout 2014). They also may earn some of their credibility by rejecting displays of feminism by other women in nerd culture such as “booth babes” or any girl wearing a “sexy” costume (Robinson 2014). The acceptance and reinforcement of wide-spread ideals, such as white, heterosexual aspects of masculinity, provide actors with gendered models of accepted interactions with feminine persons. The model of masculinity in nerd culture expresses widespread white, heterosexual ideals, fantasies, and desires (Connell and Messerschmidt 2005). Indeed, sexual harassment, verbal abuse, and other dominative performances have been directed towards those who do not provide, based on individual interpretations, acceptable amounts of masculinity in nerd culture (Lapacek-Trout 2014; Robinson 2014).

To be considered as a legitimized nerd, women seemingly need to identify more readily as masculine rather than feminine and employ an equivalent gender presentation. Using constructionist and gender presentation theories, I constructed a research study that will add to the discourse of nerd communities and of women’s identification and gender presentation.

CHAPTER IV

METHODS

Nerd women provide an interesting look into a male-dominated subculture that does not have a traditional hegemonic masculinity. The incorporation of feminine traits into the masculine identity of nerds is intriguing since their treatment of women in nerd communities is concurrent with other masculinized, male-dominated communities. Therefore, I sought to understand how self-identified female nerds negotiate their identity and gender performance as a nerd in a male-dominated subculture. To answer this question, I created and administered semi-structured interviews to women who expressed an interest to participate in my study (Appendix C). I chose to explore qualitative, semi-structured methods to get a fundamental understanding of the “real world” experiences of nerd women, not just what is portrayed in the media or perceived about women in nerd occupations or nerd culture (Mason 2011; Weiss 1994).

Sampling

Determining how to find my sample was interesting. I knew I would use a non-probability method to create a panel of informants based on the specificity of the interviewees needing to identify as a woman and a nerd (Weiss 1994). While I do have access to certain nerd communities, I wanted to be able to expand my sampling frame to get as diverse a sample as I could. I decided on purposeful sampling, even though one downfall is not being able to get a diverse enough sample (Walliman 2006; Morse 2011).

Of the nonprobability sampling techniques, purposeful sampling allowed me to find people who identified themselves as female nerds. Although this limited the overall diversity of my sample, it was necessary to get interviews with people who met these specifications. Qualitative research is not generalizable, and the experiences cannot constitute any patterns or correlations, except amongst themselves (Mason 2011).

Even so, I researched local board game stores, comic book stores, and other potentially nerdy stores in the Salisbury, NC and Greensboro, NC area. I reached out to eight stores for permission to place fliers in their windows or on community boards. In return, I offered to purchase gift cards from the store for all who saw the flier in that store. All stores accepted my offer. During the course of my interviews, a new comic book/coffee shop opened in Charlotte, NC. I contacted the owner and they also agreed to place a flier in their window. These businesses were located in areas that were drivable distances to meet for in-person interviews.

There were a few people, both nerds or women who knew nerdy women, interested in a sort of “reverse snowballing” where they either agreed to promote the flier on social media or referred women to contact me without being prompted (Walliman 2006; Morse 2011; Weiss 1994). I received three contacts via these recommendations or social media promotions.

Data Collection

Although there is significant cultural overlap with geeks among these retail stores, the fliers requested participants who identified as a “nerd” and “female.” Encountering women who identified as both geeky and nerdy was to be expected and did occur.

However, there may be biases in sampling based on the wording of “female” not being preferred over the more gender-based pronoun, “woman.” Also, based on the prominence of the flier, how long the establishment kept the flier displayed, and the number of women that entered into these often male-dominated areas, the likelihood of a female nerd seeing the flier and being interested in participating in interviews is probably somewhat low.

These types of establishments biased my sample since not all self-identified nerds enjoy comic books, games, or coffee. Also, a problematic situation was that to recruit self-identified nerds, it was important that I not assume that they, indeed, identified as a nerd. However, nerds are, by definition, not socially adept. The fliers required these self-identified, female nerds to make the first social move. Therefore, my sample was biased since I potentially have more socially adept nerds, and my sample was extremely limited.

Fliers were requested to hang in stores from June 2017 to the end of January 2018. Interviews were face-to-face apart from two, which were conducted via email due to distance (Walliman 2006). Interviewees were provided with information statements based on Internal Review Board (IRB) standards. I recorded interviews with permission of the participants, and the files were uploaded to the cloud per IRB statutes. Personal information was kept on a password-protected drive. I removed any distinguishable information and names were changed to ensure confidentiality. I transcribed the interviews and coded the information using both in vivo coding and overall themes (Corbin 2011).

Methodology

Phenomenological research method.

Phenomenological research: “In the context of social science methodology, the term usually means an approach that pays close attention to how the people being studied experience the world” (Hammersley 2011:816). By using a method that encourages analysis of the ways people view their experiences in different cultures, I can effectively study my research questions. Focusing on important attributes of their experiences will allow me to see how the women in this sample negotiate their identity as nerds and how they perform gender in nerd communities.

As Butler (1988) explains, phenomenology grounds theory within lived experiences and can reveal ways in which culture is produced through different performances. These “acts” are shared experiences as well as “collective actions” that allow people to embody meanings behind the performance of the act itself (Butler 1988).

Limitations.

There are limitations of phenomenological research methodology, as with any methodology. One limitation is that only a partial understanding of women in nerd culture can be found. Additionally, because of the lack of interpretative data, the results are not generalizable to the overall population (Mason 2011).

Demographic Information

I communicated with twelve different women and was able to interview ten. I was able to recruit women with a range of sexual orientations, ages, education levels, and occupations. Unfortunately, nine out of the ten women identified as “fully”

Caucasian/white; the tenth identified as Korean and Caucasian/white. Although the comic book/coffee shop in Charlotte, NC specifically caters to the LGBTQ community and people of color, I was not able to recruit any queer-feminine-gendered individuals or persons of color. This is potentially indicative of the lack of people of color in the nerd community. Interestingly though, only half of the women interviewed identified as heterosexual, while two women identified as pan, two as bisexual, and one as lesbian. Only 3.5 percent of North Carolinians are part of the LGBT community with 51 percent identifying as female (The Williams Institute 2018). While my sample may not be representative of LGBT women in the state of North Carolina, it may, however, be representative of LGBT women finding commonalities with others in the nerd community. Education levels ranged from some college to Ph.D. candidate. Ages varied between nineteen to forty-nine, but five of the women were under the age of thirty. Careers also varied and included unemployed individuals, a manager, a magistrate, students, a visually impaired assistant, a lawyer, a stay-at-home mom, and an industrial engineer.

CHAPTER V

RESULTS

The interviews brought to light some interesting information about women in nerd culture. Aspects of being a female nerd in a male-dominated subculture, including negotiation of heteronormative, hegemonic masculinity, and performance of masculine or feminine traits depicted a community that may be evolving.

Female Nerd Identity

The women interviewed came from many different backgrounds and had very different experiences in nerd culture. I asked each participant to define what nerd culture was to them. Based on the overall themes, nerd culture, or the term nerd, describes a type of person or group of people that express a passionate interest and knowledge of certain subject areas. Some indicated the subjects were within popular culture, others said subjects are less mainstream. However, all women indicated that today it was more socially acceptable to be a nerd than it has been in previous time periods.

Origin stories.

Interestingly, nine out of the ten women indicated that they recognized that they were nerds from elementary through high school. Twenty-nine-year-old Maggie, however, did not realize until she was twenty-two years-old that she had always been a nerd.

I was working at a bar, and I made all these comments about video games . . . I stopped and I realized, ‘Oh my god, I’m a super-nerd!’ I grew up watching Spiderman and X-men, and I was so shocked because I always assumed I was a tomboy. Now I assume neither, but I’m still a nerd deep down.

Once Maggie became more aware of her nerdiness, she began to view it as a part of herself. “As I recognized it, I accepted it a lot more. As part of identifying it - it’s like unlocking a whole new part of your personality.”

For most of the other women who recognized their nerdiness earlier in life, being a nerd was not an advantageous identifier. Once outside of school, however, they no longer cared about the negative perception of the label and began to identify as a nerd more readily.

Since most of the sample began identifying as a nerd in grade school, it was interesting that only two women continued to study or develop a career in STEM subjects. The women in the sample did seem to continue their thirst for knowledge, however, since four held a graduate degree, three held a bachelor’s degree, and three had at least some college credit. Associations of being a nerd in those younger years may have affected their decisions in terms of their education. Jennifer, nineteen, reflected on what it was like being a nerd in school, she states, “When you’re younger, you’re like, ‘Gosh, what a nerd.’ . . . ‘Gosh, it’s a bad thing.’ But now it’s like, ‘Hey, everyone can be a nerd because they’re into certain things.” When commenting on how her understanding of nerd culture has changed, Serena, twenty-eight, similarly noted, “Over time, as most of my friends were also nerds, I stopped thinking of nerds as a stereotype. Now I view it as a very diverse community.” Violet, forty-four, remembered what it was like in elementary

school when she was a nerd. On being a nerd during that time, she said, “It was not nearly so accepted. Now there is a fair amount of not only acceptance but pride in the moniker, and that was not the case for a long time.” For a majority of these women, the perception of nerds has changed. With the shift in perception of nerd culture, similarly, there has been a shift in their identity as a member of the subculture.

While they may not have known it at the time, the identity of some nerd women seemingly began with an interest in a subset of culture that is characteristically nerdy. Thirty-one-year-old Kayla indicated it was “Sailor Moon and anime, in parallel with RPGs,” that got her into nerd culture. Violet revealed her curiosity for comic book entertainment, “the quintessential good vs. evil thing and how that kind of fit in with what [her] idea of what the universe was like,” that drew her to nerd culture. Brock, twenty, remembered that it was either *Teen Titans* or *Pokémon* that brought her into the subculture.

Others, like Serena, said, “I don’t know that there was any one thing. I can’t even say I was drawn to it; I just acknowledged one day that it was something I was.” Thirty-six-year-old Heather mirrored those sentiments about being a nerd by stating, “It’s not really an escapable thing.” Indeed, forty-five-year-old Malecasta also describes an intrinsic attraction to the nerd community. She states, “Even if nobody else enjoyed what I enjoy or there was no name for it, I would still be me, so it doesn’t really matter.”

More than just a nerd.

The women interviewed did not fit a stereotypical definition of a nerd. Each expressed a large assortment of interests and hobbies both inside and outside of nerd

culture. Although, eight women in my sample indicated one of their hobbies is playing video games, and six indicated an interest in reading. Several women were into arts and crafts such as knitting/crochet, painting/drawing, or creative writing/poetry.

Within my sample, there were a variety of labels other than nerd with which women identified. Of the interviewees, four described themselves as either a geek or a gamer. Interestingly, two women described themselves as a feminist, while another two women specifically rejected the feminist label. Additional labels varied and included being a mom, a musician, a hipster, and a scientist.

Malecasta expressed what the label of nerd meant to her by asserting, “I had that feeling of acceptance into something. Well, in anything, when you have a name for it, it just makes it easier to accept yourself.” Violet alluded that once she decided that she liked being a nerd, she had the freedom to be more confident in herself. For this sample of women, nerd appeared to be an identity in which they felt comfortable and accepted.

Future generations of nerds.

It looks as if, to some women, the nerd identity is an important part of their lives. Most women in the sample who had younger children indicated that they wanted their children to grow up to be nerdy. Violet said, “I want my daughter to know she can be nerdy and silly and creative, whatever she wants.” Maggie stated,

One of the things that I like about my oldest child, she has said on numerous occasions, ‘It’s in my blood; I’m gonna be nerdy.’ It’s about knowledge and learning, and when we are pursuing that for ourselves, that - it can feel really good and that it helps things come together in our brains. That can make us try to understand how we can better serve people and each other as a family and our environment. I think that is the thing I like that I’m seeing develop within her.

Most of the women who had older children suggested that their children were already nerds. However, Malecasta explained that while her son had retained his nerdy traits, her daughter, who used to be “very nerdy,” was now at the age where she rejected the insinuation of nerdiness. “She’ll play video games in secret, but if anyone asked her about it, it’s like, ‘No!’”

Male-domination

In my sample, the perception of the prominence of women in nerd culture was divided. Six women saw nerd culture as male-dominated, while four viewed it as a mixture of both. However, some people from either standpoint saw that the number of women in nerd culture is changing. Malecasta indicated that in her view, nerd culture was “mostly male - there are both, but definitely male dominated. . . I wish they would have more things that would bring women in . . . [because] when I first went into comic book stores, I was like, the first one, but now I see more women in there.”

Most women felt that, despite being male-dominated, nerd culture was welcoming overall. Some of the women praised the increased inclusion and diversity they are seeing in the nerd community and the influx of nerd women based on the recent popularity of nerd culture. However, some did describe, in one way or another, instances in which nerd culture can be not welcoming to women, but mainly indicated it was usually a “few bad apples.” Jennifer mentioned,

I feel like, I mean, I know there are some bad parts in every community, . . . I just kind of avoid the people who are bad. . . I can start a conversation with almost anyone because it's just a - pretty much - accepting area, and like, there's a few toxic people but for the most part it's pretty good.

Heather described “that guy’ who will not shut up or will tell you why what you like is wrong,” and is seemingly a staple at any board game or comic book store. Violet’s experience was more than a “few bad apples.” “I loved comic books for a long time, and I kind of fell away from doing that because nobody would ever talk comic books with me because I had girl parts,” she shared. Violet did take up comics again, though, once they became more popular, and there were people with whom she could share her interests. Violet’s experience seems to hint at a larger issue of the image of nerd women.

Girl parts.

Although continued incorporation of women into nerd culture was mentioned, issues with the perception of women in nerd culture/media were also expressed. Maggie states, “I think women sometimes in - the fictional ones - are portrayed in a sexualized manner, but they were written by men so, I’m not really surprised. Because there’s nobody that looks like [Wonder Woman], man! That waist size? I do love Wonder Woman, though.” As Brock describes,

Women [are] sexualized, not in personal groups, but like Black Widow. The people who create these characters know what they’re doing. Wonder Woman with boobs pushed up to her chin . . . that’s why I like Jessica Jones, she’s just a depressed hard-ass - she’s just a dick. That’s what women are like. I’m waiting for the day that someone ugly or overweight is a superhero. Not everybody who wants to be a hero can be flawless; hero doesn’t mean you’re beautiful.

Though all women in my sample had issues with the sexualized portrayal of women in nerd culture, a few revealed that there were some women in nerd communities that were not entirely welcomed by nerd women. Women who dress up in sexy costumes or display sexuality were thought of as trying to attract male nerds as romantic partners.

A few women indicated that women were often seen as not being sincerely interested in nerd culture either by dressing provocatively or by pretending to be nerdy if they traditionally did not identify as a nerd. Even so, the majority of women in the study thought that women were supportive of other women in nerd culture. Kayla expressed that, to her, women in nerd communities are “99% genuine.”

Although some did specifically reveal some displeasure at women in nerd culture that might not be considered as nerds, they overall had very few negative experiences with other female nerds in nerd communities. Jennifer affirms,

I always feel more comfortable talking to other women in the communities because I know that there's no, like ulterior motive I guess. . . if a guy is talking to me - and I hate doing this, because it's like, I don't like judging people but – like, I'm instantly kind of on guard.

Serena notes, “Almost all my experiences with other women in my work place or hobby space have been very positive. I think that women nerds are so outnumbered by men that we feel a need to stick together and be supportive.” Kimberly reasons, “The few times I've been around other women to kind of get to know them, we've kind of grown together a bit.”

Proving nerdiness.

Most of the women sampled illustrated that they had to prove themselves as a nerd. On proving herself as a nerd, Jennifer states,

Gosh, I feel like in some video games that are competitive, people might instantly assume that I'm not quite as good at it. . . I've encountered some people who, like, will attack another girl on the team or be like, like, “We lost because we had a girl,” like, every few times that I've seen it happen. Um, it's mostly just like,

proving you're good enough at games, and people instantly assume that a girl isn't gonna be as good as a guy in most games.

Kayla describes her experiences of having to validate herself, “When Xbox came out, I’d turn on the microphone, and the guys on there, they would be like, ‘You’re a woman, what can you do for our team?’ So, you have to be better than most; so, you very much have to prove yourself to get on the team.” Maggie’s opinion on the matter was,

I mean, you get in those battles, but that’s in every clique and social group that you have. You’re going to have to eventually prove your knowledge. I think it’s human nature to want to compete, so yeah, eventually, you’re going to have to show off how much [nerd] knowledge you actually have if you’re going to claim [to be a nerd].

On the other hand, Heather argues that younger male nerds may be attempting to hit on women by challenging their credibility - something that she has experienced herself.

Conforming to masculinity.

About half of the sample indicated conforming to masculine ideals, but some leaned more to nonconformity. Violet shared one of her experiences of the pressure to conform:

In college it was interesting, because I went from this place where I was a big fish in a little pond. I was a cheerleader; I was, like, the nerdiest cheerleader ever, but I liked cheerleading because I’ve always like sports and we didn’t have a lot of sports in my town. I loved doing gymnastics. I liked lifting and how strong it would make me feel. Some of the reason I liked that stuff was the physics of it all, the mathematics and anatomy of it. Then when I went to college, I didn’t relish telling people I was a cheerleader. Not everybody understood.

According to Kimberly, “In my opinion, that's kind of a characteristic of being a part of [nerd] culture, being nonconformist.” Brock added, “I’m really stubborn, so if people try to make me conform, I put up two metaphorical middle fingers.”

All participants mentioned, in some way, that they felt accepted as a nerd, even if they did not conform to masculine ideals or prove themselves as a nerd. Although, some women did believe that any conformity they displayed was done so to conform to social norms or standards rather than any masculine hegemony.

Gender Performance

The gender performance of women is often, knowingly or unknowingly, negotiated carefully. Displays of too much femininity can have women treated as an “other,” someone “less than,” in the nerd community, while displaying too much masculinity can have women seen as “just one of the guys.” The expectation of women to be either traditionally masculine (except from the inherent femininity of nerd culture) or traditionally feminine was expressed by each interviewee.

Sexuality.

Although they had mostly not experienced unwelcome practices themselves, all participants mentioned sexualization or harassment of women in nerd culture. Jennifer shares some experiences within the cosplay community, “You're like - you have to be careful what you're doing because if you do anything more revealing - I've known some people to get kind of, like, creeped on because of it and stuff.” Serena reflects on other women in nerd communities, “Most of the time I think women have positive experiences, but there are definitely exceptions. Women are often harassed even in nerd communities

about their appearance, their skill and their knowledge in a way men are not.” Imogene, twenty-eight, agrees, “I certainly hear about some of this kind of thing from female friends, but for the most part, I do not think it is about different standards in the communities - it’s much more about certain individuals in those communities reacting as though women are a threat.”

Kimberly, however, had different experiences. “I’ve only had a few sexual comments directed toward me, and I don’t know that the people saying them knew they were crossing a line,” she states. There was no indication if these people were educated later about their misbehaviors.

Nerd gender displays.

Most women indicated that they do not think about how they display their gender in nerd communities. Brock said,

I don’t think gender or sex matter as much. I don’t really think about something like that. I wear and say whatever I want. I think I come off as pretty masculine, but I don’t care about that. I have no problem manspreading; I hardly wear dresses or skirts, if I do they’re usually short; no bras; baggy clothing; no jewelry. I don’t do my hair because it’s in dreads.

Kayla identifies as more masculine, but she indicates, “My rule is to not be the sloppiest dresser in the room. . . It boils down to how respect yourself to begin with. How you present yourself is not usually considered - it’s not something you think about.”

However, most women did also reveal that they displayed aspects of traditional femininity in nerd communities. When asked about how she shows femininity, Serena states, “I dress like a girl. I wear dresses and skirts and [have] long hairs. I love jewelry. I

especially love painting my nails crazy colors.” Maggie thinks, “If you want to dress cute as a nerd - I think sometimes we do get some cool stuff. We get bright colors and do our hair cool ways. Harley Quinn, her hair is super cute!”

Violet likes to find the nontraditional in traditional femininity. “I talk about the beauty of rocks and minerals that are often associated with femininity. I’ll point out how minerals are in makeup, jewelry, nail polish . . .” she says.

Kimberly, however, does not believe her traditionally feminine characteristics equate to gender presentation. She maintains, “There are times that I’ll intentionally wear makeup or fix my hair, but I don’t think it’s as much gender related as there’s kind of a feeling of applying power. And if I’m going into a competition [it] gives me confidence if I wear makeup or fix my hair, but I don’t think that’s related to how I want people to perceive my gender. It’s more of a personal thing.”

Expectations of gender.

There were certainly pressures to act feminine or masculine that were voiced. Describing how she initially felt in nerd culture, Heather stated, “it was something [about being viewed as an] outsider – not being a good girl – but not being a tomboy because they’re athletic, but not being a successful girl.” Similarly, when talking about her cosplay, Jennifer explains,

I feel like people might see it as weird if I’m doing a guy character or something, which I’ve done because it’s easy. It’s a lot easier because their outfits are less dumb. Sometimes maybe it’s like, why don’t you do like - like my mom has even said, like, “You’re a pretty girl. Why don’t you do like the pretty, female characters?” I’m like, “I just do characters I like.”

Kayla repeats those sentiments by saying, “You have to be either very knowledgeable or very - you have to act or dress a certain way around other nerds . . . women want to dress up like Harley Quinn or more gamer attire to attract more male nerds.” Serena details how women are still expected to maintain femininity in nerd culture by stating,

Men have very specific expectations, and do not handle rejection well. I have recently had a couple of encounters that led to discussion with girl friends about the fact that women are expected to be nice and polite and always let men down gently even if they are being jerks. It kind of sucks that we can’t just say no without backlash.

Women in this sample of nerds have very different experiences within nerd culture. However, some aspects, such as expectations of gender display, identity development, and power structures of male-dominated subcultures reinforce previous discourse on such areas.

CHAPTER VI

DISCUSSION

The goal of this thesis was to develop a better understanding of how nerd women come to identify with nerd culture, as well as how they negotiate their gender presentation in a male-dominated area. My aim was to review the experiences of women within the nerd subculture and, by using both a theory of identity as a social construct and a theory of gender performance, develop a narrative which would expand discourse in regard to certain sociological phenomena within nerd culture.

Identity

The identities of these nerd women seem to have morphed and evolved over different periods of time. At times being a nerd was difficult but that did not stop these women from retaining their identity as a nerd.

Early beginnings.

As the literature suggests, for most of these women, nerd was not a welcome characteristic in their early education careers. Some were ascribed the label by peers, and others came to think of themselves as nerds during grade school. Although none of the participants mentioned bullying or teasing at a young age, some did note others being judgmental toward them during that period in their life. As these women matured, they found that their identity as a nerd also matured and changed. As Kimberly recollected, “I got older and realized that [being a nerd is] a divergent way of thinking other people

don't seem to have." In this sample, the reclaiming of the label of nerd as a positive identifier does not fully reflect Whitson et al.'s (2017) assertion that those who self-label view the term in a less negative light. These women all felt proud to be a nerd once they had accepted the label, whether someone else described them as such or not. Therefore, it appears as though negative views of a stigmatized term can change over time.

According to Bronfenbrenner (1977), ecologies, or settings in which an individual finds themselves, are ever transitioning and evolving. Interactions with certain people or institutional structures can alter individual perceptions (Bronfenbrenner 1977). The nerd identity appears to have morphed as these ecological systems changed over time.

As the women grew up, they were not only influenced by their changing surroundings, but also by the label itself. It appeared to be difficult for these women to find other nerds until they accepted the moniker and incorporated nerdiness as part of their identity. Once nerd culture became more mainstream, the influx of nerds led to more availability of nerd women with whom to interact. Many women indicated that finding others who had similar interests was a positive aspect of the nerd identification. Observing this dynamic nominalist approach to labeling partially confirms Hacking's (2002) theory. As more people continue to incorporate a nerd label into their identity, it has a greater chance of forming a new cultural meaning. Although the term nerd had been around for a few decades, it was still considered a negative attribute, especially for women (de Klerk 1992). It appears as though the concept of a female nerd did not have

much of an intrinsic value until women accepted the label and applied their own values while rejecting many unwanted aspects.

There were also several women who indicated that they always knew they were a nerd, even before there was a label with which to identify. Even Maggie, who did not realize until later in life that she was, in fact, a nerd stated, “I’ve always been a part of [nerd culture] without knowing it.” Accepting hooks’s (2015) ideas on identity, these women did not need a label to practice and possess the intrinsic attributes of being a nerd.

Once a label was discovered, as Hacking (2002) contends, there are certain attributes that are assumed based on the descriptor. Certainly, these women were aware that they had traits or interests that were not widely acknowledged by others as popular, but most continued to embrace these differences whether or not they were in possession of a term that defined that part of their identity. Although they did not have a label, they still embodied what they now understand to be as nerd culture. Once they had embraced their interest and named themselves nerds, , many of the women voiced an increase in their confidence as time went on.. Confidence in their identity as a nerd, along with their ecological surroundings, may or may not have impacted their decisions to pursue an education or career in traditionally nerdy subjects.

While the effects of being a nerd on self-efficacy and self-esteem during grade school are unknown for these women, the majority of this sample opted to make choices to further their education in a variety of subjects that they “nerd out” over. Only two of the women, however, either majored in a STEM subject or worked in a STEM career. Lack of self-efficacy, a “leaky pipeline,” and interests in nontraditionally nerdy areas

could help explain the low number of women in this sample that did not pursue a career in STEM. Even so, these women seemed to be aware that a formal education was important since they all at least attempted college courses.

Stigma.

As with any label, there are certain stigmas attached to being a nerd. As Goffman (1963) and Whitson et al. (2017) suggested, stigmatized individuals that highly self-identify within a group are able to reframe negative stereotypes in favor of more positive associations. With this sample of women, this may be occurring. A few women indicated they were more willing to fight with or speak up against other nerds, especially males. These women seemed to identify deeply with the culture as an essential part of their identity.

Goffman (1963) explains how individuals can restrict their display of stigma and assimilate by minimizing obtrusion in the group. Whitson et al. (2017) also suggested that individuals may conceal membership to stigmatized groups to avoid conflict within other groups. Accordingly, some women mentioned downplaying or not displaying nerdy characteristics in different groups of people. It does seem, however, that concealment is done because the label is still stigmatized within mainstream culture. Whether the situation is an insensitive boss or uninterested ladies in a knitting club, women in this sample tended to “take the temperature of the room,” as Violet stated, before they brought out any nerdy character traits.

Although certain areas such as comic book stores, online video games, and conventions were some of the places where women could express their nerdiness, most of

the interviewees distanced themselves from the media representation of female nerds, mainly by voicing that they remain authentic to themselves above any predetermined version of a female nerd. They were more interested in the nerdy things in the subculture with which they identified rather than being a part of a stigmatized version of nerd culture. This can be explained by Goffman's (1963) theory of individuals' responses to stigma. He states, "Finally, the person with a shameful differentness can break with what is called reality, and obstinately attempt to employ an unconventional interpretation of the character of his social identity" (Goffman 1963:10). This obstinance could be what allows stigmas to fall away or to be thought of less negatively. Indeed, Goffman (1963) explained that both parties, the "normals" and the stigmatized individuals, had to believe that the act or characteristic displayed was abnormal for it to be stigmatized. Therefore, by not giving into the pressures to conform to the stigma, these women could be changing the concept of what it means to be a nerd in their communities.

Heteronormative, hegemonic masculinity.

Although the women interviewed may be challenging the stigma of women in nerd culture, most aspects of nerd culture are largely geared toward heterosexual men. Nearly all women felt that nerd culture is still male-dominated, and each of them reported either seeing or hearing about some sort of sexual harassment within nerd communities. However, these examples of harassment were mainly thought of as isolated incidents or a general part of society instead of a systemic issue. Connell's (1996) description of hegemonic masculinity seems to fit the description of the situation that all these women have similarly experienced. He states,

Masculinities are configurations of practice within a structure of gender relations, a structure that includes large-scale institutions and economic relations as well as face-to-face relationships and sexuality. Masculinity is institutionalized in this structure, as well as being an aspect of individual character or personality (Connell 1996:163).

To be sure, these potentially isolated incidents can be viewed as a symptom of the hegemonic masculinity of nerd culture.

According to Connell and Messerschmidt (2005), masculinity is representative of the way men position themselves in interactions with others. This usually means heterosexual men being in a position of power over certain individuals. Such power and status inevitably create a social hierarchy among members of an established group. As Brickell (2006) states, “However, the central insight remains: distinctions between ‘women’ and ‘men’ are expressions of hierarchical social relations, and thus bear profound consequences in all areas of social life” (p. 99). For nerds, this means straight men are typically situated in the highest echelon, followed by nonheterosexual men and masculine gendered women, and finally, feminine gendered women. Interestingly, most of the women in the sample indicated no issues with other women in nerd communities. It is unclear, however, if they were referencing other “accepted” nerd women or other women in nerd culture. A few women did reference a disapproval of women involved in nerd culture who were thought of as overtly sexual. The impression given from these few women denotes a masculine versus feminine hierarchy that still functions in some areas of nerd subculture and does affect different parts of social life.

Gender Performance

Nerd gender performance can determine the level of acceptance within some nerd communities. However, there seem to have been changes in ideals towards stereotypical gender presentation, mainly shown through nerd media, of female nerds in nerd culture.

Doing gender.

The socially acknowledged acts that women perform were often reinforced by the heteronormative, hegemonic masculinity of nerd culture. Acts such as conforming to masculine ideals were mentioned as being prevalent in nerd culture by about half of the sample, but several women suggested that they do not perform gender based on ascribed ideas of masculinity or femininity. According to Heather, she knew she was an “outsider” because she was “not being a successful girl.” Therefore, when she found nerd culture, her gender presentation presumably matched that of the masculine hegemony of the areas she frequented.

As Butler (1988) contends, performative acts “either conform to an expected gender identity or contest that expectation in some way” (p. 527). All women in the sample performed both expected and unexpected ideas of gender. Brickell (2006) also asserts, “As we do gender, we involve ourselves in the ongoing construction of distinctions between ‘male’ and ‘female’ and the accretion of social expectations into those categories” (p. 94). Being aggressive versus accommodating, being outspoken versus shy, or playing masculine video games versus playing feminine video games are some examples of the spectrum of gendered performances revealed by participants.

Evidently, media representations and perceptions of female nerds did not seem to play a large role in the day to day lives of the interviewed women. Women in this sample rarely mentioned influences of media on their gender presentation in relation to anything other than attempting cosplay. The issue of gendered roles only seemed to be apparent in relation to or when it was contested by male nerds. It appears that male nerds enact an essentialist outlook in regard to the social practices of women in nerd culture. Truly, Brickell (2006) seems to be channeling Hacking (2002) when he explains that labeling these actions or attributes of gender have no significance prior to meanings placed on them through interactions with others. Adherence to either a binary masculine or feminine gender role seems to be what men in nerd subculture expect of nerd women.

Feminine versus masculine.

I found that most women felt welcome in nerd culture. These findings are congruent with Robinson's (2014) research, which found that 22 percent of participants always felt welcome and 41.9 percent often felt welcome in nerd communities.

Yet, some women in my sample revealed that they were expected to prove their knowledge of specific attributes of nerd culture in order to be considered authentic. A participant of Robinson's (2014) research said,

There's this whole 'fake geek girl' thing going around; even I've been told I had to justify my interests because I'm female. Too many 'geeks' think women need to pass a test to be considered 'real' nerds, and the criteria of these are so arbitrary and often deliberately rigged for the girl to fail (p. 41).

Butler (1988) elucidates that from the point of view of established categories of gender, some may question if "this is *really* a girl or a woman, or this is *really* a boy or a

man, and further that the *appearance* contradicts the reality of the gender . . .” (p. 527). Potentially, when male nerds see any unauthorized display of femininity, they may question if that person is a woman or “essentially” a man (Leblanc 1999; Kanter 1977). Indeed, this may be part of where the notion of the “fake geek girl” comes from. To be accepted as a nerd - and therefore, a “convincing man” - women should prove their nerdiness or “manliness” since their feminine gender display contradicts the established categories of gender in nerd society. If a girl fails to measure up to these arbitrary standards of knowledge or masculinity, they are not “real” nerds and are labeled as a “fake geek girl.” Goffman (1963) would call the incongruence and discontentment between a person’s display of femininity (actual identity) and the masculine hegemony of nerd culture (virtual identity) a “spoiled identity.”

While having a “spoiled identity,” Goffman (1963) believed there are “sympathetic others” that can be supportive of those with a “spoiled identity.” In this sample, a few of the women pointed out that women in nerd culture had to stick together. Conversely, some women seemed to insinuate that blatant displays of sexuality were not welcome in nerd culture. Either by stating they felt women were being objectified by a heteronormative male culture, women were exploiting this culture for attention, or women should not be embracing their sexuality in such a way, some of the interviewees expressed feminine displays of sexuality in nerd culture were at least frowned upon.

Some women, however, voiced interest in the sexualized nature of female cosplay costumes indicating that they were “cool” and noting the skills it took to create these outfits. As Hunting (2015) remarks on how interpretive cosplay can transcend specific

gender performances and provide a space for pairing masculine nerd culture with feminine “fashion culture.” In essence, cosplay can be a place for nerd women to alleviate some of their “spoiled identity” through their gender presentation.

Future Research and Suggestions for Society

Although a fair amount of information was gathered from the interview conducted, there are still aspects of women in nerd culture that could use further attention. Influences of sexuality, race, socio-economic class, and family structure of female nerds should be studied more in depth. The addressed social hierarchy of masculine and feminine characteristics is also an area that requires additional research. Also, what the emergence of nerd culture into the media spotlight means for nerd women should be studied. This additional research could provide valuable discourse and understanding of females in nerd communities.

I found an interesting dynamic between interactions with other female nerds and perceptions of other females in nerd culture. The relationship between these women in nerd culture should be given more attention in future research. Based on findings in my research, another area of focus should be the influence of micro-ecologies (i.e., peer groups, family units, or school teachers) during the transitioning phases of nerds labeled by others to self-labeled nerds.

Additionally, there are other ways in which to benefit nerd communities. A common element of nerd culture is that STEM subjects and careers have a lack of female representation. To change this, there are several options posited. One of the largest movements currently is a push for grade schools to encourage girls to participate in

STEM subjects. Hanson, Smith, and Kapur (2000) suggest one way of inspiring girls is to increase their self-esteem. By changing the curriculum and school climate towards girls in STEM to be more female friendly decreases the high school drop out rate and boosts self-esteem in girls (Hanson, Smith, and Kapur 2000).

At the college level, Lee (2002) suggests housing female students with interests in STEM together and attempting to reconstruct social processes that might hinder girls from engaging in STEM. Rosser (2001) recommends revising current teaching pedagogies to make STEM classes more appealing to women.

There are also less formal movements for nerds to be civically motivated. There are many fandom-based activities and activism that enable people within the culture to demonstrate shared values, along with the literature they love, and engage in civic practices (Kligler-Vilenchik 2016). It is important for female nerds to not only break the stigma of being a female nerd but to help others break stigmas associated with poverty or hunger. Nerds of all genders should pull together and support not only their community but other “outsider” communities as well.

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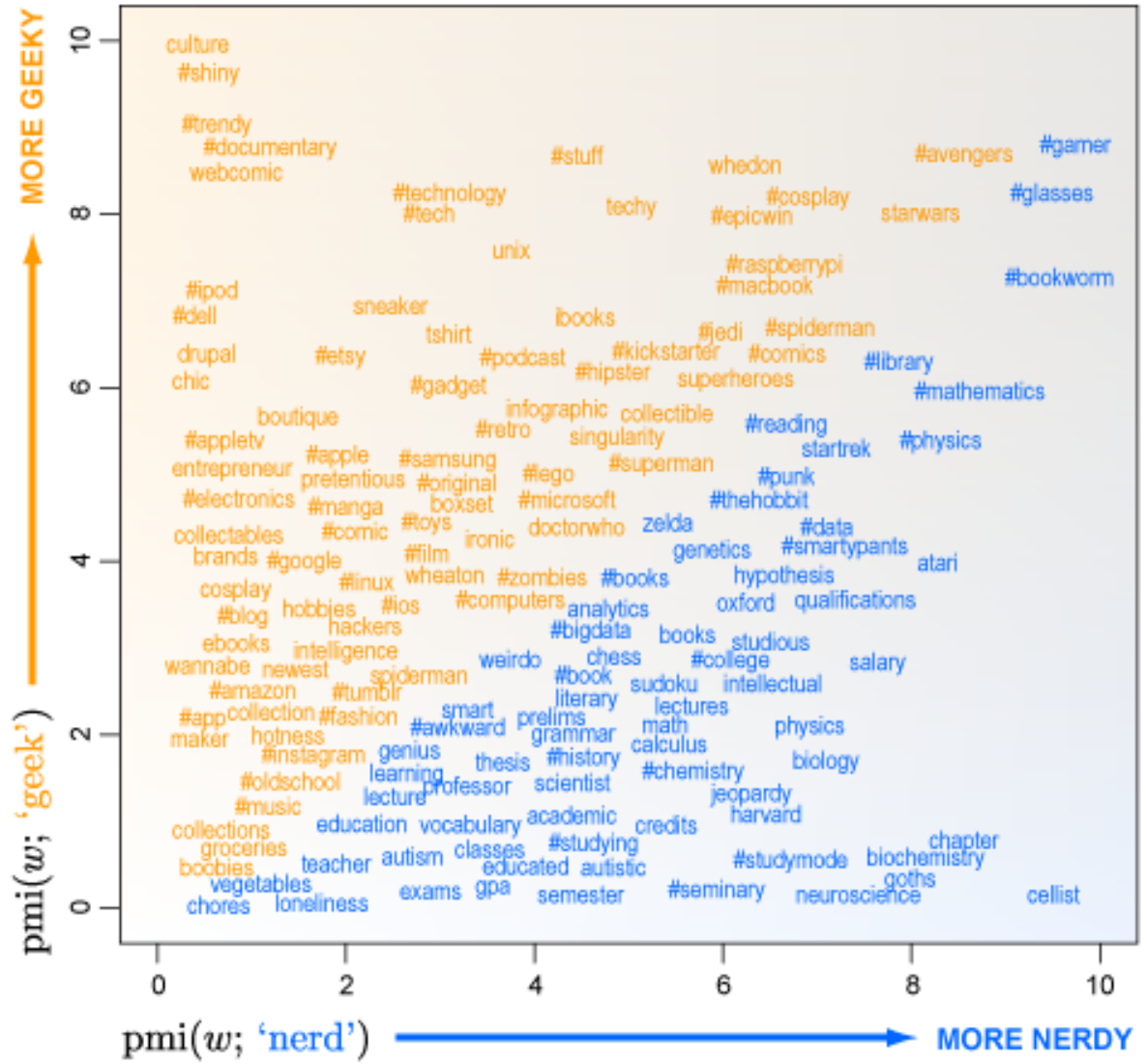
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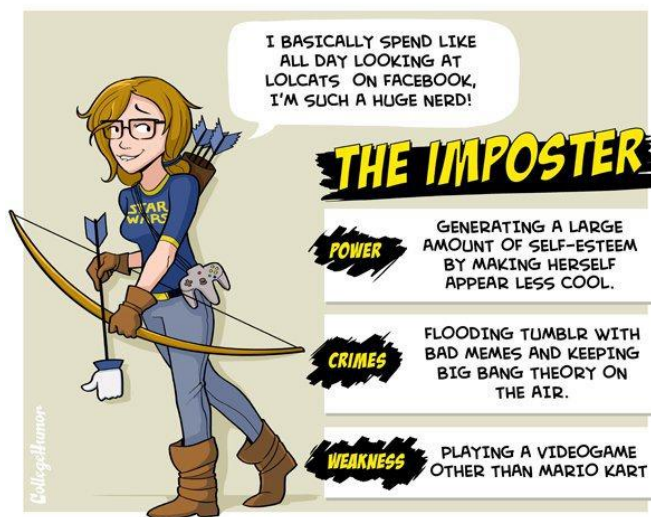
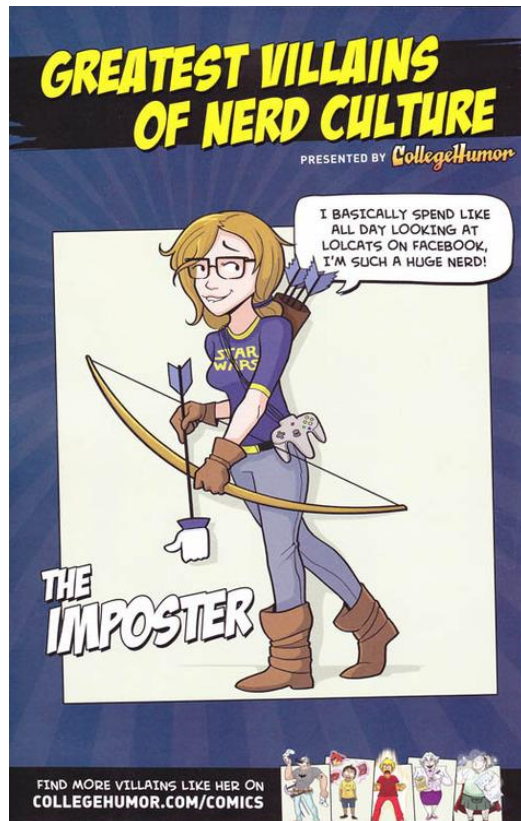
APPENDIX A

GEEK VERSUS NERD GRAPH



APPENDIX B

FAKE GEEK GIRL



APPENDIX C

QUALITATIVE INTERVIEW QUESTIONS

- What would you like your pseudonym to be?
- Tell me about yourself. What do you do for fun; what are some of your hobbies?
- Do you feel that nerd communities are mostly male, mostly female, or both? How do you feel about that?
- When did you come to think of yourself as a nerd?
- What do you think nerd culture is?
- Has your understanding of nerd culture changed since you first began to identify as a nerd vs. now? How or why not?
- How do you feel being a part of this subculture?
- Have you felt welcomed in nerd communities?
- What first got you interested in being a part of this subculture?
- What do you like about being a nerd?
- Is there any reason you do not like being a nerd?
- Have you ever had to “prove” yourself as a nerd? If so, what happened?
- Has anyone claimed you are not a nerd? If so, what reason did they give?
- Do you feel there are different standards for women than men in nerd communities? If so, what is an example? If not, why not?
- How do you feel other women may be treated in nerd culture?
- How have you been treated by other women in nerd communities?
- Did your behavior change after you labeled yourself as a nerd? Why and/or how?
- Are there things you do or ways you behave as a part of nerd culture that you do not do anywhere else? If so, what sorts of things or behaviors?
- Do you feel like you have to conform to a certain identity or play a certain role to be a part of nerd culture?
- Are there any other labels that you identify with?
- Do you feel you have any personality traits that are not welcomed in nerd culture?
- Do you feel pressure as a woman to act a certain way? If so, how do you deal with these demands?
- Have you felt like a sexual object when around other nerds? If yes, how so?
- What are some ways you like to show your gender around other nerds?
- Have you felt like you were not taken seriously in nerd communities because of your gender?
- Is there anything else you want to talk about?