

November 2024

The Challenges Women Face in Brazilian Jiu-Jitsu in the United States

Rachel S. Silverman

University of Nebraska at Kearney, silvermanr@unk.edu

Anthony Dixon

Troy University, awdixon@troy.edu

Harriet E T Dixon

Troy University, hedixon@troy.edu

Follow this and additional works at: <https://scholarworks.bgsu.edu/jade>



Part of the [Sports Management Commons](#), and the [Sports Studies Commons](#)

How does access to this work benefit you? Let us know!

Recommended Citation

Silverman, Rachel S.; Dixon, Anthony; and Dixon, Harriet E T (2024) "The Challenges Women Face in Brazilian Jiu-Jitsu in the United States," *Journal of Athlete Development and Experience*: Vol. 6: Iss. 3, Article 3.

Available at: <https://scholarworks.bgsu.edu/jade/vol6/iss3/3>

This Research Article is brought to you for free and open access by the Journals at ScholarWorks@BGSU. It has been accepted for inclusion in Journal of Athlete Development and Experience by an authorized editor of ScholarWorks@BGSU.

The Challenges Women Face in Brazilian Jiu-Jitsu in the United States

Cover Page Footnote

No conflicts of interest to disclose. Correspondence should be addressed to Rachel S. Silverman at the University of Nebraska Kearney, 1410 W 26th Street, Cushing 135, Kearney, NE 68849, email: silvermanr@unk.edu

The Challenges Women Face in Brazilian Jiu-Jitsu in the United States

Rachel S. Silverman
University of Nebraska, Kearney

Anthony Dixon
Troy University

Harriet E. Dixon
Troy University

ABSTRACT

The purpose of this case study was to discover the challenges facing women participating in Brazilian jiu-jitsu in the United States, how they overcame these challenges, and why they continue to participate in Brazilian jiu-jitsu. Twenty-three female jiu-jitsu athletes participated in the study. Semi-structured interviews using open-ended questions were utilized. Analysis of challenges revealed three broader themes of Brazilian jiu-jitsu being male-dominated, gender norms and Brazilian jiu-jitsu being a contact sport. Women discussed how they coped with the challenges and the benefits they gain from participation. To increase the number of women involved in Brazilian jiu-jitsu, participants suggested more women's-only classes and seminars, creating more awareness about female participation, being supportive of new women, trying multiple gyms to find the right fit, and persevering.

Keywords: Feminism, Gender Norms, Male-Dominated Sports, Martial Arts

Females often are viewed as less capable or worthy of the same opportunities as male counterparts (Bergvall, 1999), and sport historically has been intended for men, further emphasizing male superiority (Bandy, 2005). However, in the 1960s and 1970s, beliefs about roles and responsibilities of women began to change with the Equal Pay Act (1963), Title VII (1964), and Title IX (1972; Weatherford et al., 2018). Title IX specifically addressed equal opportunities for female sports participants in federally-funded programs (Holland & Oglesby, 1979). Title IX challenged gender stereotypes and gender roles in sports (Bandy, 2005).

Previous research on women in sports has focused on gender-neutral or gender-appropriate sports, such as gymnastics (Follo, 2012). Society decides which sports are more appropriate for women. Sports such as Brazilian jiu-jitsu and other male-dominated contact sports are seen as “breeding grounds” for hegemonic masculinity (Follo, 2012, p. 707). Hegemonic masculinity is the most dominant form of masculinity, incorporating traits of strength, athleticism, and leadership. Therefore, women participating in male-dominated sports challenge gender norms and ideology (Channon, 2014; Hamilton, 2020).

Brazilian jiu-jitsu (BJJ) is a grappling-based sport involving skill and technique, including wrestling takedowns, judo throws, and techniques from the ground (Biscontini, 2019; Øvretveit et al., 2019). Japanese jiu-jitsu originated in Japan and spread beyond Japan through the teachings of Mitsuyo Maeda. The Gracie family in Brazil changed the Japanese style of jiu-jitsu into a more sports style of martial arts with rules, promotions, and tournaments (Todd, 2020). Originally, Brazilian jiu-jitsu included more self-defense techniques before it became a competitive sport.

BJJ is one of the fastest-growing martial arts disciplines, and its popularity is not limited to a specific country (A4Fitness, 2024). It has a global reach, which has assisted in diversifying and expanding BJJ. Although BJJ is a male-dominated sport, female participation is also growing rapidly (Raftery, 2018; A4Fitness, 2024). Contributing factors to the increase in BJJ female participation are increased awareness of the benefits of BJJ, positive role models in the sport, and increased support from the BJJ community (A4Fitness, 2024). BJJ provides women empowerment, physical and mental health, and community.

BJJ is one of the few sports that attracts participants of various ages; it is common for beginners to start later in life (Chinkov & Holt, 2015). Since it is a style of martial arts that does not include strikes to the head or any punches or kicks, it can be appealing as a recreational sport

for a variety of people. Everyone can participate, any size, age, or gender, and benefit from strength, conditioning, cardio, flexibility, and self-defense (Todd, 2020). Compared to other martial arts, BJJ is one of the sports that takes the longest to receive a black belt, on average 8-10 years. It is a sport that requires a long-term commitment, and a participant's belt level is determined by how much knowledge they have acquired (Raftery, 2018). It is often considered a lifelong journey, and it does not stop once a black belt is received. Therefore, for women to truly receive all the lifelong benefits of BJJ, women need to prevail over obstacles that previous women have faced in the sport.

One of the critical concepts of Brazilian jiu-jitsu is that a smaller opponent can defend themselves against a bigger and stronger opponent using leverage and technique (Kavoura et al., 2015). Like other martial arts, the number of males participating in BJJ far exceeds the number of female participants (Mierzwinski et al., 2014). Low female participation rates in martial arts, including BJJ, are due to various reasons, such as societal views, gender norms, discrimination, and gender hierarchies (Kavoura et al., 2015).

Power dynamics favoring male martial artists are a social construct, not biological, and therefore can be changed (Kavoura et al., 2015). Kavoura et al. (2015) indicated gender dynamics are an essential social construct for promoting gender equity in any sport typically seen as male or masculine. The researchers also highlighted the number of females participating in a sport, as well as legislation or policies, are not always enough to change male hierarchy discourse. Instead, Kavoura et al. (2015) recommend coaches empower women, value female experiences, and help challenge limiting beliefs about women's bodies.

Despite women's challenges and obstacles in BJJ, women continue participating in male-dominated sports. BJJ can positively impact participants' lives outside the sport (Chinkov & Holt, 2015). For women, participation in BJJ has many benefits, including physical fitness, psychological health, and self-defense (Thrasher, 2014). To help women overcome challenges in BJJ, Kavoura et al. (2015) contend women knowing strategies of how other women have been successful, despite male domain, could aid female athletes in developing BJJ careers. Also, the researchers suggest knowledge of successful strategies employed by female athletes in martial arts, as well as other sports, may assist others in coping with individual struggles and finding solutions. Weatherford et al. (2018) indicated scholars and practitioners alike must be persistent in the quest for social change, gender equity in sports, and more solutions to promote equity in sports. Due to the growing popularity of BJJ in the martial arts domain and increased female participation, this study aims to discover the challenges facing women participating in BJJ and why women continue to participate. The purpose of the study led to development of the following research questions:

1. What are the challenges facing women who participate in Brazilian jiu-jitsu?
2. How do these women overcome the challenges in Brazilian jiu-jitsu?
3. Why do these women choose to continue to participate in Brazilian jiu-jitsu?

Literature Review

Gender Discrimination

Mierzwinski et al. (2014) indicated ridicule and discrimination are impediments to women participating in male-dominated sports, such as mixed martial arts, judo, and BJJ. Gender discrimination begins as early as adolescence, with young girls playing sports being subjected to derogatory comments about athleticism from fellow students (Knifsend & Graham, 2012). Ridicule and discrimination continue into adulthood and are experienced by females participating in male-dominated combat sports such as boxing, mixed martial arts, Judo, etc. (Mierzwinski et al., 2014). Gender discrimination is prevalent in combat sports because concepts of fighting and competitiveness are perceived as masculine (Kavoura et al., 2018). In research on the discourses of women participating in mixed martial arts (MMA), women perceived as masculine faced prejudice (Da Silva et al., 2021). Although women in MMA are becoming more common, some still question and reject the presence of women in MMA. Historically, women's desire to participate in male-dominated combat sports has been challenged and met with resistance.

Gender Norms and Hierarchies

Obstacles women face in male-dominated sports are due to women challenging gender norms (Follo, 2012). Sports, such as BJJ, that are physically demanding and involve violence are often viewed as a masculine domain (Kavoura et al., 2018). This stereotype is a result of the idea that fighting is framed as a violent activity best suited for the male physique and goes against females' biological nature (Kavoura et al., 2015). Women's bodies are historically understood to be beautiful, sensual, and passive, and thus, women who break this stereotype are seen as masculine instead of being appreciated for their technical skills (Da Silva et al., 2021).

Females in martial arts or combat sports defy the essence of femininity and hegemonic masculinity (Follo, 2012). Additionally, female mixed martial artists often have traits considered masculine (Hamilton, 2020) and are judged by heteronormative discourse questioning femininity (Da Silva et al., 2021). This discourse is not only about women's participation but also about what female participation represents. Female participation in combat sports shows women can take care of themselves and become self-protectors, a role traditionally perceived as masculine (Follo, 2012). Martial arts, including MMA and BJJ, can provide a space for challenging gender norms (Hamilton, 2020).

Gender hierarchies in sports are presented as unchangeable constructs because of the belief gender differences are embedded in human biology (Holmes, 2009; Weedon, 1997). Research has shown specific characteristics such as reason, intellect, assertiveness, strength, and competitiveness to be associated with male biology (Kavoura et al., 2018). On the opposite side of the spectrum, attributes including sensitivity, modesty, kindness, cooperativeness, and dependence are associated with female biology. These established attributes regarding gender differences create an unjust concentration of power for males in sports. Young (2005) described gender hierarchies as institutionalized violence, a form of oppression. These gender hierarchies found in BJJ and other male-dominated sports exclude women from the decision-making process and create a "glass ceiling" preventing women from achieving higher positions (Uhde, 2010). However, Kavoura et al. (2015) indicated these inequalities and hierarchies are socially constructed, meaning created by society, and may be altered over time.

Martial arts gyms tend to celebrate male superiority and support gender hierarchies. Although the number of women training in martial arts has increased, gender hierarchies continue and are sometimes reproduced by female athletes because female athletes are attempting to gain acceptance in a male-dominated world (Channon, 2013). It is challenging, although not impossible, to create change in the persisting gender hierarchies of martial arts, including BJJ.

Overcoming Participation Obstacles

Women can learn from previous women's experiences in BJJ and other male-dominated sports to identify strategies utilized to overcome challenges to participation. Kavoura et al. (2015) found Finnish female BJJ athletes used strategies of commanding responsibility and initiative, creating inclusive and supportive conditions, and persistence. Weatherford et al. (2018) suggested challenges women face can be alleviated through education, recruitment, and mentoring. Researchers encouraged equal pay for work and prize money, marketing promoting women, balanced leadership, and zero tolerance for gender discrimination and harassment.

Since power dynamics favoring male athletes are created by society, training partners are one way to change the power dynamics (Kavoura et al., 2015). Channon and Jennings (2013) suggested heteronormative, patriarchal, and paternalistic gender structures can be challenged through long-term, mixed-sex training. As participants became more comfortable training with the opposite gender, sexualized notions of touching each other's bodies were rejected. Researchers found some participants training with both males and females felt gender stereotypes changed, with time viewing training partners as equals.

Many women compete in tournaments to encourage and justify female participation in BJJ. Competition results can be used for female BJJ athletes to prove competency and defend participation (Kavoura et al., 2015). To support the growth of women's BJJ, women can teach classes and seminars, referee at tournaments, encourage more women to compete, and take leadership roles.

Participation Continuance

Although women face many challenges when participating in BJJ, many continue to participate despite challenges. Thrasher (2014) indicated many women continue to participate because of benefits such as increased physical fitness, psychological health, and self-defense. Women also become more assertive, physically empowered, and feel able to defend themselves against violent attacks, rape, and sexual assault. In addition, Thrasher (2014) suggested mental benefits discovered by women along the martial arts journey compelled continued participation.

Theoretical Perspective

'Structures of constraint' include assets, rules, norms, and preferences which allow more freedom and opportunities for some social groups than others (Folbre, 1994). Young (2002) proposed three axes of gendered structures: a sexual division of labor, normative heterosexuality, and gendered hierarchies of power. Institutions such as BJJ condition masculine hierarchies of power, which constrain the potential actions of women and are resistant to change. These gender hierarchies generally provide some people, usually men, with decision-making authority, status, and privileges not afforded to other social groups, usually women. Female BJJ athletes are tackling the normative gendered culture of BJJ (Maor, 2018) and embody deviations from gender norms (Young, 1980).

Issues presented in this study align with the theory of feminist post-structuralism, which evolved from the post-structuralism movement applied to a feminist perspective. Post-structuralist feminism, as a conceptual framework, is a way of countering commonly accepted societal gender stereotypes, gender roles, and gender power. Post-structuralist feminism is a theory about the complex relationships between knowledge, power, and gender (Kenway et al., 1994). Researchers use post-structuralist feminism to investigate how meanings and knowledge are produced, contested, and changed. The current study draws from Weedon's (1997) explanation of post-structuralist feminism to understand social and cultural practices, exposing how gender power relations are created, reproduced, and contested. Gender stereotypes in BJJ are structural and socially reproduced through language and discourse.

Kavoura et al. (2015) utilized feminist post-structuralism theory in a case study on women participating in BJJ in Finland. Feminist post-structuralist theory was a starting point to question the "taken-for-granted male superiority in martial arts" (Kavoura et al., 2015, p. 240). Researchers sought to understand athletes' strategies to escape power relations or dynamics of gender in BJJ. Those in the BJJ space may consciously or unconsciously reinforce patriarchal discourses put forth by those in leadership roles, mainly male black belts. Kavoura et al. (2018) viewed gender stereotypes as resilient to change, due to being structural, meaning gender stereotypes exist in society's institutions and social practices.

Post-structuralist feminist perspective understands gender equity is embedded within organizational cultures, including values, symbols, rituals, and social interaction (Acker, 1990). Gender inequities are embedded in the history and culture of Brazilian jiu-jitsu being a male-dominated sport. Researchers must identify and challenge underlying gender assumptions in organizations and analyze multiple perspectives to understand how to create lasting change. Post-structuralist feminism can be employed as a theory for change (Kenway et al., 1994) and is a way of countering what society commonly accepts in gender stereotypes, gender roles, and gender power. This study uses this theory to challenge the gender stereotypes of Brazilian jiu-jitsu and those typically in positions of power at BJJ gyms and organizations.

Rationale for Study

Follo (2012) suggested barriers women face in male-dominated sports are associated with challenging gender norms. Kavoura et al. (2018) implied additional research is needed about women participating in male-dominated sports to create social change in the male-dominated martial arts domain. To further an agenda of gender equity in BJJ, structures reproducing male

superiority need to be exposed and disrupted. The purpose of this case study is to discover the challenges facing women participating in Brazilian jiu-jitsu in the United States and why they continue to participate in the sport.

Methods

Study Design

Case studies are appropriate for research questions seeking to explain the how and why of a social phenomenon, events the researcher has no control over, and when the focus is a contemporary phenomenon, not historical (Yin, 2018). Cases are bounded by time and activity; in this case, there were interviews of females currently participating in Brazilian jiu-jitsu in the United States.

Case studies are intended not only for studies about specific locations but also for an in-depth analysis of individuals, groups, organizations, processes, programs, neighborhoods, institutions, events, and decisions (Yin, 2018; Creswell & Creswell, 2018). Xu et al. (2021) employed a case study design to measure depression in first-year college students from two different R1 institutions, and Wang et al. (2017) used a case study to explore Vietnamese refugee elderly women because they are a marginalized group in terms of gender, immigration status, and context. This research study utilizes a case study design to explore female athletes in Brazilian jiu-jitsu, as this group is marginalized in terms of gender, sport, and context. According to Yin (2018), two key elements of case studies are the boundaries or bounded system and the unit of analysis. In this case, the boundaries are biological female athletes currently participating in Brazilian jiu-jitsu, and the unit of analysis is the challenges biological females face participating in a male-dominated sport.

Women in BJJ are a unique group with experiences not been adequately studied or represented. Case study research aims to create meaningful insights to inform professional practice, policy development, community action, or social action (Bloomberg, 2018). This research aims to create applicable recommendations for (1) biological female athletes participating in Brazilian jiu-jitsu and (2) male black belt leaders in Brazilian jiu-jitsu.

Participants

Purposive sampling was used, and participants who best understood the research problem and questions were selected for participation (Creswell & Creswell, 2018). Participants were recruited through personal connections, Instagram, and referrals within the Brazilian jiu-jitsu community. As a female Brazilian jiu-jitsu athlete, the researcher knew female Brazilian jiu-jitsu athletes throughout the country through competitions and training Brazilian jiu-jitsu during the past eight years. Twenty-three female Brazilian jiu-jitsu athletes aged 24-40 years old participated in the study. Participants' belt rankings ranged from white to brown, and years of experience training Brazilian jiu-jitsu were 11 months to 11 years (Table 1). Only five of the participants were white belts, which means eighteen participants were colored belts with a significant number of years participating in Brazilian jiu-jitsu. Many of these women started at a time when they were the only female at their respective gyms, or there was a very limited number of females. Some who participated in this study as brown belts have now received their black belts. This is a milestone not only for the individual but for the growth of women's Brazilian jiu-jitsu.

Table 1
Participants' Demographics

Pseudonym	Age	Belt Rank	Years Experience
Participant 1	31	Brown	8 years
Participant 2	37	Blue	4.5 years
Participant 3	29	Blue	5 years
Participant 4	24	White	11 months
Participant 5	38	Brown	11 years
Participant 6	29	White	1.5 years
Participant 7	37	Purple	10 years
Participant 8	33	Purple	10 years
Participant 9	31	White	2 years
Participant 10	34	White	2 years
Participant 11	38	Purple	6 years
Participant 12	33	Blue	4 years
Participant 13	34	Blue	3 years
Participant 14	29	Purple	8 years
Participant 15	33	White	1 year
Participant 16	36	Blue	3.5 years
Participant 17	37	Blue	6 years
Participant 18	30	Purple	10 years
Participant 19	29	Purple	5 years
Participant 20	29	Blue	4 years
Participant 21	25	Blue	4 years
Participant 22	40	Purple	10 years
Participant 23	31	Blue	6 years

When possible, initial contact was made face-to-face to explain the study briefly and ask if the potential participant was interested. When face-to-face communication was impossible, contact was made by direct messaging on Instagram. A follow-up email was sent to participants, including an informational letter, an informed consent form, and interview questions.

Researcher's Positionality

The goal of qualitative case study research is to provide detailed, in-depth descriptions of the participants' experiences, and having a researcher with insider status aids in gaining deep insights (McNarry et al., 2019). The researcher cannot be detached from the research process but rather is a part of it, and reflexivity is enacted across all stages of the research process (McNarry et al., 2019). Therefore, the researcher must acknowledge their positionality and reflexivity. The researcher in this study is female, born and living in the United States, and has trained Brazilian jiu-jitsu for approximately eight years. She is currently a brown belt. The researcher's experience positions her as an "insider" regarding gender and background in Brazilian jiu-jitsu. The researcher informed participants' of her belt and years of experience in the sport. This demonstrated to participants they were speaking with an experienced Brazilian jiu-jitsu athlete who could understand their opinions and experiences. Having "inside" status among the group being studied, the researcher assisted female study participants in feeling comfortable and safe discussing experiences in Brazilian jiu-jitsu. The researcher did not discuss her own experiences but rather related her understanding as participants discussed their experiences. The researcher did not want to impact participants' responses. The researcher's experiences as a female Brazilian jiu-jitsu participant assisted in identifying and interpreting themes.

Data Collection

Semi-structured interviews were conducted using open-ended questions to elicit the views and opinions of participants (Creswell & Creswell, 2018). The questions were developed from the previous literature on Brazilian jiu-jitsu, judo, and mixed martial arts. Probing questions were only asked when further details were needed. Interviews were conducted face-to-face at a location approved by the participant. When in-person interviews were not feasible, the interviews were conducted online using Zoom. The identities of participants remain confidential by using pseudonyms. Five interviews were conducted in person, and 18 interviews were conducted via Zoom. For online interviews, the audio and video were recorded, but participants had the option to turn the video off. For in-person interviews, the audio was recorded. Interviews lasted approximately 45-90 minutes, depending on the participant's responses. Data collection stopped at 23 interviews because saturation had been reached. Interviews were conducted over a 3-month period. A second researcher with no participation history in BJJ reviewed interview transcriptions and data analysis to ensure the accuracy of the findings.

To establish trustworthiness in qualitative research, Guba and Lincoln (1982) suggested four major concerns be addressed: credibility, transferability, dependability, and confirmability. To ensure credibility, member checking was employed to determine the accuracy of findings (Creswell & Creswell, 2018). At the end of each interview, the researcher gave a verbal summary to participants. Interview transcripts were emailed to participants, checking for accuracy; changes were made based on participant feedback as necessary. The final report with descriptions and themes of each interview was sent to participants, further checking for accuracy. To achieve transferability of the findings, thick descriptive data was collected, and purposive sampling was used to produce context-relevant results (Guba, 1981). To ensure dependability, the researcher documented all the procedure steps and followed a detailed case study protocol (Yin, 2018). A second researcher reviewed the audit trail. To establish confirmability, the researcher's reflexivity was addressed.

Data Analysis

Thematic analysis was conducted to identify patterns in data. Thematic analysis is appropriate for understanding experiences, behaviors, and thoughts across a data set (Kiger & Varpio, 2020). Steps of thematic analysis included "familiarizing yourself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report" (Kiger & Varpio, 2020, p. 1; Braun & Clarke, 2006). Inductive and deductive coding was used throughout data analysis. During inductive coding, themes were developed directly from data; deductive coding generated themes from theoretical frameworks found in the literature (Kiger & Varpio, 2020). The themes found in the literature were perseverance (Kavoura et al., 2015), a welcoming/supportive environment (Kavoura et al., 2015), and gender norms (Mierzwinski et al., 2014). All other themes were inductively coded directly from the data.

After transcription, hand-coding and QSR NVivo software were used to analyze the data. Data were coded and given labels using QSR Nvivo software, a qualitative research software program. Text was highlighted in yellow when coded within each interview. Different color coding stripes were used for each code. This assisted with visualization and analysis of codes and overarching themes. One researcher conducted all coding. A second researcher reviewed codes and themes for agreement.

Findings

Analysis revealed themes relating to (1) challenges biological females face participating in BJJ, (2) overcoming challenges, (3) benefits of BJJ participation, and (4) recommendations to increase the number of biological females participating in BJJ (Table 2).

Table 2
Codes

Top Themes	Number of References	Sub Codes	Number of References
Male-Dominated Sport	66	Abuse of Power	12
		Sexual Assault	12
		Issues with other women	17
Gender Norms	52		
Contact Sport	39		
Overcoming Challenges		Address Issues with Gym Owners	8
		Talk to Teammates	6
		Change Gyms	5
Benefits			33
		Community	52
		Mental Health	25
		Physical Exercise	14
Recommendations		Self-Defense	14
			23
		Women’s-Only Classes	21
		More Awareness	14
		Perseverance	10
		Welcoming/ Supportive	

Challenges

Analysis of challenges women face in BJJ revealed three broader themes: (1) BJJ being a male-dominated sport, (2) Gender norms, and (3) BJJ being a contact sport.

Male-Dominated Sport

Interview participants described BJJ as a sport where biological females are largely underrepresented. Study participants described difficulties being a biological female participating in a male-dominated sport. When describing Brazilian jiu jitsu, participant 11 explained:

I still have to say that when you visit other schools, more old school traditional schools, you can still very much see that it is very male-dominated. There is still very much the boys club, which is unfortunate.

When women initially enter a BJJ gym, noticing BJJ is male-dominated, women sometimes feel intimidated and apprehensive. Not all women had the same experience, but many women had negative experiences due to the sport being male-dominated. Women expressed the specific challenges of being in a male-dominated sport, including the abuse of power, sexual assault, and issues with other women.

Abuse of Power. Some of the participants described situations where the males who were in positions of power abused their power through sexual abuse and other inappropriate behaviors. This has been highly publicized in other women’s sports, including gymnastics, tennis, and soccer, with coaches, doctors, and others in leadership roles abusing their positions of power. BJJ does not receive the same media attention as other sports, but the abuse of power is as prevalent as other women’s sports. A majority of study participants attend BJJ gyms run by male black belts and very few mentioned encountering a female black belt in their years training. When asked about her

experience being a female participating in BJJ, participant 14 described why she left her first gym as a white belt:

At my first gym, I actually left there because I dated one of the black belts that I trained with and apparently, he dated three other women at the gym and it was a secret. So that's one of the reasons why I felt uncomfortable and left.

Sexual Assault. Some participants in the study did not realize that sexual assault can take many forms. The U.S. Department of Justice defines sexual assault as any nonconsensual sexual act, including when the person lacks the ability to consent (Office on Violence Against Women, 2023). The Rape Abuse and Incest National Network (RAINN) describes sexual assault as including attempted rape, fondling, any unwanted sexual touching, and forcing a victim to perform sexual acts. Force not only refers to physical pressure but also refers to emotional coercion, psychological force, manipulation, threats, or intimidation (RAINN, 2023).

Participant 1 was hesitant to describe her experience of groping and unwanted sexual touch as sexual assault. She explained her experience at her first BJJ gym as a white belt:

I did get sexually assaulted. Not assaulted... a guy groped me during Brazilian jiu-jitsu at my first school that was outside of class, but he was the coach there and I was not comfortable with that. Also, I did notice that he would give special treatment to females he found attractive.

The participant further described a situation at the beach in which the coach and a group of teammates were “getting handsy,” and “he reached out and through my swimsuit, grabbed my nipple and twisted it.” Later that evening, the coach pulled the participant aside and explained that “he and his girlfriend were swingers.” When walking back to the main group, the coach asked, “Who wants to shower at my place?” Although Participant 1 was hesitant to describe this situation as sexual assault, according to the U.S. Department of Justice and the Rape Abuse and Incest National Network, this participant experienced sexual assault.

Issues with Other Women. Participants also described negative experiences with women at Brazilian jiu-jitsu gyms. Instead of fellow women being welcoming and encouraging, multiple participants described women as being unwelcome and vindictive to new women. Surprising to the new women, it seemed as though these women did not want other women encroaching on their territory. Participant 8 explained: “I think that it's not always the men that make you feel unwelcome. Sometimes it's the women.” Participant 3 experienced “cattiness,” and Participant 23 described there were “girls with so much ego.”

Some participants speculated female participants left BJJ gyms due to the behavior of the other women in the gym. When she was a white belt at her first BJJ gym, participant 22 speculated:

There were women at the gym, a relatively new gym, that had a huge chip on their shoulders. Some of the women could be very mean. When I started at that gym, there were about 10 women, and there was one individual that drove them all off within two months of me starting... there can be some big ego issues.

Gender Norms

By participating in a male-dominated contact sport, women are challenging gender norms that persist in society. The theme of gender norms included participants' comments of discrimination, judgment, and stereotypes about women and their capabilities to participate in a physically aggressive male-dominated sport. Although there have been improvements in gender equality in the United States with Title IX, preconceived notions about women participating in male-dominated sports cause men to discriminate and judge women. Hyvarinen (2017) explained a problem occurs when people state gender equality has been achieved then people end up downplaying existing gender issues. As Participant 10 stated: “Anyone that thinks of fighting they think of it being a male-type sport.”

When asked about her male teammates, Participant 3 felt male teammates treated her differently than male teammates at her first BJJ gym as a white belt. She felt male teammates were patronizing and toxic and thus she chose to leave that first gym. Participant 3 described discrimination as:

They would tease me about my femininity. I wanted to wear a pink gi, or I would be made fun of for my braids. They were always pointing out that I was the only girl in class, and I always felt singled out. I still feel looked down upon by my male teammates and they always want to coach me. I can't roll with them without getting a small lecture afterward on how I can improve.

Participant 3 felt male teammates' comments after live rolls were not intended to be supportive and inclusive, but rather were condescending.

Many participants described challenges of stereotypes about women and being judged by those outside of BJJ, including family members. BJJ is viewed as a masculine sport and participants expressed friends and family did not understand or respect their decision to participate in a masculine sport. Those within the sport of BJJ also stereotype women by making comments assuming women cannot be feminine and at the same participate in male-dominated combat sport. Participant 1 explained:

It's viewed as a masculine thing. I feel like females have been told by society that you should be not doing something that's so aggressive. Well, my parents – specifically my mom – did not approve in the beginning. It wasn't an outright yelling-at-me sort of disapproval. It was more of a snide comment here and there. Like, "Oh, girls aren't supposed to do this."

Participant 12 stated:

When I grew up girls didn't play football. They didn't wrestle, didn't do any of that stuff and if you did, you were kind of the weirdo. Women my age grew up with not being allowed to even entertain the idea of doing a sport like wrestling or fighting or anything not feminine.

Brazilian jiu-jitsu is a Contact Sport

BJJ, being a contact sport, was identified as a theme among challenges of female participation in BJJ. Participants expressed nervous and uncomfortable feelings about being physically close to other people, both male and female. The challenge of women generally being physically smaller and not as strong as male teammates was identified. In BJJ tournaments, women only compete against other women; however, in BJJ classes, women will train with both men and women. Participants are sweaty and in close contact with one another. Many may not be used to close contact with a member of the opposite sex. Participant 16 stated: "I think it's definitely a gross thing about it. It is the close contact and I think just learning to be comfortable with being that up and close with guys in a really awkward position." Participant 14 echoed this sentiment, stating in the beginning:

I couldn't deal with the closeness of it. It made me feel really uncomfortable. The lack of personal space, cleanliness, and real life, it's just too real sometimes, especially if someone has been assaulted, it's like 'whoa this is way too much.'

Overcoming Challenges

Study participants gave suggestions based on personal experiences of overcoming challenges to help future women in BJJ overcome similar challenges. To overcome the challenges of participating in BJJ, women described addressing issues with gym owners, teammates, or changing gyms. The club culture of each individual BJJ gym had a major impact on participants' experiences.

Address Issues with Gym Owners

In BJJ, most gym owners are the head black belts; however, this is not always the case. Some gyms were owned by a pair of black belts or by a husband-and-wife team. If participants had issues with teammates, sometimes the problem could be discussed with either a gym owner or head black belt. Describing how the owner handled her complaints, Participant 20 stated: "The owner had no problem with handling it. I have been to a few gyms where the owners have made it clear that if anyone hurts you or makes you uncomfortable, let them know."

Participant 9 appreciated when gym owners took action to remedy an issue with someone at the gym. Participant 9 explained: "We've actually had to kick someone out of our gym for being

kind of weird. The owners are super supportive, and I really appreciate the men in the community who really support women and take their side.” Participants appreciated when they felt supported by the BJJ gym owners and were more likely to continue at a gym where they felt supported.

Address Issues with Teammates

Many participants felt the best people to discuss challenges with were fellow teammates, as teammates could relate to and understand experiences. Teammates assisted participants in finding solutions to the issues or ways to move beyond the issues, so the challenges and obstacles did not continue to hinder participation. Participant 1 stated: “I remember talking to my teammates. I told them what happened.” Participant 1 further explained:

I did have to go through the traumatic experience of telling my boyfriend at the time and telling my brother, and I've told the story a few times before because I want people to know it and what kind of environment sometimes, we have to deal with.

Change Gyms

If speaking to the gym owner or teammates did not solve the situation, participants recommended changing gyms. This recommendation only works for those in locations with multiple BJJ gyms. Some participants were located in areas where the next closest facility was two hours away, so this was not a realistic solution for those participants. Participant 16 explained:

Don't go in a gym where you don't feel comfortable. Don't let it stop you from trying it because then you're going to lose out on this great opportunity. So just keep going until maybe you get adjusted or maybe find the right gym. But at the end that effort to find the right place is totally worth it because it sucks that if you try to get into it and then after the first three classes and you gave up, like you lose out on such a great experience.

Participant 1 recommended new BJJ participants “try multiple gyms and find a place you feel comfortable because that's where you're going to grow.” Participant 3 further explained:

There's no shame in finding the place that's right for you and the place that's right for you might change at any point so find the people you want to be with and that's what's going to serve you best in this world.

Benefits

Despite challenges of participating in a male-dominated sport, all study participants continued to participate in BJJ due to the many benefits. Study participants described benefits of community relationships, improved mental health, physical exercise, and learning self-defense. Although many recreational sports provide similar benefits, the benefit of self-defense is unique to martial arts.

Community

As an adult, it can be challenging to make new friends and expand social circles. BJJ can provide a community for adults because BJJ, other forms of grappling, and all martial arts promote togetherness and break down barriers (Coate, 2023). Participant 8 explained the most significant benefits being “community and friendship and empowerment.” When moving to a new city, BJJ helped Participant 3 make friends and adjust to living in a new city. Participant 3 stated:

I've met incredible friends that we chat outside of Brazilian jiu-jitsu and that's been really awesome. Especially since I joined Brazilian jiu-jitsu when I came to a new city and not really knowing anyone, so it helps my social life, my confidence, all of that it.

Mental Health

Participants described the meditative and peaceful nature of BJJ; highlighting participating in BJJ improves moods, decreases depression, decreases anxiety, and overall improves mental and emotional health. Participant 14 explained: “I hit a point in my depression and Brazilian jiu-jitsu

was the one thing that got me out of the house. It was a regular thing that I could go to and it's reliable. It's always there.”

Participant 20 stated:

Emotionally I feel like I'm able to handle stressful situations very well. I am able to handle being under pressure and manage it and function, which is super helpful because I work in healthcare so I have to be calm, cool, and collected.

Participant 21 described increasing her confidence:

Brazilian jiu jitsu gave me my voice, my confidence. If it wasn't for the sport, I don't know where I would be today. I don't think I'd be coaching. I don't think I would be acting. I don't think I would be the woman that I am today.

Participant 18 explained BJJ “helped me kind of walk with my head a little higher. I always struggled with confidence and low self-esteem, so it helped with that too. It has helped me gain confidence and I see my worth a lot more.”

Physical Exercise

After starting Brazilian jiu-jitsu for different reasons, many participants continued participation due to the benefit of physical exercise. Physical exercise can be achieved through many forms of fitness, but participants felt more motivated and felt BJJ was a more enjoyable way to exercise compared to other styles of fitness and recreation. Participant 10 explained: “Now I do it for a workout. Being able to work out and lose a little bit of weight and put on muscle has helped. It's helped me with my weight training also.” Participant 12 further explained: “There's always going to be physical benefits from physical activity. I think it's a way more enjoyable way to workout, a way more enjoyable way to do cardio and weightlifting.”

In addition to improved mental health and physical exercise, participants further indicated participation in BJJ led to an improved body image. When asked about the benefits of Brazilian jiu-jitsu, Participant 14 expressed: “I had an eating disorder when I was younger. Brazilian jiu-jitsu has definitely changed my view of beautiful. I see those knobby fingers and I think ‘man she must be so strong’ instead of feeling weird or embarrassed.”

Participant 1 further illustrated benefits of improved body image as:

I feel growing up, it's easy to think you're supposed to be skinny and you're supposed to be very feminine looking. But I feel Brazilian jiu-jitsu makes you think about your body differently, because whatever society says is not always right for you. What I love about the sport is that it conforms to your body. Your body is your positive point that you can use. For example, if you have longer legs, certain moves are easier for you. I think you learn to appreciate your body more no matter what kind of shape it is in. Also, for the people who do want to lose weight it helps with that too. It'll make you more confident in two ways. You're putting in the work and you're comfortable with the body that you have because that's the tool you have to use.

Self-Defense

Initially, many participants were drawn to BJJ for the self-defense aspect. Although it attracted participants to the sport, participants continued for the other benefits they experienced. It was not the top benefit listed by participants but still a significant reason for new women to choose to participate in BJJ, especially with some participants previously experiencing abuse in personal relationships. According to the CDC (2024), one in four women experience physical violence from an intimate partner. Women also are at risk for stalking, rape, sexual violence, workplace harassment, and human trafficking. In 2009, the Bureau of Justice Statistics found during a 12-month period, approximately 3.3 million people age 18 and older were stalked, with a majority of those victims being female (Status of Women in the States, 2024). Therefore, although self-defense was not the top benefit mentioned in this study, it is vital for women to learn self-defense and be able to protect themselves.

Although many sports share the same benefits as participation in BJJ, the self-defense component of BJJ makes it unique compared to other recreational sports such as recreational leagues for softball, hiking, marathon running, etc. Participant 22 described jiu jitsu as

“empowering, because as an individual, knowing that if push comes to shove, I can defend myself. I am capable of so much more than I think.” Participant 4 explained: “I am confident that I can protect myself. If something ever happened to me, I could get away.”

Recommendations

To increase the number of women participating in Brazilian jiu-jitsu, study participants recommended more women’s-only BJJ classes and seminars, increased awareness of female participation in Brazilian jiu-jitsu, having perseverance, and women being purposefully welcoming and supporting of new women participating in Brazilian jiu-jitsu. Study participants expressed women in BJJ have a responsibility to help improve BJJ’s culture for future biological female participants.

Women’s-Only Classes

The most common recommendation to increase women participating in BJJ was for gyms to have women-only classes or seminars. Women-only classes are an excellent approach for women who are hesitant about beginning BJJ because of the physical contact of the sport. Also, it displays to women BJJ is not only for men. Participants who attended gyms with women’s-only classes spoke highly of the experience and felt it was a welcoming environment, especially for women new to BJJ. Participant 9 participated in the weekly women’s-only classes at her gym and stated: “I love the women’s-only classes. I love that some gyms do a free drop-in for women’s classes.” Participant 3 also enjoyed her experience at women’s-only classes, explaining: “I’m a big proponent of the all-women’s class. Having a safe space is huge.”

When asked about increasing the number of women participating in Brazilian jiu-jitsu, Participant 1 stated:

Having more women’s-only events, whether it be competition or open mats. I always feel that’s a good way to bring people, women of the same mind, together. Also having women’s classes is a big one because then it gives newer people the chance to see what other women can do.

Creating Awareness about Women’s Brazilian jiu-jitsu Participation

Participants explained the need for increased awareness of female participation in BJJ. The responsibility to increase awareness of female participation belongs to the media, BJJ gym owners, and women currently participating in Brazilian jiu-jitsu. Participant 17 expressed:

I think there needs to be a bigger presence of women training and letting people know that women are welcome out of the gate. I see women’s conferences, groups that travel, and they allow women to come and train. But I think individual schools should do more to promote female involvement in their community. Either making them more visible out in the community, I don’t know how you would advertise that, but I think there needs to be a way for people to see that it’s a safe place for women to train, that they will be treated equally, that they will be respected. I think part of it is people seeing it. I don’t know how you visually show that, maybe through social media. I think people seeing a small snippet of what it could look like and what their participation could be. I think interacting with other women who trained so that they could ask those questions and feel comfortable and feel like they’re getting a true answer.

Perseverance

BJJ is a physically challenging sport. Perseverance is needed to learn techniques and become comfortable with physical contact, sweat, and lack of personal space. Participants explained the best way to persevere in BJJ is to continue to show up consistently. Although there may be physically and mentally challenging days on the mat, participants felt the benefits of BJJ outweighed the challenges. Describing perseverance, Participant 22 stated: “For a really long time,

I had really bad anxiety even showing up to class, and I just kept showing up, just kept persevering.”

Participant 2 recommended:

Give it a couple of months and it's going to be uncomfortable and it's going to be stretching and it's going to be so different and you're going to feel like you're not ever growing, but you do. It's so weird because I feel like white belts grow the most because they start from zero and then in a year they've learned so much, but then I think it gets harder later on to see growth, but you're always growing, even though you may not feel like you're learning and growing, you are. So in the very beginning, it feels the most uncomfortable.”

Welcoming and Supportive of Women

Some study participants described encountering issues with other women participating in BJJ. In order to increase female participation in BJJ, study participants expressed women currently participating in BJJ need to welcome and support new female members. Further, black belts, gym owners, and other BJJ leaders must encourage and support new female BJJ participants.

Participant 11 explained:

Brazilian jiu-jitsu used to be an exclusive thing 20 years ago. Brazilian jiu-jitsu practitioners would say, ‘Don’t tell anybody our secrets. Don’t talk about Brazilian jiu-jitsu. This is something we need to keep within our community.’ Instead, I would be welcoming to new female members. Explain to them, ‘Brazilian jiu-jitsu is your own individual journey. You cannot compare what your body is capable of, and what you are capable of versus anybody else.

Echoing this sentiment, Participant 8 stated:

I think that the more women you have, the more women you have. Gyms need to focus more on that. I think that they need to make them feel like they're taken seriously.

Discussion

The goal of this research was to gain a deeper understanding of women’s experiences in the male-dominated sport of Brazilian jiu-jitsu. This study aimed to discover the challenges facing women in Brazilian jiu-jitsu, how women overcome the challenges, and why women choose to continue to participate. By understanding women’s experiences in BJJ, the sport can be improved for future female participants and assist women in coping with challenges faced in BJJ.

In response to RQ1 about the challenges women face in BJJ, study participants emphasized the most significant challenge of participating in BJJ is male dominance. Sports, and specifically martial arts, are one of the last areas in which men can still celebrate masculinity and physical superiority to women (Kavoura et al., 2015). In the past, women were not encouraged to participate in martial arts and sports involving fighting. Kavoura et al. (2018) revealed although judo was portrayed as a sport for all, it was still a male domain and women were perceived as biologically incapable of competitive judo. Even in societies that value equality like Finland, gender hierarchies still persist. This resembles issues found in this study when examining Brazilian jiu-jitsu in the United States. As the number of women participating in martial arts sports increases, women inherently are challenging historical ideas of male superiority (Channon, 2013). Study participants echoed previous mixed martial arts research, which found family members did not approve of women participating in a violent sport (Mierzwinski et al., 2014).

Women’s involvement in many sports has the potential to challenge gender hierarchies, norms, and discourse, especially in male-dominated contact sports (Maor, 2018). An inherent part of BJJ and other grappling-style martial arts is physical touch. This physical closeness between participants can be a challenge for participants as well as outsiders viewing females training with males. Physical contact between mixed genders in BJJ challenges gender discourse about what is appropriate behavior for women. Physical contact in BJJ initiates physical relationships between men and women that are not based on sexuality or motherhood (Maor, 2018). Women also challenge gender norms in BJJ by expressing competitiveness and assertiveness.

Study participants confirmed previous research on judo and Brazilian jiu-jitsu, which described women facing prejudice, ridicule and shame in male domains (Kavoura et al., 2018; Mierzewski et al., 2014). Participants described how they felt they were treated differently due to their gender. Some male teammates patronized and belittled female teammates. Participants did not appreciate such treatment from male teammates as it made them feel ridiculed for being a woman. Although previous research delved into the treatment of teammates, research is lacking on the power dynamics and gender hierarchies in martial arts. Study participants expressed how those in positions of power, usually male black belts, abused their power and how challenging it is to change a culture that has been in place since Brazilian jiu-jitsu's founding.

RQ2 delved into how women in Brazilian jiu-jitsu overcame challenges. Previous research examining Judo in Finland demonstrated women have quit judo due to the male domain, and it was common to be the only female in a judo gym (Kavoura et al., 2018). Some study participants described leaving BJJ training facilities due to existing BJJ female participants being overly competitive and hostile toward new female participants. Overly competitive and hostile female participants are reinforcing gender norms that play a role in the exclusion of women in BJJ and other martial arts (Lindsay et al., 2023). Participants also described changing gyms if there was a negative environment set by the male black belts. If women are welcomed and supported by existing female BJJ participants as well as the male black belt leaders, new female participants will be less intimidated and more likely to continue participating in a sport with many great benefits.

Perseverance is a strategy emphasized by study participants and is consistent with previous research (Kavoura et al., 2018; Kavoura et al., 2015; Mierzewski et al., 2014). Perseverance entails finding the right gym with good leadership, environment, and culture. It includes enduring challenges, struggles, and negative attitudes and not conforming to gender norms (Kavoura et al., 2015). Participants described the best way to persevere in BJJ was showing up consistently. Participants who had the most years of experience explained that by continually showing up despite mental and physical challenges, participants will discover the benefits outweigh the challenges. With time, participants felt more comfortable training with mixed genders and dealing with any issues that might arise. By continuing with the sport despite the challenges, women will eventually begin to create change in the attitudes and culture of Brazilian jiu-jitsu.

RQ3 explored why women continue to participate in Brazilian jiu-jitsu and what benefits women receive from the sport. Only a minimal amount of previous research explored the benefits of Brazilian jiu-jitsu for women. Although some benefits are similar to other sports, BJJ is unique due to the self-defense component and the sense of accomplishment from achieving stripes, belts, and participating in tournaments. Competing is not necessary to achieve the benefits of BJJ, but it does allow women who wish to compete the opportunity to compete against competitors of the same gender, belt, age, and weight. As a martial art that takes the longest to achieve a black belt, promotions are a meaningful part of the journey. Other sports do not have the same sense of accomplishment and community achieved throughout the long BJJ journey to black belt. Study participants described the benefits of community relationships, improved confidence, mental health, learning and practicing self-defense, physical exercise, discipline, and improved body image. As a sport with many possible benefits for women, it is evident why women continue despite the challenges and why it is imperative to promote BJJ as a sport accessible and welcoming to women.

Practical Implications

Case study research explores a contemporary issue in society with the goal of gaining an in-depth understanding of participants' experiences (Bloomberg, 2019; Yin, 2018). It is appropriate for conducting research on an applied problem with real-life implications. Case study research aspires to produce deep insights to advise professional practice, policy development, community action, and social action (Bloomberg, 2019). The challenges women encounter in BJJ is a contemporary issue with minimal research and the goal of this study was to create practical solutions to the ongoing issues.

Study participants explained that although BJJ has a history of being male-dominated, the future of BJJ does not have to continue as male-dominated. To increase the number of women

participating in BJJ, gyms should add more women-only classes. Women feel safer training BJJ with other women, especially when initially trying BJJ, because of the close contact necessary to participate, and size and strength differences between males and females. Regardless if the BJJ facility offers women-only classes, women need to be aware of other women participating and help them feel welcome and supported by other BJJ female participants. However, the onus of changing and improving BJJ for women does not solely lie with women. Study participants described the best BJJ gyms as those with male BJJ black belts who were welcoming and encouraging of women joining the BJJ gym.

It will take time for more female black belts to rise through the ranks. As such, male BJJ black belts must purposefully create a positive environment for female participants. Unfortunately, study participants described instances of male BJJ black belts abusing positions of power. Such behaviors should not be the norm regardless of whether BJJ is male-dominated or otherwise. Female study participants with a history of participating in BJJ for many years did however express that the abuse of power and male-dominance culture of BJJ has improved in recent years. Study participants described the best BJJ facilities as the ones where male BJJ black belts were welcoming and encouraging of females joining the BJJ program. Black belts are the role models and leaders in BJJ. As such, BJJ black belts must lead by example, treating females appropriately and with the utmost respect when interacting, training BJJ, and competing.

To create an inclusive environment for females, educational workshops on leadership, SafeSport, and proper coaching are needed for male BJJ black belts. SafeSport is a new requirement for black belts in order to register with the International Brazilian jiu-jitsu Federation (IBJJF). As part of BJJ black belt registration process, gender-inclusive training should be implemented with goals of improving culture, attitudes, and behaviors of BJJ black belts. Although not every black belt registers with IBJJF, adding gender training into BJJ black belt registration is a step in the right direction for creating change within BJJ. Gym owners or head coaches need to understand BJJ accepted cultural norms of the past do not represent the present and future of BJJ; gender discrimination, disrespect, and sexual assault are never appropriate. Educating BJJ leaders how to create safe and inclusive spaces can improve BJJ for everyone involved.

Future Research

Female participation in contact sports in general and BJJ specifically needs further examination. Future research should examine overall culture, as well as the female perspective of participating in BJJ in 5-10 years; thus, examining if and how BJJ has changed. Specifically, it would be beneficial to research if participants' perspectives on body proximity changed as they advanced or participated longer in the sport. Longitudinal studies can determine the effectiveness of recommended strategies on increasing female participation in BJJ and the culture change in Brazilian jiu-jitsu. Future research also should look at different male-dominated sports, comparing which sports are most effective at challenging gender norms and stereotypes and creating a welcoming environment for women to participate. Future research also can examine male perspectives of females participating in BJJ to understand why some men are more open to allowing female participation in BJJ than others, as well as what components of educational training are necessary.

Conclusion

This study sought to understand the challenges women face in Brazilian jiu-jitsu and how women overcame these obstacles. Results found challenges existed due to BJJ being a male-dominated sport and a contact sport. Women experienced difficulties because they were challenging gender norms. Recommendations for future BJJ participants included discussing issues with gym owners and teammates and creating changes to BJJ culture. Positive advances have been made for females participating in BJJ. However, this study is just the beginning of creating a positive future for female participation in BJJ.

References

- A4Fitness. (2024). The rising numbers of women practicing jiu jitsu: A comparison to previous years. https://www.a4fitness.com/number-of-women-who-do-jiu-jitsu-in-comparison-to-previous-years/#google_vignette
- Abu Dhabi Combat Club. (2022). *Official ADCC weight classes*. <https://adcombat.com/adcc-rules-regulations/official-adcc-weight-classes/>
- Acker, J. (1990). Hierarchies, jobs, bodies: A theory of gendered organizations. *Gender and Society*, 4(2), 139–158.
- Bandy, S. (2005). From women in sport to cultural critique: A review of books about women in sport and physical culture. *Women's Studies Quarterly*, 33(1 & 2), 246–261.
- Baxter, J. (2002). A juggling act: A feminist post-structuralist analysis of girls' and boys' talk in the secondary classroom. *Gender and Education*, 14(1), p. 5–19.
- Bergvall, V.L. (1999). Toward a comprehensive theory of language and gender. *Language in Society*, 28(2), 273–293. <https://doi.org/10.1017/S0047404599002080>
- Biscontini, T. (2019). Brazilian jiu-jitsu. *Salem Press Encyclopedia*.
- Bloomberg, L. D. (2018). Case study method. In B. B. Frey (Ed.), *The SAGE Encyclopedia of educational research, measurement, and evaluation* (pp. 237–239). SAGE.
- Bloomberg, L. D., & Volpe, M. (2019). *Completing your qualitative dissertation: A road map from beginning to end*. (4th Ed.). SAGE.
- Brunell, L. and Burkett, E. (2021). Feminism. *Encyclopedia Britannica*. <https://www.britannica.com/topic/feminism>
- Butler, J. (1990). *Gender Trouble* (2nd ed.). Routledge.
- Channon, A., & Jennings, G. (2013). The rules of engagement: Negotiating painful and “intimate” touch in mixed-sex martial arts. *Sociology of Sport Journal*, 30, 487–503.
- Channon, A. (2014). Towards the “undoing” of gender in mixed-sex martial arts and combat sports. *Societies*, 4(4), 587–605. doi:10.3390/soc4040587
- Chinkov, A., & Holt, N. (2015). Implicit transfer of life skills through participation in Brazilian jiu-jitsu. *Journal of Applied Sport Psychology*, 28(2). <https://doi.org/10.1080/10413200.2015.1086447>
- Coate, B. (2023). Forever the new kid: Mikey Musumeci finds community using ‘universal language’ of jiu-jitsu. *One Championship*. <https://www.onefc.com/features/forever-the-new-kid-mikey-musumeci-finds-community-using-universal-language-of-jiu-jitsu/>
- Creswell, J.W. & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and mixed methods approach* (5th ed.). Sage Publications, Inc.
- Da Silva, G., Jaeger, A., & Silva, P. (2021). Sport student teachers' discourses about female athletes in mixed martial arts. *Movimento (Porto Alegre)*, 27, 1–16. <https://doi.org/10.22456/1982-8918.103726>

- David, M., Coffey, A., Connolly, P., Nayak, A., & Reay, D. (2006). Troubling identities: Reflections on Judith Butler's philosophy for the sociology of education. *British Journal of Sociology of Education*, 27(4), 421–424. <http://www.jstor.org/stable/30036153>
- Folbre, N. (1994). *Who pays for the kids?* Routledge.
- Follo, G. (2012). A literature review of women and the martial arts: Where are we right now? *Sociology Compass*, 6(9), 707–717. <https://doi.org/10.1111/j.1751-9020.2012.00487.x>
- GracieMag. (2022). *The history of Brazilian Jiu Jitsu*. <https://www.graciemag.com/en/the-saga-of-jiu-jitsu/>
- Guba, E. (1981). ERIC/ECTJ Annual Review Paper: Criteria for Assessing the Trustworthiness of Naturalistic Inquiries. *Educational Communication and Technology*, 29(2), 75–91.
- Guba, E. & Lincoln, Y. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication and Technology*, 30(4), 233–252.
- Gutting, G. (1998). Post-structuralism. In *The Routledge Encyclopedia of Philosophy*. Taylor and Francis. <https://www.rep.routledge.com/articles/thematic/post-structuralism>
- Hamilton, J. (2020). Undoing gender or overdoing gender? Women MMA athletes' intimate partnering and the relational maintenance of femininity. *Sociology of Sport Journal*, 37, 346–354. <https://doi.org/10.1123/ssj.2019-0132>
- Holland, J.L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Psychological Assessment Resources.
- Holland, J.R., & Oglesby, C. (1979). Women in sport: The synthesis begins. *The ANNALS of the American Academy of Political and Social Science*, 445(1), 80–90. <https://doi.org/10.1177/000271627944500110>
- Holmes, M. (2009). *Gender and everyday life*. Routledge.
- Holmes, A. (2020). Researcher positionality: A consideration of its influence and place in qualitative research – a new researcher guide. *International Journal of Education*, 8(4), 1–10. <https://doi.org/10.34293/education.v8i4.3232>
- Hyvärinen, H. (2017, February 8). *Is gender equality encountering a backlash?* University of Tampere. <https://www.uta.fi/en/ajankohtaista/uutinen/gender-equality-encountering-backlash>
- IBIS World. (2021). *Brazilian jiu-jitsu studios industry in the U.S.: Market research report*. <https://www.ibisworld.com/united-states/market-research-reports/brazilian-jiu-jitsu-studios-industry/>
- International Brazilian Jiu Jitsu Federation. (2022). *Rules*. <https://ibjjf.com>
- Kavoura, A., Chroni, S., Kokkonen, M., Ryba, T.V. (2015) Women fighters as agents of change: A Brazilian jiu jitsu case study from Finland. In Channon A., Matthews C.R. (Eds.), *Global Perspectives on Women in Combat Sports. Global Culture and Sport Series*. Palgrave Macmillan, London. https://doi.org/10.1057/9781137439369_9

- Kavoura, A., Kokkonen, M., Chroni, S., & Ryba, T. (2018). “Some women are born fighters”: Discursive constructions of a fighter’s identity by female Finnish judo athletes. *Sex Roles, 79*, 23–252. <https://doi.org/10.1007/s11199-017-0869-1>
- Kenway, J., Willis, S., Blackmore, J., Rennie, L. (1994). Making ‘hope practical’ rather than ‘despair convincing’: Feminist post-structuralism, gender reform and educational change. *British Journal of Sociology of Education, 15*(2), 187–210.
- Knifsend, C., & Graham, S. (2012). Unique challenges facing female athletes in urban high schools. *Sex Roles, 67*, 236–246. <https://doi.org/10.1007/s11199-012-0159-x>
- Lindsay, R., Horne, J., Shaw, J. *et al.* (2023). The influence of gender dynamics on women’s experiences in martial arts: A scoping review. *International Journal of the Sociology of Leisure, 6*, 297–325. <https://doi.org/10.1007/s41978-023-00140-2>
- Lopiano, D.A. (1984). A political analysis of the possibility of impact alternatives for the accomplishment of feminist objectives within American collegiate sport. *The Arena Review, 8*(2), 49–61.
- Maor, M. (2018). Fighting gender stereotypes: Women's participation in the martial arts, physical feminism and social change. *Martial Arts Studies, 7*, 36–48. doi.org/10.18573/mas.56
- McNarry, G., Allen-Collinson, J., & Evans, A. (2019). Reflexivity and bracketing in sociological phenomenological research: Researching the competitive swimming lifeworld. *Qualitative Research in Sport, Exercise and Health, 11*(1), 138–151.
- Mierzwinski, M., Velija, P., & Malcolm, D. (2014). Women’s experiences in the mixed martial arts: A quest for excitement? *Sociology of Sport Journal, 31*(1), 66–84. <https://doi-org.libproxy.troy.edu/10.1123/ssj.2013-0125>
- Messner, M. (1990). When bodies are weapons: Masculinity and violence in sport. *International Review for the Sociology of Sport, 25*(3), 203–218. <https://doi.org/10.1177/101269029002500303>
- Office on Violence Against Women. (2023). Sexual Assault. <https://www.justice.gov/ovw/sexual-assault>
- Øvretveit, K., Sæther, S.A., & Mehus, I. (2019). Mastery goals are associated with training effort in Brazilian jiu-jitsu. *Journal of Physical Education and Sport, 19*(4), 1294–1299. <https://doi.org/10.7752/jpes.2019.s4188>
- Raferty, H. (2018, August 27). BJJ beginner’s guide: Training with women. *Fighter’s Market*. <https://fightersmarket.com/blogs/fighter/bjj-beginners-guide-training-with-women>
- RAINN. (2023). *Sexual Assault*. <https://www.rainn.org/articles/sexual-assault#:~:text=Some%20forms%20of%20sexual%20assault,or%20penetrating%20the%20perpetrator's%20body>
- Rogers, K. (2021). Abu Dhabi World Professional Jiu Jitsu Championships announce \$800,000 in prize money. *Jits Magazine*. <https://jitsmagazine.com/abu-dhabi-world-professional-jiu-jitsu-championships-announce-800000-in-prize-money/>
- Status of Women in the States. (2024). Violence and safety. *Institute for women’s policy research*. <https://statusofwomendata.org/explore-the-data/violence-safety/>

- Teague, H. (2019). IBJJF announce cash prizes at Worlds, equal pay for black belt men and women. *FloGrappling*. <https://www.flograppling.com/articles/6397877-ibjjf-announce-cash-prizes-at-worlds-equal-pay-for-black-belt-men-women>
- Thrasher, C. (2014). “A few crazy ladies”: How women broke down barriers and created a place for female martial artists in Florida, 1974–1983. *The Florida Historical Quarterly*, 93(2), 226–248.
- Todd, J. (2020). The history of Brazilian Jiu-Jitsu. *FloGrappling*. <https://www.flograppling.com/articles/6744662-the-history-of-brazilian-jiu-jitsu>
- Uhde, Z. (2010). On sources of structural injustice: A feminist reading of the theory of Iris M. Young. *Human Affairs*, 20(2), 151–166.
- Vertinsky, P. (1994). The social construction of the gendered body: Exercise and the exercise of power. *International Journal of the History of Sport*, 11(2), 147–171.
- Wang, S., Creswell, J., Nguyen, D. (2017). Vietnamese refugee elderly women and their experiences of social support: A multiple case study. *Journal of Cross-Cultural Gerontology*, 32, 479–496.
- Weatherford, G., Block, B., & Wagner, F. (2018). The complexity of sport: Universal challenges and their impact on women in sport. *Women in Sport and Physical Activity Journal*, 26, 89–98. <https://doi.org/10.1123/wspaj.2018-0001>
- Weedon, C. (1997). *Feminist practice and post-structuralist theory* (2nd ed.). Malden: Blackwell.
- Xu, X., Chikersal, P., Dutcher, J., Sefidgar, Y., Seo, W., Tumminia, M., et al. (2021). Leveraging collaborative-filtering for personalized behavior modeling: A case study of depression detection among college students. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.*, 5(1), 1–27. <https://doi.org/10.1145/3448107>
- Yin, R.K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications.
- Young, I.M. (1980). Throwing like a girl: A phenomenology of feminine body comportment motility and spatiality. *Human Studies*, 3(1), 137–156.
- Young, I.M. (2002). Lived body vs. gender: Reflections on social structure and subjectivity. *Ratio*, 15, 410–428.
- Young, I.M. (2005). Lived bodies vs. gender: Reflections on social structure and subjectivity. In I.M. Young. *On female body experience: Throwing like a girl and other essays*. Oxford University Press.
- Young, K. (1993). Violence, risk, and liability in male sports culture. *Sociology of Sport Journal*, 10(4), 373–396. <https://doi.org/10.1123/ssj.10.4.373>