Brazilian Jiu Jitsu: A Tool For Veteran Reassimilation

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Dedication

It is with the utmost gratitude and appreciation that I dedicate this dissertation to my parents. Your unconditional love, support, and faith fuel my passion to want to give everything I can while on this Earth. To my Sadie-Anne, you are the light in my world and I can't thank you enough for supporting me through the countless nights away from you so I could make this research a reality. To my beloved grandmother who was not here to see me accomplish this dissertation, I carry you in my heart and spirit every step of the way and am forever grateful for the lessons you taught me about love and staying in the fight. To my Uncle Vic, you are a warrior of warriors and I am humbled to have you as not only a leader but also a shining example of how warriors can live a balanced life and identity. Ungawa!

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Abstract

This dissertation evaluates veteran participation in the martial art of Brazilian Jiu Jitsu (BJJ) as a tool of reassimilation for veterans suffering from anxiety, stress and/or combat PTSD associated with military deployment. From the onset of Operation Iraqi Freedom, Operation Enduring Freedom and Operation New Dawn, challenges associated with U.S. Veteran assimilation and reintegration have been increasing. Coping with long term displacement, trauma, loss, and making sense of identity shifts between being an active duty service member and civilian can often present challenges when navigating back into civilian life.

By utilizing a neuroanthropological lens, ethnographic inquiry, surveys, semi-structured interviews, and focus groups, this research advances anthropology's understanding of how sport participation may have the ability to combat assimilation and mental health challenges that are a result of combative trauma exposure. I examine BJJ as a physical and mental tool for strengthening social bonds, buttressing identity formation, and easing the burden of transitioning into a civilian life after enduring time within a combative theater. This analysis is a building block for future research that will explore BJJ as an avenue of elective intervention for veterans suffering from stress and anxiety disorders associated with time in service.

Chapter One

Introduction

"The damndest thing about war is that once it's over you miss it. You're shot to hell, see your brothers die next to you, and lose who you thought you were before you were downrange. Then you come home...and can't make sense of the civilian life...you miss the hunt and the person you are when your life is on the line every minute of every day."

-Rudy, Veteran and Research Participant

War brings violence, loss, suffering and dislocation. War also enculturates raw moments of emotion, growth, and tribal collectivity that frequently go unnoticed. The Oxford dictionary defines war as "A state of competition or hostility between different people or groups," suggesting powerful elements of group identity, cultured values, and the belief that what each respective side involved in the conflict is doing is right. Of keen importance to the research presented in this dissertation is the bond that is formed within a group at war and how that plays out within the reassimilation process when returning home from combative deployment. The reassimilation process incorporates elements of combative camaraderie and a continuation of the warrior ethos that is forged within military service. Often, a gap is created after returning home from deployment when coping mechanisms and social groups that were once relied on are no longer present and veterans feel "lost" and without a place of understanding from others. In this dissertation, the pain, the struggles, the moments of personal and social growth as well as the meshing of identities are explored through a physical + mental and social model found within combative sport. The physical + mental approach consists of activities that challenge both the physical body as well as the cognitive and mental skills of the brain in order

to achieve a specific outcome or objective. When considering the role of combative sport as a physical + mental activity, it is important to consider individuals who interact with one another (the social) through the use of strategy, tactics, and physical objectives that carry similarities to duties performed while serving in the military.

The rapport built on the battlefield between comrades is one of a kind (Hinojosa and Hinojosa 2011). The fortitude, purpose and the level of ferocity that is forged within combat is nearly non-existent in the civilian world. It is a rapport and a trust that resonates with survival for not just of one's self, but also for one's identity and place in the world within a "tribe" or unit (Junger 2016). The twenty combat veterans that this dissertation is built around provided rich insight into their loss of rapport with fellow comrades as well as other challenges that they linked to their transition back to civilian life.

Challenges that often present themselves include disconnects between pre-service social relationships and loss of civilian identity elements that at one time proved to be important. Previous research has shown that social relationships matter when dealing with the many challenges involved within the reassimilation and reacculturation process (Adler and Sowden 2018, Finley 2015). Family, best friends, colleagues, and other pertinent social connections within civilian life matter, but seldom do they completely fill in the gap that is left once service members return home from combat deployment. Due to the exposure of traumatic experiences on the battlefield as well as the eradication of pre-service coping mechanisms, gaps in their trauma response are formed and cause a ripple effect within their identity as a civilian. The excitement of constantly being in a state of combat, the trust that is

shared knowing that your comrades have your back when your life is on the line, and being on the "hunt" for "bad guys" with other elite combatants is a unique condition that most of humanity cannot relate to. Additionally, the socially constructed condition of being an elite U.S. Combatant operating in a foreign country with a whole military apparatus that is supporting you and sustain you fosters a systematic dependence that is not seen within the civilian lifestyle or transition.

The research that follows explores the many facets that are involved within the reassimilation process after returning home from combat. In particular, I explore the use of Brazilian Jiu Jitsu (BJJ) and its effectiveness of providing combatants with a physical + mental model that continues to cultivate their warrior ethos while forging new social connections. To unveil fundamental components of identity regulation, emotional wherewithal, and biological components involved within the meaning making process, my research relies heavily on neuroanthropology. Additionally, medical anthropology and sociocultural anthropology are used to explore the significance of cultural conditioning, social interactions, and cultural constructs that hold salience for combatants.

Early in my field work, I met Flanker. Flanker was unique amongst his peers in that he served in two different branches of Special Operations Forces (SOF). He began his military career as an Air Force Pararescue (PJ) and later enlisted in the Army to become a Green Beret. His combat experience was vast and he had been training in BJJ off and on throughout his time in-service. In one of my early interviews, Flanker described the insatiable thirst he had to get

back "downrange" (a slang term that is used to describe being in combat) and the only thing that was remotely close to the feeling he had downrange was training BJJ. He states:

"The fight in the sandbox is different than the fight on the mat. Different rules of engagement, different feel, smells, and tempo. What is similar about them is the fact that you are in a fight. A fight that requires you to be in the now and not somewhere else. Every bit of you has to be there and able to react to whatever the threat is throwing at you. That rush, that feeling is part of what defines me...just at different levels. Beyond that, when I am done rolling on the mat I can hug my brothers and say thank you for the rolls. Out in the sandbox there is no one to thank but my brothers to my left and right...I have nothing to thank the threat for other than the opportunity for the fight and to put him down."

What is unique about the narrative above is Flanker's perception of the "fight". In one sense, the fight on the mat is an opportunity to continue building the warrior ethos that is already embedded as a combatant but without the level of ferocity that is seen in a life or death situation as felt in war. On the other hand, the fight that is endured in the "sandbox" is one that is absolute as the resulting consequence is death of the threat, themselves, or their comrades. This presents varying degrees of being a warrior with two different predications of what the "fight" is all about; nevertheless, the "fight" exists in both realms.

Flanker continued to describe BJJ as his "saving grace" and the one thing that allowed him to make sense of the civilian world:

"When I got off of active duty I had a lot of free time...too much, actually. I found my mind traveling to places that were dark. I couldn't make sense of civilian logic and the laziness of

people around me. Things that people get bent out of shape over were beyond my understanding. Then little things started getting to me! Sitting in traffic, hearing people sound off to others around them, passive aggressive bullshit...! started to get the itch. That's what drove me to get back on the mat and it was the best thing I ever did...it was my saving grace. I started with going twice a week then noticed that it was the best medicine and began going 4-5 times a week. It became my way of creating new brothers and getting back to a warrior mentality...but a state of mind that didn't itch for war. Rather, a path that encouraged relaxation and logic to every situation. The workout is a complete ass kicker, any and all anger or confusion you have built up throughout the day is left on the mat and in that process you are not only helping yourself but also your training partners. That is exactly how we forge our brotherhood."

This excerpt summarizes Flanker's understanding of how the physical + mental and social model presented within BJJ effectively aligned with his reassimilation journey back to civilian life. He describes the journey as one that had initial challenges with negotiating everyday adversities that civilians have to contend with frequently (hearsay, sitting in traffic, etc.). The acculturation needed (Bichrest 2013) to handle these sorts of challenges required a medium that transcended many barriers that were built over a long career in life or death situations while serving on several deployments. Being able to put his body in a stressful state (physical exhaustion offered in BJJ) while also requiring him to think logically so he wouldn't get submitted (very similar to what he felt when involved in active firefights) allowed for a point of familiarity with his military identity that he could build upon in the civilian world. This

familiarity combined with the social relationships that were built on the mat and tested through training fostered familiar sentiments to his time in service.

Approach to Research

Anthropology is a vast field that allows for a keen blend of science and art. Creativity in cultural interpretation and meaning making provides a pivotal component amongst both the humanities and social sciences that highlights one of the many benefits of anthropological analysis and data. As stated by Virginia Woolf, "Let us never cease from thinking—what is this 'civilization' in which we find ourselves? What are these ceremonies and why should we take part in them?" (Wolf 1938: 60). Being able to study and analyze different realms of the human condition provides invaluable knowledge that creates a better understanding of humanity and the different experiences lived by others. My research highlights the human condition of being immersed in a culture of trauma and violence that is found within the military, and highlights challenges navigating between different spheres of identity.

In Foucault's (1976) *Discourse on Language*, there is a push to understand the challenges associated with truth. He elaborated that truth is often swayed by who, what and where the truth applies to and the forces that shape AND mold the consideration of truth through the rituals and cultural variables at stake. Within this dissertation, I view truth as the reality set forth by participants and what they believe is real and what matters and motivates them. Historically, there has not been much work which tackles the ripple effects of integration

and assimilation post combative deployment. In order to capture the truth of the experiences found within my research, I found it necessary to be immersed into the study population.

Utilizing ethnographic methods to unveil emic and etic experiences within a group of people has proven vital within the history of both social science and the humanities as well as within my research. Unveiling what actually happens through participation in BJJ as well as the experiences that participants recounted while going through reassimilation serve as the focal point of my research. The use of participatory analysis brings a first-hand account to the ritualistic nature of experiences within the group of veterans I worked with. Observing, interacting, and training with them shed light that could augment clinical frameworks that advocate for cognitive behavior interventions for veterans having challenges within the assimilation process.

Scholars with a concentration on assimilation are progressively relying on ethnographic inquiry to pinpoint phenomena and assimilation niches within the veteran population (Finley 2011; Wool 2015; Kohner 2016; Junger 2016). Historically, clinically-based approaches have led the charge in offering a salient approach to veteran assimilation. Methods such as cognitive "play therapy", accelerated resolution therapy (Kip et al. 2016), group therapy, and prescription medications have been evaluated as potentially effective methods. An area that this dissertation contributes to is the use of both sport and martial art to foster the assimilation process. Utilizing the strategic components that are found within sport and having "bodies in motion" (Lockrem 2016) in a martial activity requires real time decisions to be made in order to "win"; this lends itself to investigating an approach that is sport based that could help in filling the "gap" that is missing for veterans enduring civilian re-assimilation.

Key Concepts

This research is framed using a neuroanthropological perspective which calls for cross examination of culture, neurological happenings, mental conditioning, and experiential phenomena (Vogl et al. 2015). Viewing the conditioning process of going to war as enculturement indicates that there is a social structure and a reward system that lead to desired outcomes and interactions within combative environments. This is also true when considering the reassimilation process and the lack of enculturement that comes with becoming a civilian again and not having the institutional support that is seen within boot camp as well as other schools within the military. For veterans leaving the military, the meshing together of combative constructs, understandings of trauma and stress, and a sense of place in the world is now expected to be done by the individual instead of through the institutional support and structure as seen within the military.

The complexity of this process requires some key concepts. Within the chapters you will find that the following ideas are repeated: physical + mental and social model, niche models, and nuances.

The reference of the "physical + mental and social" model alludes to the need for both the mental side of a task as well as the physical side to explicitly work together in order to achieve a specific outcome. In the case of participation in Brazilian Jiu Jitsu, it is absolutely necessary for the cognitive side of participation to be in sync with the physical side and vice versa. This model calls for simultaneous growth between both mental ability and physical prowess in order to build more confidence, become more proficient, enhance social bonds, and build more aptitude towards specific tasks.

Niche models are a neuroanthropological concept that refers to ecological syntheses that are a direct product of self, environment, biology, social interactions, and structural components that contribute to positive or negative feedback loops of individuals and groups. As elaborated by Fuentes (2016), niche models are a necessary component in understanding human evolution as well as interactions between different cultures. They often define commonalities between specific groups interacting in specific contexts within a specific timeframe. These models helped me capture some of the shared similarities in BJJ practice at my two research sites.

Within the context of my research, nuances reference subtle differences that matter in identity between individuals, participation in activities or interpretation of different groups.

They are vital as they highlight cues and interactions between participants while also bringing interpretations together in order to identify commonalities between veterans and BJJ players.

An example of this was seen between participants who were part of special operations and those who were not. The differences that existed in the interactions between those who were former special operations and those who were not became noticeable at times as there seemed to be a deeper understanding or camaraderie between those who shared that commonality.

Organization Of This Dissertation

This dissertation is organized into seven chapters. Given the ethnographic nature of my research the key informants' names have been protected through the use of pseudonyms and I did not include any specific information that could be used to identify who they are.

Chapter Two: Methods and Ethnographic Considerations presents the specific research methods used, the demographics explored within the data collection process, my positionality as both a researcher and participant as well as data collection challenges that were endured throughout the field work.

Chapter Three: Sport and Martial Arts outlines the mental framing as well as trait resiliency that is unique to BJJ within the military community. This chapter shows how identity, sport, and constant contributions to retrospective identity growth are paramount within the assimilation process. Details of the primary research site at Gracie Tampa are discussed as well as the niche community that is built upon BJJ practice.

Chapter Four: Connecting BJJ To Veterans presents a critical perspective of the research results as well as a model for the connection between BJJ and veterans. Specific elements that are built upon and connected to one another include patience acquisition, stress navigation, building relationships, accepting failure, physical exhaustion, and combative identity

Chapter Five: The Calling provides the framework for understanding the anthropological and psychological aspects of military service as well as the research to date on dealing with combative trauma and assimilation. Additionally, aspects of understanding the distinction between "warrior" and "civilian" are explored as a means of establishing distinctions and similarities between both forms of identity.

Chapter Six: Mental Toughness and Post Traumatic Stress contextualizes "mental toughness", "mental adversity", PTSD and what goes into the fundamental recipe for making individuals push through repetitive challenges. Within this chapter, I dive into elements that were unveiled throughout my fieldwork which allude to adaptation to previously lived trauma and the "physical + mental" and social model within my research that can contribute to the assimilation process for combatants.

Chapter Seven: Applied Conclusion and Outcomes outlines the conclusions I draw from military members and veterans participating in BJJ and the potential benefits that it provides to the assimilation process. I offer recommendations for further research as a result of these conclusions and ways that BJJ and combative sport can benefit individuals who share the warrior ethos with civilian assimilation. Though not all participants shared the same interpretations of the role that BJJ has played in their reassimilation into civilian life, the findings within this research offer the field of anthropology further avenues for exploration that can contribute to the growing body of veteran assimilation research. My hope is that this research will lead to greater explorations within the field of combative sport that push the "physical + mental and social" model forward as a salient tool for combat veteran assimilation into civilian life.

The structure of the chapters within this dissertation contain a mesh of methods, results, theory and discussion. In an effort to apply connections between theoretical framings and data collected, it was important to me to include a comprehensive presentation of what the data meant, how it mattered to anthropology and the veteran community, as well as the

framings and impact that it had to not only my participants but potentially to combat veterans, in general.

Chapter Two

Methods and Ethnographic Considerations

Researchers across disciplines have looked at the military community to learn about different aspects of the human condition, hierarchy, concepts of service, and people whose lives are affected by the military. Combative stress, displacement from home, battlefield adversity, and other stress related issues lend themselves to creating environments that challenge cognitive understanding of emotional and psychological processes for individual soldiers, marines, airmen, and the like. When unveiling the value of an ethnographic approach to these issues, anthropology creates an embedded lens that relies on real accounts and interpretations of cultural transformations that happen at both the individual level and group level.

This chapter will present the ethnographic model and research paradigm that I utilized to collect data within the veteran population that I worked with. I will outline the specific data collection methods and analytical tools I used in order to inform both emic and etic perspectives of BJJ as a tool for veteran reassimilation. This chapter then outlines specific instances of assimilation-in-action that are reflected in the individual veteran experience with BJJ as well as negotiation of "redeployment" challenges. Finally, I humbly reflect on my positionality as an anthropological researcher, BJJ practitioner and observer at Gracie Tampa South in Florida.

The design of this research relies on participant observation as a primary method.

Specific methods such as semi-structured interviews, focus groups, and time embedded with key informants led to the conclusions and outcomes of this research. All of the data collection

was done in Tampa, Florida, between Gracie Tampa South and Gracie Tampa North with a total of 20 research participants included in the data collection and analysis. The research sample consisted of all males who had been through at least one combative deployment and who had some experience in BJJ.

The Recipe For Ethnography

Ethnography is a rich qualitative research strategy that relies on researchers embedding themselves into their target population. This is done to unveil intricacies and nuances of lived cultural models and milieus to shine light on the identity cascade that makes cultures salient. My approach to this style of research is that "the ethnographer is both storyteller and scientist; the closer the reader of an ethnography comes to understanding the native's point of view, the better the story and the better the science" (Fetterman 1989:12). My goal was to understand and relay the emic perspectives of my participants and model their experiences with BJJ with etic considerations. Methods that I chose were carefully selected to highlight the warrior ethos, military servitude, community integration, and important elements of sport that anthropology highlights through play and deep social meaning.

Given this framing of my research it was essential to capture participants in their natural environment and blend in as a participant to observe natural interactions and social innuendos that had meaning. As stated by Angrosino (2007), ethnography "literally means the description of a people...and its way of life" (1). Being able to utilize methods such as participant

observation, interviews, and focus groups allowed for me to capture qualitative data that pushed forward my research design and led to concrete observations and inferences.

Being able to capture the stories, experiences, and insights within a combat veteran community is tough. Simply standing by the sidelines and watching them "roll" and interact with one another wasn't enough. I needed to be on the mat with them and feel the exchange of movement, force, and battle of wills in order to relate to what they were experiencing. These moments brought forth the value of participant observation and translated the hidden culture that exists amongst the combat veteran community that participates in BJJ. As stated in Bernard (2006), "participant observation fieldwork is the foundation of cultural anthropology...it is both a humanistic method and a scientific one" (256). Observing, participating, and inquiring about some of the private details of my participants' lives and previously lived traumas brought intense moments within data collection. Emic constructions, etic interpretations, and "intuitive challenges" (Bernard 2006) were brought forth through the participatory role I had within my field work. Being able to witness and experience the same motions, movements, interactions, and processes that the participants did on the mat opened up vital framings that contributed value not only to the project, but to the rapport building process as well. The more time I spent as a participatory observer, the more I was able to garner trust with my research participants and get past their internal "gate keeper" (Emmel et al. 2007), tap into their past and how it molded their current challenges, and identify the cultural constructions that lead to how they made sense of previously lived trauma through BJJ participation. Additionally, applying a neuroanthropological approach called for an immersion

in combative culture to understand how veterans' perception is influenced and how it is they frame lived experiences.

Primary Research Site

My primary research sites, Gracie Tampa North (GTN) and Gracie Tampa South (GTS), are located in Tampa, Florida about 12 miles from one another. GTS and GTN served as my primary sites due to their population of military veterans as well as the innate connection that the head instructor, Rob Kahn, has with the military community, having been the head combatives instructor for Special Operations Command (SOCOM) at MacDill Airforce Base in Tampa, Florida.

All of the participants who were sampled were between the ages of 27 and 54, had been deployed to a combative theater and had been training in BJJ for at least two months. The head instructor of GTN, Rob Kahn, as well the head instructor of GTS, Matt Arroyo, were not military veterans but have both had extensive experience training military members and veterans in BJJ.

My primary sampling strategy was convenience sampling that was conducted through flyers, word of mouth, and simply asking participants I knew had a combative military background. Additionally, snowball sampling was conducted with military members who had acquaintances that trained BJJ at other BJJ schools in different locations. These participants were used specifically for informal interviews to capture their experience with BJJ as a tool for reassimilation.

GTS and GTN serve as unique pillars in their community given their deep-rooted ties to the military and the infusion of BJJ that currently exists in both the U.S. Army Combatives program as well as the Marine Corps Martial Arts Program (MCMAP) (Wells 2012). Both GTS and GTN lend themselves to working with veterans of all military branches and have developed programs that modify BJJ techniques for veterans who have experienced traumatic injuries such as loss of limbs, inability to walk, as well as traumatic brain injury which has led to loss of certain motor skills/cognitive abilities.

I gained entry into both GTN and GTS through having been a long time student of BJJ, specifically under the teachings of Rob Kahn. My time at GTS was due to my relationship with Matt Arroyo, who is the head instructor there. We both trained BJJ together under Rob Kahn over a decade ago and Matt advanced in his training to the point of opening his own school and competing in the Ultimate Fighting Championship (UFC). Over the course of four months, I spent several nights and days watching and recording the interactions, growth, and adversities that my sample population incurred. Being a BJJ participant and student, I recognized that participant observation is rich in real time interactions but I also needed to establish a hardline base of data for each of my participants.

To solve this, I administered a survey to all 20 of the participants who were acquired across GTS and GTN. The survey asked about time served in the military, time training in BJJ, as well as questions that focused on potential assimilation challenges. Quite frequently, members of both sites would train together to have new interactions and test their abilities with

unfamiliar faces. This allowed for real time improvements to their own BJJ skills and put them in varying social interactions via combative sport that created increased social capital.

Within GTS and GTN, there is a heavy sampling of participants who come from a special operations background. Given the close proximity to MacDill Airforce Base, many members of SOF (Special Operations Forces) gravitated to training at either GTS or GTN. This served as a rich environment for being surrounded with BJJ participants who had seen heavy doses of combat within their deployments and had previously been exposed to BJJ through their specialized training in special operations.

Key Informants

My ethnographic research project was a 4 month study that took place from February of 2015 to June of 2015. My project integrated surveys to understand perceived levels of trauma as well as establishing the types of trauma, time in service, and time training in BJJ. The interviews and focus groups placed a heavy emphasis on meaning making behind warriorship, assimilation, and the collective value of participating in combative sport; my participant observation aimed to uncover the possibilities of resiliency forging and rapport building between participants as they learned together and trained together.

Sean, Steve, Flanker, and Travis were the key informants who I had the most contact with throughout the study. During participant observation I worked most closely with Sean, a retired Judge Advocate General (JAG) officer who had been deployed to Iraq and Afghanistan to

provide legal counsel on behalf of the United States Navy. During our time together, we frequently would meet at a local Starbucks to discuss the intricacies of how BJJ forged a sense of pride and accomplishment that he had never felt in any other experience in his life. He provided an emic perspective as a participant who never had to pull a trigger in combat but was stuck in the middle of combative engagements during a few convoy ambushes. His insight as an officer, lawyer, and administrative leader stuck in the crosshairs of combat were keen to piecing together a model that exposed the higher level processes in community building, decision making under stress, and analytical components of the warrior ethos.

Steve was fresh to the BJJ game. He had a strong background in kickboxing, as that served as one of his primary physical outlets during his time in the Army. He had hundreds of combat missions under his belt and was a seasoned "operator" with a keen understanding of war, counterinsurgency, and socialization models within the military. Often our interactions were limited in conversation but when he would speak, he would make it a point to make sure he looked me directly in my eye and capture the value of what it is he was saying to ensure his experience got out so it could help others. His drive and commitment to serve others was a pivotal element of exploration for me and unveiled nuances that otherwise would have gone unnoticed.

Flanker was fairly new to BJJ and came from a heavy combative background within US Army Special Operations as well as the US Air Force Special Operations community, one of the few military members who had served in SOF units within both respective branches. When conducting interviews and focus groups I would often carry side conversations with Flanker

about his definition of rapport and camaraderie and what they meant to him. His insights and understanding of how to build rapport unveiled nuggets of insight that contributed to the models set forth in this research. Flanker exposed multiple layers of identity elements that went into the makings of "trigger pullers" or those service members who were infantry, special operations, etc. His understanding of what it took to create a cohesive "unit" that moved and thought as "one" were vital to this research project's success. His emic insights of his time deployed in both the US Army Green Berets as well as the US Air Force Pararescue Unit contributed to the creation of the two models that were exposed through this research-the combat based model as well as the family based model.

Travis was a long-time BJJ practitioner who came from a combat pilot background in the US Marine Corps. He had flown hundreds of missions into enemy territory and had been using BJJ as a means of stress relief and building a core group of friends outside of the Marine Corps. His input was heavily relied on within the Participant Observation portion of my study as he and I "rolled" together on several occasions and would debrief about what was happening at a resiliency and relationship level afterwards. Travis brought a unique sense and perspective to this research as his combative experiences were endured from the air rather than the ground. With over 20 years experience as a combat pilot, Travis shined significant light on the coping process. Experiencing traumatic incidents isolated from a "unit" or brothers that were to his left or right in the heat of combat brought about unique perspectives that were infused into the research as a means of understanding the assimilation process as one that is often done "solo" and not with members of a unit that can relate.

My research design was fluid, meaning that my perception and analysis of what was taking place on the mat was constantly changing as I saw growth take place within my sample population. There were key points that I sought to investigate but knew there were hidden innuendos that I could only unveil with the help of my key informants. Frequently, I would consult with them about things to look for within participant observation as well as in informal interviews. Neuroanthropologically, the foundation that was acquired through my conversations with them allowed for the emotional states, cognitive awareness, and skill acquisition that came with consistent training to be captured. This mattered as it fostered an understanding of bodies in motion within the context of martial training as well as in a coping and assimilation sense. Sean, Steve, Flanker, and Travis are all heavily responsible for contributing to the success of this important research and I am forever in their debt for lending their experience, wisdom, and insight to the completion of this project.

BJJ Practitioners

At the start of this research, I took the opportunity to introduce myself as a fellow BJJ practitioner as well as researcher. I rolled and trained with several of the study participants as a means of building rapport and exposing my genuine interest in not only the art of BJJ, but my dedication and devotion to improving my own skill as well. Having this exchange with my participants allowed me to have a sense of trust with the participants as they recognized that I was on the same journey within BJJ that they were. Showing my "battle wounds" from years of BJJ training and having them exposed to my style of rolling allowed them to see my weaknesses

and challenges on the mat which I later learned motivated them to have their voice heard in the research project.

Every participant in the study took a preliminary survey online which provided background on their military service, time spent training in BJJ, as well as their respective branch and age. Additionally, questions regarding their combat deployments were presented as well as the significance that they placed on BJJ and the difference their participation in it has made in their lives. Specific questions consisted of:

- 1. How Old Are You?
- 2. What Branch Of The Military Did/Do You Serve In?
- 3. How Many Years Did You Serve In The Military (Please Indicate If You Are Still In The Military):
- 4. What Was/Is Your Job Title In The Military?
- 5. While In The Military, Were You Exposed To Combat?
- 6. Do You Experience Post Traumatic Stress Disorder or increased Stress /Anxiety/Depression Associated With Your Time In The Military?
- 7. How Long Have You Been Training In Brazilian Jiu Jitsu (BJJ)?
- 8. While In The Military, did you train in BJJ?
- 9. Have You Noticed A Change (Good or Bad) In How You Deal With Daily Stress Since You Began BJJ? Please Explain.
- 10. Has Participating in BJJ Made A Difference In Your Personal and Social Relationships? If so, Please Explain.
- 11. Are You Currently Taking Any Medications For PTSD, Depression, Stress/Anxiety? If so, Please Explain.
- 12. Any Additional Comments Regarding Your Experience With BJJ And Its Effect On PTSD Or Any Stress/Anxiety/Depression You May Have?

Figure A below provides a brief table that presents the research participants varying backgrounds and time in the military as well as time training BJJ.

Figure A

Current Age	Branch	Years In Service	Years In BJJ
27	USMC	5	2 months
29	USMC	5	2
30	USMC	2	2
32	Army	12	6
32	Army	14	10 mos
33	USCG	4	9
34	USMC	5	6
34	Army	13	7 months
34	Army	11	10
36	Army	13	1
38	Army	20	2
38	USMC	4	2
41	Navy	22	16
43	USMC	22	3
45	Army	17	5 months
45	Army	7	2
47	Army	25	15
49	USMC	5	1
50	Army	18	1
54	Army	25	8

Of the 20 participants, 100% of participants had experienced or endured combat. For clarity, combat is defined as "an active fight" (Grossman 1996) in which the participant was in direct observation of or participation through the operation of weapons, vehicles, or ground movement.

Of the 20 participants, 75% indicated that they experience Post Traumatic Stress

Disorder (PTSD) or an increased sense of anxiety, stress, or depression that was directly associated with their time in service. The range of time training in BJJ was between 2 months and 16 years with a population average of four years exposure/training in BJJ training through hand to hand combat schools, combatives training, as well as outside of service training. All of the participants mentioned that they struggled with assimilation once returning home from combat. Even those who had been out of the military for several years still had challenges that they discussed within conversations with me or amongst one another. This was an integral fact since some of the participants had been training in BJJ for many years and were still negotiating adversities that were acquired during their time in military service; this serves as a benchmark to note that BJJ may certainly help assimilation and stress mitigation processes but is not a "cure all". There are several other mechanisms at play such as moral injury and the "how" factor that allows BJJ to reduce previously lived trauma for participants.

Participant Observation, Focus Groups and Interviews

Given the ethnographic design of this project, it is important to note the intimate nature of this research that spanned across the use of participant observation, focus groups, and semi-structured interviews. I chose a mixed methods approach as a means of expanding, complementing and converging data sets (Palinkas et al. 2010). The rich nature of qualitative data gathered throughout my research required overlapping as a means of finding the consistent elements which contributed to applied and salient outcomes while also raising discrepancies between analyzed responses.

Though all three of these methods were integral in this ethnographic research design, participant observation proved to be vital in the framing and meshing of what was said in focus groups and interviews. Observation field notes were organized by date, participants on the mat, descriptions of interactions, as well as perceptions that I carried as a practitioner watching participants learn new techniques, teach back those techniques, as well as "roll". One of the primary things I did within my field notes was "problematize all statuses" (Davies 2002) which included initial interactions with my participants that were formed from the online surveys they completed. Having an understanding of each of their stories was vital in being able to piece together how it is they made meaning of fist bumps, rolls, and taps.

Focus groups and interviews came later in the research process after I had established cultural framings of BJJ as well as analyzed the initial online surveys. The intent of the focus groups was to encourage "group interaction" (Bryant 2007) and procure fruitful discussion between participants to explore collective understandings about BJJ, trauma, adversity, life after being deployed, and the warrior ethos.

For the two focus groups conducted (four participants attended the first one and three participants attended the second one), I recruited participants through verbally asking those who had already participated in the online survey. The focus groups were held at GTS in a back office room. No non-participants were allowed in the focus group sessions in order to protect confidentiality of the research participants. As a means of facilitating the focus group efficiently, I utilized a question guide that had the below questions listed:

1. What difference, mentally, does BJJ make in your lives?

- 2. Does BJJ affect your outlook on what stress, anxiety, and depression [are] and how it is they affect your lives?
- 3. Has training BJJ changed the way you view combat?
- 4. Does being strong physically make you strong mentally?
- 5. What are the negative aspects of training in BJJ?
- 6. Does training in BJJ give you all a sense of camaraderie that is similar to the camaraderie you formed while in the military?
- 7. Does BJJ allow you to build on the warrior identity you fostered while in the military?

Both groups conducted were a success and proved to hold value not only for the research project but also for the participants of the study. One participant stated, "it was a kickass experience to talk about our time in the sandbox with not just other vets, but our brothers on the mat. Sharing the warrior spirit with them and talking about our experiences brought us closer." Though valuable data was procured, there were a few instances within the first focus group that proved to be difficult. When I posed the question, "Has training BJJ changed the way you view combat?", I experienced a participant who was not thrilled about the idea of discussing their view of combat and that "nothing could ever change" their view on it. This created a ripple effect throughout the group in which there was a strong sense of silence that blanketed everyone. It was as if all of them could relate to what he was saying and wanted to support him. Yet, participants slowly chimed in to offer a different perspective on how

training has helped them cope with the sense of loss and anger they acquired because of combat. In following Tong et al's (2007) 32 item checklist for focus groups and interviews, I attempted to include reporting facets that would allow for transparency and clarity in data collection with my participants.

Semi structured interviews were used to understand individual constructions of trust, masculinity, BJJ, and combat. All of the questions were standardized in order to identify themes between participants as well as optimize the time I had with each individual participant.

Questions that were asked consisted of:

- 1. How did you first start training in BJJ? What about BJJ sparked your interest?
- 2. What's similar about BJJ and the military? What's different?
- 3. Tell me about the relationships you've built through BJJ?
- 4. What's the camaraderie like with BJJ? What about trust? Are those similar to what you experienced in the military?
- 5. Does BJJ help your health? Has it hindered it at all?
- 6. Does training make you feel like a warrior? If so, how does it do that?
- 7. Tell me about what you identify with in BJJ. And, Has BJJ become a part of who you are post-military?
- 8. Has BJJ helped you be able to handle things outside the gym? How does it help with stress? What about dealing with anxiety or feeling down?
- 9. How do you make sense of the trauma you endured while serving in combative deployment?
- 10. How do men in the military deal with stress and trauma?
- 11. How do stress and trauma affect families and support systems?

12. Is BJJ just a sport to you? Or is it something more? And is there something therapeutic in doing BJJ? If so, what?

Not all 20 participants were able or willing to participate in the semi-structured interviews. A total of 16 participants were included in the interview process that spawned several different themes which showed correlation to the significance of BJJ within the assimilation process. Following Tong et al's (2007) 32 item checklist, an interview guide was used, the interviews were not digitally recorded (as a means to not disrupt the saliency of participant responses), and six themes were derived from the data collected.

Given the vulnerabilities and fears that exist within my research population (particularly with not wanting to be labeled as "weak" or in "need of help"), I went through great lengths to explain the nature of informed consent (IC). The form itself was five pages in length and did some concern within my initial conversations with a handful of my participants. Many of them were concerned about admitting to having PTSD or anxiety related to combat as they are still actively in the military or seeking to re-enlist. Admitting to such conditions to the Department of Veterans Affairs or their current command could jeopardize their respective roles in the military or ability to go back into the military. I assured those with concerns that their information would remain strictly confidential and at times adhering to their request to not use their real name within written analyses as well as results.

Psychological Inventories

At the onset of the research process I had planned on administering a series of psychological evaluation tools that would have measured stress, anxiety, emotional stability, and perceptions of stress. These included the Center for Epidemiologic Studies Depression Scale (CESD), PTSD Checklist for DSM-V (PCL-5), State—Trait Inventory for Cognitive and Somatic Anxiety (STICSA), and the Perceived Stress Scale (PSS). These psychometric tools were going to provide a strong quantitative component to the research that could have possibly shown real time changes in felt stress, anxiety, etc. After initial conversations with a few participants who refused to participate in the inventories, I decided to not continue with their administration throughout the duration of the study. I did not feel it was worth risking the rapport I had built with the participants and having them feel they were being "clinicized" (as one participant stated) when the study focused on understanding BJJ as a reassimilation tool.

As stated by Rollin (2006) "ethics is part of science" (22) and considerations must be made about the consequences of the science that is being developed and pushed forward. My research is about human subjects for human subjects so ensuring that I did no harm was vital and necessary. Not pushing forward with administering the psychological inventories ensured that I did not hinder rapport building and did not jeopardize the emotions of participants or cause them any unnecessary strife.

Perceptions

Immensely vital to maintaining a sound ethnographic approach is recognizing my positionality as well as how my participants viewed me throughout the research process (Davies 2002). The more time I spent with my participants both on the sidelines as well as "rolling" with them on the mat, I developed an affinity to understanding not only their challenges on the mat, but their successes and adversities off the mat. To be able to see them as not solely a participant but also as a brother in BJJ proved to be both beneficial and challenging. Quite frequently I would need to catch myself from being overly optimistic about their condition/progress within the reassimilation process as I was balancing between changes I "wanted" to see in them and the changes that were non-existent. This was clearly a large learning point for me as I am a naïve ethonographer with much to learn and explore within my interactions research participants as well as the content and context of my research.

As Moustakas (1994) states, "the researcher enter[s] into the material in timeless immersion until it is understood" (51) is a pivotal point when making sense of qualitative and ethnographic methods. Forging relationships and seeing emic connections between participants is vital as it connects their lived experiences with larger issues at hand. Hacking how those experiences are played out at a ground level provides the necessary ingredients to forge applied solutions which can lead to salient models of understanding issues such as trauma, stress, adversity, and the like.

My own personal dynamics made a difference within the data collection process, particularly within participation with the guys on the mat. There would be days when I would be rolling and

would find myself getting angry at the participant I was rolling with; vice versa, there were moments when I could feel participants get angry when I would "tap" them. This ebb and flow is a natural byproduct of BJJ and pushing through different emotional states of "losing" or "winning" are vital in the cascades of how BJJ forges resiliency. Neuroanthropologically, this is an area that conjured facets of emotional embodiment (Campbell and Garcia 2009) within myself as a researcher as well as with the participants. Being able to explore emotional connections that frame perceptions and expectations is an area of neuroanthropology that is emerging and that my research contributes to. As Finley (2012) states, "combat trauma may occur during war but is unavoidably shaped by meaning of the event to the individual" (158); the meaning making process on the mat is also shaped by previously lived experiences of the individual that mesh with emotionally charged realities of the present at both the group and individual perspective.

Analysis

Analysis is a multi-stage process that includes "summarizing, sorting, translating, and organizing" (O'Reilly 2005: 184) all methods of data collection within a project. Within the context of this research, analysis consisted of varying periods of cross referencing between methods to ensure corroboration of findings and to shed light on potential discrepancies between methods. Online surveys and semi structured interviews were cross referenced with both focus groups and participant observation field notes. This provided a comprehensive approach to analyzing ethnographic patterns and findings throughout the research.

Additionally, semi structured interview responses were analyzed to uncover repetitive themes. Identifying commonalities as well as differences allowed for connections to be made with other methods which created categories of strength found within BJJ. This also held true for interpretations of the assimilation process and identifying common interpretations and challenges as well as differences within the experience. Combining these with themes that emerged in both focus groups as well as surveys contributed to the construction of Figures B and C that were created as a result of this research.

Survey results were entered into an Excel workbook and appropriate demographic information was loaded in addition to narrative responses. Averages were taken of participant ages, time in training, as well as years of combat served. The narrative responses provided within the survey allowed for me to build on semi-structured interview questions and subsequent discussion that pertained to participants' specific backgrounds. Additionally, they contributed to the framings that participants carried and how it is their age, time in service, and years of combat served may or may not have had on effect on their perception of BJJ and reassimilation.

Participant observation notes were organized by date and analyzed for consistencies in behavior patterns that emerged on a regular basis. Additionally, irregularities in participants' behavior, rituals, rolls, and interactions were noted in an attempt to identify how BJJ played a role within their daily lives. Capturing moments that either affirmed responses given in focus groups and semi structured interviews or contradicted them were highlighted. Within my observation notes I also included shifts and changes in participants' skill and the correlation

that I saw with their interactions on the mat and the accomplishments or failures they endured within each night of training.

Focus group analysis consisted of noting ideas, emotions and statements that were both individual as well as collective as a group. I combined these ideas together with data from the different methods, found exemplary quotes, talked over emerging analyses with key informants, and reviewed my notes for key moments of insight to capture what was happening within BJJ.

Shortcomings Of This Research

Observing and participating in a sport that is combative in nature brings about challenges to the research process that revolve around male ego, pride, and a primal sense of hierarchy between combatants who are competitively engaged with one another. Wearing both hats as a participant and an observer forced me to be objective beyond what I thought was personally possible. Objectifying my own emotion and internal warrior ethos to maintain clarity as a researcher to what was happening to participants on the mat was challenging. I often would have to consciously remind myself of my role as a researcher while respecting the notion that I was solely a participant observer and not another brother in arms on the mat. There were a few instances where I caught myself having to step off the mat to maintain a clear perspective on the project at hand and not wanting to break any rapport that I had built. Additionally, not having been a member of the military mattered to participants. With some of the deep questions asked within the semi-structured interviews and focus groups, many participants wanted to know why I was interested in exploring the intricacies of their own meaning making

process behind trauma, adversity, combat and the like. On six different occasions participants asked me why I didn't "serve" since I had such an interest in military culture and how battlefield adversity is negotiated. This was to be expected as combative military members pride themselves in having their combative experience be a large part of how they identify who they are as a person (Finley 2012) within the military and outside of the military.

When I first began the data collection process I had intended to include the aforementioned psychological inventories with the hopes of being able to show a change in perceived stress/anxiety symptoms throughout the study. What I quickly found was that my first few participants were not comfortable with taking the inventories as it reminded them too much of something a psychologist would have them do for a diagnosis. Being that the majority of the population in this research have had several interactions with the VA Hospital system, the last things they wanted to do is go through another "test" or "evaluation" for their mental health. After consulting with key informant, Flanker, he recommended that it would hinder the comfort level that participants would have participating in the study as many of them were "sick and tired of BS tests" from the VA. This caused me to withdrawal these inventories and focus much more on ethnographic methods that exposed niche components of the assimilation process.

An additional challenge was timing and ability to watch all participants train together.

Due to work schedules, class times, and participant injuries, it was difficult to get consistent observation of the same folks on a scheduled basis. This only ran true for participant

observation, not the focus group or semi-structured interviews. To thwart this, I attended more classes throughout each week to optimize the contact time I got with participants.

Conclusion

Ethnographic methods unveil nuances that shine light into the meaning making process and the lived experiences of participants. Anthropologically, the meshing of several different cultures, subcultures, perceived value systems, consciousness, and lived experiences provides the fruitful place within social science that anthropology occupies. Within the initial design of this data collection process I sought to highlight the quantitative and more "hard" components to reassimilation as well as measure "growth" that took place at a psychosomatic level. What I found is that by approaching data collection with "growth" in mind, I was unable to identify and build rapport with participants which hindered the "experience" with participants within BJJ.

Additionally, the qualitative approach heightened my ability to find niche models that had little to do with "growth" through trauma, but rather were my informants' salient models for making sense of trauma, stress, as well as acceptance of adversity. Considering that niche models are syntheses that are a direct product of self, environment, biology, and social interactions, unveiling the models at play to make sense of trauma and accept adversity established a focal point within this dissertation. Coming to this realization and adopting a critical lens as to what "works" to reassimilate played into the understanding of the niche models uncovered in my work. My research coupled synergistic interactions with sound ethnographic inquiries to allow for interactive theory building that contributes to neuroanthropology which is evidenced throughout my research.

Chapter Three

Sport and Marital Arts

Sport That Isn't Just Play

Sports are an internationally accepted and supported paradigm that teaches structure, discipline, and friendly competition in the way of 'sportsmanship'. Throughout history we have seen sports bridge gaps between nations, ignite morale within specific regions and countries, as well as incite violence and aggressive banter between followers of competing teams (Besnier et al. 2012). The symbolic nature of sports allows for a strong sense of identity to be established not only for the participants but also for the spectators on the sidelines. The notion of having a body or bodies on a playing field/arena/court or the like that represent the identity of several groups of people has cultural implications and power that is well beyond that of a simple cheer or shout of excitement at a particular event. There is profound emotion, identity implications, and political motives behind "the game" which can be deeply embedded in the fabric of spectator groups, players, and even the global community (Cash and Damousi 2009). Viewing the sport of Brazilian Jiu-Jitsu (BJJ) within an anthropological lens provides ethnographic richness that includes components of play, ritual, and meaning making that are all attached to cultural constructions of one's place in society as well as functional sportification with mental and physical benefits. As discussed in McGinnins' work (2008) on the "Amazon Warrior Theory", "with practice and training, energy from anger can be stored by the individual for use at any time" (McGinnins 2008: 74), BJJ allows for a paradigm which enacts Nietzsche's interpretation of "sublimination" (Gemes 2009) where socially unacceptable behaviors are

internally repressed and later channeled into behaviors that can expel aggressive and provocative drives in a manner that is socially acceptable. In other words, the conditioned response to fight back and invoke violence can be internally repressed, repackaged into the game and art that is BJJ, and played out in a socially acceptable sport. The challenge that comes into play is transferring from repression to enhanced understanding of why they responded a particular way in the first place. This requires patience, stress navigation, and deep understanding of social play and cultural norms they are a part of depending on the environment they find themselves in.

To date, anthropology has offered fruitful ethnographic accounts of how sport and play have been seen as a tool for spotting the continuum between the "savage" and the "civilized" (Brownell 2008). Having a construct that is organized, embodies rules as well as structured play facilitates a medium that calls for savage behaviors such as pushing, punching, kicking, throwing, and other confrontational traits to be considered civil and praise worthy as it is towards an end goal of winning a civil competition. This morph from the savage to the civil is unique and allows for sports to build bridges between groups that otherwise may not have been possible. Walker's (2013) account of time spent with the Urarina in Peru shows how soccer serves as a "new mode of sociality" which promotes enhanced political and social relationships within Amazonia. He establishes a clear understanding of how "play" in soccer is used to "make good neighbors" and represents individual native communities with "brotherly" understandings and prevents miscommunications that could lead to violence and war.

Downey's (2005) work with Capoeira in Brazil details how the martial and athletic ritual forges a cultural connection to Brazil's tumultuous, political past while also enhancing the identity of

each Brazilian who becomes a student. His various ethnographic accounts show how Capoeira has shifted from a savage activity due to its association with unemployed Brazilians who were once slaves (Downey 2002) to a ritual that embodies the essence of the Afro-Brazilian struggle for equality within Brazil's slave-ridden past and showcases the art as friendly play and ritual instead of a form of intense combat. Wacquant's, Body and Soul (2004) describes the functional alternative that boxing provides for low socioeconomic individuals in the southern portion of Chicago. His thick description of the "gym" serves as much more than just a space where fighters learn how to fight; rather, the actual location is part of the material culture embedded within the practice of the sport and serves as a "sanctuary" and place of structure, balance, and righteousness where boxers can play out an altered reality in the midst of one of the worse ghettos in Chicago.

These ethnographic accounts as well as others have provided robust perspectives for viewing the structural-functionalism provided by sport and how it is that sport can build social bridges while also functionally growing the social bandwidth of groups and individuals. This matters as it contributes to the cultural staples that help define groups and how it is they choose to interact physically and mentally with others as well as each other. Additionally, there are biological components that coincide with the identity building elements within the physical expectations of sport; examples include callous hands in football, cauliflower ears in wrestling, as well as increased neurohormonal activity associated with any objective based and structured physical play. These traits have embedded meaning as they are adaptations that allow for the game to be played and ripple into the social spheres that groups and individuals are associated with. In Bortz's classic article (1985) regarding physical exercise and play, he argues the notion

that our evolution into increased sedentism is ignoring our physically, active heritage and is "playing a dangerous game" which has pathological and psychological consequences that may have a devastating effect to the future of our species. This matters as the participation in sport counteracts the widespread trend of sedentism currently seen within American pop culture as well as the demands of a digital workforce.

Drawing on the work of Walker, Downey, and Wacquant there is evidence that sport can serve as something much more meaningful than just an event that fans show up to and cheer at. It serves as a socialization vehicle that satisfies elements within the human condition that call for close contact, collective synergy, strategic thinking, physical challenge, and identity elaboration. Being involved in an activity that thrives off of belonging to a team and requires structure and working together on a consistent basis has important implications that contribute to culture and camaraderie that are forged in a physical + mental and social platform. The ability to transcend cultures, socioeconomics, language barriers, and political platforms proves that sport serves as a staple activity within the socialization between and amongst humans.

Orthodox sports which involve elements of violence such as western Football, Boxing, Wrestling and the like have an impressive following of both spectators and participants worldwide. Though there is structure and controlled elements there is an innate emotional arousal of anger that comes with participating in any violent sport that ignites combative intuition within the human condition (McGinnis 2008). Pushing the body to its limits, feeling a direct threat from an opposing person or team, and protecting those that are within your own camp provides reaffirmation of one's place and identity as a team member. BJJ provides this arousal in its rawest form. There are minimal safeguards that prevent injury (unlike football or

hockey which have an abundant amount of equipment which alter natural, physiological movements). A mouth piece and the occasional ear guard (to prevent hematoma auris, "cauliflower ear") are the only two pieces of protective equipment that are allowed in BJJ and are rarely seen in-use amongst academies (mouth guards are required in BJJ tournaments). There is a distinct affiliation that participants have with their school or their "camp" which fosters a sense of shared identity that is bound in loyalty by the sweat, mat hours, and bodily sacrifice that players subject themselves to for their betterment as well their fellow players. This is indicative of Durkheim's collective effervescence as well as collective consciousness. The social bonds and rituals found in consistent training represent a paradigm of shared consciousness which has the ability to manifest itself when challenged by other schools (during competitions) or even at an individual player level (Throop and Laughlin 2002).

The type of play found in BJJ as well as other sports such as Greco-Roman Wrestling (Barbas et al. 2011) and Pankration (Arvanitis 2003) allow for arousal of core emotions and direct responses to actual threats which immediately put into action evolutionary reactions (i.e. fight or flight) through the vehicle of "play". This arousal keeps participants pushing their physical limits when training combats the increased sedentism described by Bortz. The uniqueness of BJJ within this context is that it pushes the role of vulnerability amongst practitioners and forges important social bonds, while exercising self-agency in having respective participants at a practitioner's mercy via submissions that could be fatal. As a practitioner executing a submission, it is completely within your ability to choke someone unconscious, break their arm, wrist, leg or a variety of other combinations; yet, embodying the notion that each player is subduing their defense to allow you to practice refining your own skill

brings a sense of responsibility and mutual respect that is distinctly different than most sports. Additionally, BJJ recreates a sense of bodily risk and danger that was experienced in combat as well as the controlled means to avoid it which calls for restraint. Invoking restraint and appropriate framing of the combative activity is what makes BJJ play as it calls for reactions within the context of the roll or drill being executed. These reactions as well as social bonds created with fellow practitioners keep individuals engaged in the practice of BJJ and thwart notions of being physically sedentary and socially isolated as they know that their lack of participation will affect not just their ability to improve in the art but also the salience of the relationships with their "brothers on the mat."

Methods In Sports Research

Unveiling rich ethnographic accounts within sports research has a unique ability to expose hidden cultural milieus and niche models of viewing the engagement of a particular sport as well as the human experience associated with participation. In establishing context for ethnographic approaches a baseline definition provided by Atkinson and Hammersley is defined as "involving the ethnographer in participating, overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking questions – in fact, collecting whatever data are available to throw light on the issues that are the focus of the research" (1994). As described in Wacquant's work with boxing (2004), Downey's experience with capoeira (2005), and Walker's account of soccer (2013), the methods utilized which capture significant moments and structures of meaning within particular social realms are important. Given the intricacy and "deep play" (Geertz 1972) found within the practice of BJJ,

participant observation proved to be essential as cues, language, and ways of thinking about training could only have been captured through immersion. Downey's work (2005) shows how the feeling of being in a "roda", or Capoeira circle, is distinctly different than merely observing one. The gestures, collective consciousness, and subsequent "fight game" are understood only by those within the circle at that particular moment and time. Wacquant (2004) provides a strong account of feeling the social "struggle" from impoverished boxers who viewed boxing as their only viable means of making socioeconomic gains. His participant observation lead him to actually compete in a boxing match after months of training with participants which allowed him to embody what it was like to "beat the streets" (Wacquant 2004: 43) as well as understand the adversity and hope which boxers embodied. These moments of seeing, feeling, and mentally going "through the motions" of what participants experience provides invaluable data to the physical adaptations the body endures as a result of sport participation as well as the psychological challenges and "games" that are lived. This adds additional insight into the importance of a neuroanthropological approach as the physical experiences and social interactions cast a ripple effect that forge perceptions, motor control, emotional regulation, identity affirmation (or not), and mental framing of experiences that are lived through "the game".

Throughout my data collection, the power of participant observation allowed me to form the understanding of brotherhood, commitment, and meaning that veterans cultivated from the training of BJJ. Having been a previous practitioner of BJJ certainly helped but when adopting the lens of a researcher while rolling and training unveiled a different approach to

meaning making and niche models of social interactions and personal growth that I never realized were apparent.

There is also the ability to gain valuable ethnographic data of sport training without participating in the sport itself. In Sugden's account of studying boxing sub-cultures (1996), he shows how observation and being present in different gyms (without training) unveiled incredibly rich data about how resilient and motivated boxers are and the subtle moments of growth which invoked confidence and increased maturity within the sport. He states, "despite the fact that there is a lot at stake and the fights themselves are conducted with furious intensity, the young boxers show incredible self-discipline and emotional restraint. There is little overt sign of anger even in the most bruising encounter" (Sugden 1996: 162). This is powerful and lends itself to understanding how simple observation without direct participation can provide contextual insight into the emotional and psychological state of participants. As Walker (2013) accounts in his case of observing Peruvian soccer teams play against one another, participating in sporting events which have high social and political value undoubtedly sway and alter both the perception of the researcher as well as the groups being studied. Additionally, observing and capturing moments where participants do not know they are being observed presents a naked view of their interactions which permits a more objective sense of consciousness where the researcher can describe what is being done or exchanged. In Gratton et al's text (2010) entitled, Research Methods for Sports Studies, unobtrusive observation is deemed as an essential component of seeing environments and interactions in their "natural state." Once it is known that a researcher is watching, though they are not participating, an innate shift amongst participants can take place which alters their normal state of interaction;

particularly if the observant is taking notes, pictures, and the like. On a few occasions while observing participants I certainly experienced a shift in the "natural state" within the training environment. I clearly saw them glimpse at me while on the mat and noticed they would make a conscious effort to roll harder or to try whatever technique they were practicing with more vigor. An important note to add is that this only happened with my younger participants and not the ones who were older or had more service time. I do not have a studied correlation of why that may be, but I do find it to be noteworthy as there may be additional implications with this shift to other social circles they are involved with and their behavior shift when being observed.

BJJ History and Practice

As a means of understanding the entirety of Brazilian Jiu-Jitsu within my research it is imperative to understand the martial and social history which contributed to the construction and dissemination of BJJ throughout Brazil as well as the world. This context provides the necessary components needed to unveil its uniqueness from other forms of sport and play, as well as why it has beneficial and potentially negative consequences for its players and society. The cultural blend that has produced modern Brazilian Jiu-Jitsu (BJJ) has a history well embedded in political strife, sociocultural oppression, and martial roots which are dated past the Edo era in Japan (1603 - 1868) (Sato 2013). The art finds its lineage and subsequent formation from the well-known sport and martial art of Japanese Judo. To understand BJJ, one must understand the development of Judo and its influence on global understandings of

combative prowess, mutual welfare and benefit for participants, as well as political value that Judo brought for Japanese politicians seeking to establish a strong identity within the global sporting community. Known as the "Gentle Way" (Sato 2013; Tokarski 2012), Judo is an innovation of Japanese Jiu- Jitsu practitioner, Jigoro Kano. Born in 1860, Kano was the son of wealthy Japanese merchants (Sato 2013) whose youth was shaped by preparatory schools led by Dutch and German instructors and was surrounded by a Japanese social structure that was experiencing a rapidly shifting industrial and modernization process. No longer were Samurai principles leading the way in which Japanese citizens understood social hierarchy and customs; rather, "civility," industrialization, and western influence began leading the charge in how productivity and modern social progress were defined (Hunt 1979). Yet, there existed a silent blanket of Samurai "machoism" which Japanese, adolescent males prided themselves with and were all too quick to engage in physical confrontations as a means of showing off their "samurai ability" (Kano 1997). This element of cultural masculinity associated with Japan's Samurai past led Kano to study Japanese Jiu-Jitsu at the age of 18 and eventually transform its lethal techniques to ones that were less barbaric (Kano 1997), appealed to Western culture, and could be applied within a sporting environment. The transformation included the dissolution of blows (punches, kicks, and any other form of striking) and weapons training and focused on forcing an opponent off balance and submitting them through a pin, controlled joint manipulation, or a variant of chokes. Prominent Japanese aristocrats deemed martial forms, particularly Jiu-Jitsu, as a practice that was attached to Japan's tumultuous past (particularly, Samurai rule) and not associated with progress into the future (Sato 2013); this fueled Kano to change the name of his art to "Judo" which translates to "the giving way" (Sato 2013; Kano 1997) and purposefully

attached western, scientific explanations to techniques that were based off of physics.

Coinciding with the western element of science, Kano distinguished Judo from traditional JiuJitsu with the implication of set rules which were designed to have a winner of a challenge
through a regulated, point system rather than combative harm. Kano made it a priority to
showcase Judo worldwide as an art that promoted "maximum efficiency and mutual welfare
and benefit" as well as psychological wellbeing for judokas (the official term for judo athletes).

The notion that Judo's philosophy was based in mutual welfare and benefit and not lethality, as
found in traditional Jiu-Jitsu (where the aim was to incapacitate an opponent through fatal
blows and weapon use) brought an attractive quality to the Japanese government who
(eventually) considered it as a form of healthy, physical education for Japanese youth that was
rooted in rich, historical value. Kano himself stated that "judo [could] be an effective tool to
implant patriotism in the 'spines and brains' of Japanese youngsters" (Nakajima 2012).

In the spirit of spreading Judo and "going global" (Sato 2013), Kano (as he himself did as a member of the International Olympic Committee) had many of his practitioners travel to regions throughout the world and showcase Judo through exhibitions; one such disciple was Mitsuyo Maeda. Maeda, traveled to the United States, South and Central America, the Caribbean, as well as Europe on his mission to spread the art of Judo and assist Kano is his quest to showcase the effectiveness of the art. His trips consisted of frequent exhibitions with other traveling Judoka, but more often than not ended up in challenge matches with individuals from the audience. Maeda, consistently professed that he would grapple any member of the audience (which often consisted of wrestlers, football players, military members, and the like) and even offered a financial reward if they were able to throw him and/or submit him. This

style of showcasing Judo was effective. Mitsuyo, ended up having over 2,000 matches (Bunasawa 2007) all over the world and built a reputation which made Judo respectable and even admirable amongst other sports and fighting styles outside of Japan. This had political value that was recognized by prominent figures such as President Theodore Roosevelt who endorsed the practice of Judo within the U.S. military as it became a staple in the hand-to-hand combat curricula taught to U.S. military personnel beginning in 1905 (Svinth and Green 2003; 57).

In 1917, Maeda traveled to Belem, Brazil and showcased one of his many exhibitions of Judo. Within the crowd was prominent Brazilian businessman, Gastao Gracie, as well as his 14 year old son, Carlos Gracie (Gracie 2003). After watching Maeda perform, Carlos became a devout student for three years and passed on the knowledge he gained to his younger brother, Helio, who was considered to be ill and frail as a young child (Gracie 2003). Unlike his brother, Carlos, he was unable to execute the majority of the throws and techniques of Judo which required a certain level of athleticism and strength. Due to Helio's smaller statute (5'7" and 150lbs) he had to adapt the techniques from Judo to suit his ability to perform against larger, faster, stronger, and more athletic opponents (Gracie 2003). This forced Helio and Carlos to begin creating a new form of Judo which is now known as Brazilian Jiu-Jitsu. The aim for their variation was to create a platform of techniques that could be utilized by smaller practitioners and work every time regardless of how much quicker, stronger, or athletic an opponent may be.

Though the roots of Judo shared this philosophy, there was still an element of athleticism and strength that was needed to execute some of the foundational throws and sweeps within Jigoro Kano's curriculum. Value was found in the traditional structure and principles of mutual welfare and benefit for Judo players; yet, the Gracie's sought an art form that focused much more on the self-defense aspects of training and displayed an element of constant control so an adversary could be subdued through ground submission or by simply maintaining a dominant hold or pin to control an opponent. This became the essence of Brazilian Jiu-Jitsu. Forging a variant of Judo that could be used in survival situations where smaller and weaker opponents could defend themselves and subdue a threat as quickly as possible. The Gracie's were no longer concerned with the point system learned from Maeda; they focused on making an opponent uncomfortable by always putting them on the ground as soon as possible which would expose the weakness of not training in ground fighting. Boxing, Capoeria (Downey 2002), and other combative forms which were popular in Brazil at this time conducted their training and techniques based on standing and ignored the importance of knowing what to do when an altercation shifted to the ground; the Gracie's knew this and saw it as their vehicle for promoting the effectiveness of Brazilian Jiu-Jitsu. In 1932, Helio challenged a Brazilian Boxer named Antonio Portugal to a Vale-Tudo match ("everything goes"), and defeated him via ground submission within 30 seconds (Gracie 2003). This was the beginning of the spread of Brazilian Jiu-Jitsu as well as a tumultuous, sociocultural understanding of the art form as something that Brazilian elites and politicians were not proud of, a sort of "moral sickness" (also associated with Afro Brazilian Practitioners of Capoeira for their association with gangs and street fights) (Martin 2006) that they sought to tuck away and keep from the global

spotlight. Such oppression of the art mimicked that of the oppression experienced in Japan with traditional Jiu-Jitsu coming out of the Edo era. There was strong adversity from Brazilian politicians and aristocrats who sought to mute the Gracie's and BJJ practitioners as they were typically associated with thugs, drug users, bullies, and the like. This certainly was not the case for all practitioners but it put a challenge in the Gracie's ability to get the exposure they sought to attain.

It wasn't until the late 1980's when Helio's sons migrated to the United States as a means of promoting their art that it began to make an impressive impact on the American martial arts community. The shift in perception from elites in Brazil, who were ashamed of the art, to the multitude of American fight fans whose thirst for violence was well known allowed the Gracie's to gain increased social buy-in as well as establish their presence in the combative, athletics world. Additionally, the impression that BJJ had on Western Society via the Ultimate Fighting Championship in 1993 cannot be ignored. The Gracie's showcased their style on cable TV by putting 170 lbs Royce Gracie in an ultimate fighting competition that sought to settle a hot topic within the fight community of which style of martial art was most effective. This competition consisted of elite level fighters in wrestling, Kung Fu, Tae Kwon Do, professional boxers, street brawlers, as well as kickboxers and had no weight classes. Royce won the competition via submission and subsequently won the second competition a little over a year later. This was perplexing to the spectators as they could not understand how a 170lbs man could defeat men who were 220-260lbs, stronger, and more athletic than he was. This drew the attention of Western fight fans as it automatically indoctrinated credibility and belief in the art of BJJ. This led to the U.S. Army reaching out to the Gracie's and having them redesign the

entire curriculum of hand-to-hand combat taught to soldiers, now deemed the "Army Combatives Program" (Pariante 2008; Blanton 2008) which is familiar to all combat personnel.

Additionally, the United States Marine Corps has developed their own brand of modern combatives entitled "MCMAP" (Marine Corps Martial Art Program) which bases its teachings off of Brazilian Jiu-Jitsu as well. In a sense, the Gracie's unraveled the sociocultural movement made by Jigoro Kano in 19th century Japan with his distinction between traditional Japanese Jiu-Jitsu and Judo as the differentiation between an art of fighting and an art of promoting peace and mutual welfare. It is clear that the Gracie's sought their art to be utilized for self-defense with an eventual transition into sport. Yet, the notion of volunteering for no-holdsbarred fights as well as inviting anyone and everyone to train in the art does raise concern as to their original motives of promoting BJJ within the spectator driven, commercial fight world.

Nevertheless, the art has made a smooth transition into western athletics and know bases itself in the same principles as Kano's mutual welfare and benefit.

BJJ In Tampa, Florida

In 2002, a young man by the name of Rob Kahn moved from New York to Tampa, Florida, with the simple mission of spreading Brazilian Jiu Jitsu throughout the Central Florida community.

Rob had spent the majority of his 20's living and training at the Gracie Academy in Torrance,

California, and became the first American to ever be awarded a black belt in BJJ from Royce

Gracie. He spawned the beginning of BJJ in Tampa and slowly began cultivating a following of students out of a small fitness studio he rented from a local 24 hour gym. It was at this gym that

I had my first encounter with Rob as I was a member of the boxing gym that was attached to the back of the fitness center. After a few years of teaching and building a following of students, Rob opened up his own academy a few miles north of his original location. Fast forward to current day and Rob has successfully opened seven different affiliate academies with instructors that he has trained and promoted to the level of blackbelt. One of these affiliate academies is the Gracie Tampa South (GTS) academy whose head instructor is Matt Arroyo. Matt and his academy served as the primary data collection location for this research as his academy is close to MacDill Airforce Base which is home to the U.S. Central Command as well as US Special Operations Command. Though there were quite a few practitioners at GTS who were part of this community, many of them did not feel comfortable participating in my research as they felt that admitting to assimilation challenges may somehow adversely affect their standing in the military or even their peers' perception of them (additional elaboration can be found in Chapter 5). Nevertheless, having them on the mat with the participants of my research was an eye opening detail that who practitioners shared the mat with very much matters and contributed to my understanding of how socialization plays an important role within BJJ that contributes to the assimilation process. When watching my subjects train and roll with fellow service members there was a silent understanding between them that served as a "green light" to train hard and push the limit. At times there was even a quest for dominance while rolling, knowing their training partner was part of a different military branch (often, friendly competition between different branches of the military is encouraged as a means of enhancing morale and solidarity within the specific branch that service members are a part of) lent itself to competitive, yet constructive, behavior. Often, I would witness research

participants bump fists then immediately attack their training partner if their partner was a fellow service member. The training tempo that was kept throughout the roll was significantly more aggressive and faster. Yet, more often than not, when participants would roll with non-service members, there would be a bit more patience displayed and a slower training tempo. Interestingly, there would be many more moments of laughter and oral communication between practitioners who were service members than not. This was fascinating to explore and witness. Seeing the faces that practitioners would make, the deep laughs they would share, and the intensity of their rolling grow, acted as mediators of resiliency growth due to the nature of both members knowing they shared a common thread from the "outside world" that wasn't a part of the BJJ game. Having that one common fiber that both served in the military made all of the difference in the world to how it is they viewed each other and how they treated one another while training and rolling. This doesn't suggest that all service members involved with training BJJ shared the same experiences, yet, the ones that were subjects within this research in Tampa, Florida, displayed these tendencies on a frequent basis.

The current day BJJ scene is Tampa, Florida is vast. There are several schools and academies that have opened in the past decade that all claim different lineages to the Gracie family. Of unique importance is the mesh and labeling of Mixed Martial Arts (MMA) that has taken place within BJJ schools not just within Tampa, but also across the country. The schools associated with Rob always rely on BJJ as their foundation and stand proud of that though they have expanded their course offerings to include other combative arts such as wrestling, muay thai, judo, and boxing. In addition to MMA classes, Rob has incorporated a no cost, BJJ class that is specifically designed for veterans who have endured a traumatic injury associated with

their military service that adapts standard BJJ techniques to whatever their physical adversity is; this makes training BJJ possible for those who thought they would never be able to train.

BJJ Context and Practice

The practice of competitive BJJ has evolved into a structured, point based system (due to Western demands of more structure), but has its roots in what is known as "Gracie Rules" (Gracie 2003). Some of these rules consist of matches that have no body weight standard or time limit and the loser of the match is depicted by he/she who "taps out" from being put into a submission technique (joint lock, choke, or simply exhaustion). This structure is the most widely utilized training paradigm found in BJJ academies and only shifts to weight class and point based training when a competitor or competitors are preparing to compete in a regional/national/international grappling event (point structures, weight classifications, time limits, etc. differ with different tournaments). Practices are consistently embedded with deep conversations amongst instructors and students which elaborate on why technique has the ability to be superior to strength, a particularly unique element within BJJ which allows for students to consistently train at full speed without fear of hurting themselves or their partners. When building the skills needed to successfully execute in competition (with an audience, team mates and coaches watching) having conditioned movements and strategies that are tried and true in practice allows for participants to have the confidence to know that they can actually win and aren't trying a technique at full speed against a resisting opponent for the first time. This also matters within the fostering of control and knowing that they will not permanently injure their opponent as long as the opponent abides by the rules of play that are found in BJJ.

Brazilian Jiu-Jitsu is taught through scaffolding imitation (Downey 2008) where instructors physically show the movement sequences that must be completed at different speeds and angles as well as consciously assist each practitioner until they are able to conduct the technique on their own. This fosters a strong dependence between both student and instructor as it is mutually understood that the path to learning BJJ is conducted through "guided discovery" (D'Andrade 1981: 186) where learning is done through direct imitation and techniques are embodied with the conditioned experience shared between fellow practitioners. Downey's piece on understanding "scaffolding imitation" in the Brazilian marital art of Capoeira states that "scaffolding imitation requires diagnostic skills of the instructor, not only to ascertain what is developmentally 'proximal' but also to intervene appropriately and support the actions of the novice who is learning" (Downey 2008: 210). This is important as it showcases the process of martial enculturement that takes place not only between instructors and students but also explicitly between students and highlights the value of social learning models. Having an instructor or group of instructors teach through imitation with a training partner provides a platform where students can repeat and condition the techniques with one another and subsequently enculture each other with the feel, awareness, and mentality that define BJJ. This sort of consistent interaction and dependence upon other practitioners makes BJJ unique as it gives participants the ability to mutually develop their "inner warrior" (McGinnins, 2008) while expelling stress, suppressed emotion and frustration in a group setting that is socially acceptable. As discussed in the results chapter, participants of this research attested to the importance of their warrior ethos and how it is that BJJ allowed them to keep it, build upon it, and foster a much needed camaraderie that many of them lost after leaving

military service. Being that BJJ is a martial art that is unable to be practiced without another participant (unlike Karate, Tae Kwon Do, Boxing, Capoeira, etc) the dependence upon other training partners is a staple ingredient within its paradigm and forges positive, social capital as mutual dependence is present as well as a simultaneous fusion of a mental + physical + social challenge for all practitioners who train.

Gear and its Importance

Material culture matters in BJJ. As asserted by Lubar, "Objects change the world and we constantly rediscover and redefine the world through objects" (Lubar 1993: 197). Additionally, Borish and Phillips (2012) make the argument that material culture in sports provide meaning and value when considering the construction of participants' identity in a given time, place, and particular environment. The fundamental, material components found within BJJ have strong historical and modern value as they have not changed since Japanese samurai (empty-handed) training in the Edo era. These items consist of a "gi," belt, and the training mat which is often coveted as a "holy ground" of sorts which hosts the ritual and play that make up BJJ. The gi (derived from a traditional, Japanese Kimono) is a heavy, multi-layered jacket, accompanied with reinforced cotton pants (particularly in the knee area). Unique to modern gi's is the inclusion of patches which are sown onto the front and back of a players jacket and indicate school and team affiliation. These patches are powerful as they can be equated to the identity value placed on insignias found on military uniforms. They provide direct insight into a participants rank, region of practice, school of affiliation, and accomplishments in competition. Belts in BJJ keep the practitioners gi closed as well as indicating rank within the art. These ranks consist of white belt (beginning practitioner), blue belt (intermediate practitioner), purple belt (advanced practitioner and eligible to instruct other practitioners), brown belt (advanced-elite practitioner), and black belt (elite practitioner and instructor) (Gracie 2001).

Most schools promote belt ranks based on one's ability to "roll", or spar at full-force, as well as the level of loyalty shown to their academy. This is an important distinction from other martial arts where belt promotions are based off of paid "testing" and the memorization of certain physical forms. Instructors are known to promote when they feel the student is psychologically growing and physically refining techniques; it is rarely disclosed when students are being considered for promotion though this is slowly changing within BJJ culture. Frequently, instructors look for more controlled, mellow demeanors in their students when sparring as well as how students treat other practitioners (maintaining humility, willing to instruct and help lower ranking practitioners, etc) that are having difficulty and frequently get "tapped out" (tapping a practitioner with light smacks to indicate that they are submitted). Within BJJ, these sorts of behaviors serve as a sign of combative maturity and lend themselves to Jigoro Kano's "maximum efficiency, mutual welfare and benefit" where a practitioner has learned to subdue an opponent while not imposing brute force or a mentality of wanting to hurt an adversary. Rather, the ability to maintain control of one's conscious abilities and face adversity with a calm disposition, even in the most vulnerable of positions, are clear signs of maturity and growth within the art. In conversations with Matt Arroyo, he would often discuss how the skill of a student is certainly an important aspect to promotion but it certainly isn't everything he looks for when promoting someone. The recipe for promotion calls for a good attitude, hard work ethic, and increased control in their rolling abilities not just amongst the

same level of practitioner, but more importantly, other practitioners that may not be as skilled as or more skilled than the student up for promotion.

Constantly exploiting the human capacity to fight as well as respecting the body's limits provides a true account of what hand-to-hand combat is and what makes BJJ unique; there is no selling of "secret tactics" which only high level practitioners and "black belts" know; there is simply time on the mat and refining one's skillset and mentality. In this same fashion, when an instructor or student feels as if they are overtly confident in their ability they are welcome to challenge other practitioners through rolling; it is taught that the journey of learning BJJ is done together (instructor and students alike) and is continuous for all levels of practitioners and that there is never a plateau in one's ability to learn, discover, and refine their skills as well as their conscious (Gracie 2003). Getting "tapped out" is seen as a vehicle of improvement, learning effective remedies for what you are doing wrong and altering your technique as well as the way of thinking about being in a vulnerable position so that it doesn't happen again. When considering the challenges of navigating daily stressors and adversity, training in this sort of mentality helps practitioners frame assimilation stressors in a more productive context. This contributes to the neuroanthropology of BJJ as it forges a paradigm between two different realms of past and present which influence conscious mentalities between past warrior and present civilian. The importance of having a bridge that helps navigate mentalities is one of the major focal points that this research contributes to not only neuroanthropology but also applied anthropology, at large. Identifying, analyzing and applying the cultural bridges that serve as mediators between different places in time is paramount given the continuous

meshing of cultures that we continue to experience through globalization and within society at large.

On Rolling, Taps and Fist Bumps

When diving into the world of BJJ, rituals matter. From initial greetings, material culture, to live competitions, rituals make up conditioned responses and expectations that add meaning for both practitioners and spectators alike. Particular rituals of interest are fist bumps, taps and rolling. Fist bumping is the action of two practitioners making a fist and briefly tapping them before they commence to roll with one another. Rolling is the action of two BJJ practitioners engaging in "live sparring" where they both are attempting to submit one another in one of many techniques utilized within BJJ (chokes, joint locks, and pins). Tapping is the "reset" indicator where one practitioner submits to another and indicates that the roll is over and they should cease training or reset and prepare for a new roll.

The fist bump is powerful and symbolizes different niche innuendos that have meaning. Often, the fist bump is kicked off by a brief slap of the hands and then the subsequent bump. For practitioners, the bump signifies mutual respect and is a time for them to discuss if there are certain techniques they want to really focus on as well as to let their training partner know if they have any injuries or training limitations. Additionally, it is similar to the bell ringing at the beginning of a boxing match or the yell of the quarterback at the beginning of a play in a football game. It signifies that as soon as the fists leave one another the chess game to submission is in play and both practitioners are fully committed to the roll. For the spectator,

the fist bump lets them know that both practitioners share mutual respect and are amicable towards one another, it is an important sign of sportsmanship. At the same time, the omission of the fist bump or the ignoring of an attempted fist bump from a fellow practitioner sets the tone for the roll or the competition. It signifies that there is no respect shared and that the tone of the roll will inherently be more aggressive. It is very rare to see the lack of touching fists before rolling but it is a notion that is taken seriously with direct consequence displayed in the subsequent roll. Within my data collection, I did not witness the lack of a fist bump in any of the rolls that I was privy to but have witnessed it outside of the context of this research.

"Rolling" matters in BJJ; it is one of the primary activities that makes BJJ special and distinguishes it from the practicing of other combative arts. It is the medium that lets practitioners leave their all on the mat on a frequent basis. The concept of rolling is to be able to practice your skill, techniques, control, and grappling maturity with a live opponent who is attempting to submit you while you attempt to submit them. Since there are no strikes, eye gouges, etc. being able to go full force with an opponent is relatively safe as long as both practitioners maintain mutual respect for one another and stop the execution of their techniques once a "tap" is made. The value in rolling is found in the sharpening of reactions to unpredictability and becoming "comfortable with the uncomfortable". Practitioners do not know what their opponent is going to attempt or how they are going to defend techniques that are being invoked. Rolling is the process of sharpening one's blade as a BJJ practitioner and more importantly in their character as a martial artist as every single practitioner will be submitted by multiple people throughout their time on the mat. A constant phrase that was repeated around me was, "there is always someone better and always someone to beat, the

cycle never stops." This concept is preached on a daily basis within GTS as there are moments where higher level belts would get submitted by lower level belts (though not often), as well as seeing instructors roll with another and take turns tapping each other out. That is the gold in rolling. Becoming comfortable with not "winning", leaning into the losses as a combatant and learning from each roll is what translates into the civilian world of having to deal with social adversity, things not going according to plan, and the strategies that practitioners can rely on to overcome the adversity. Throughout the research process several participants highlighted the value that rolling has for them. The ability to step back and accept losses and learn from them constantly translated to their ability to deal with disappointments in their civilian lives outside of the academy. The "fight" they go through within each roll deposits small amounts of knowledge, fortifies their social bond with the folks they are rolling with, and allows them a physical outlet to relieve accumulated stress and lower their allostatic load.

There is only one judge within "rolling" and that is the "tap". The tap signifies the motion of tapping your opponent on any body part that is exposed (depending on the position practitioners find themselves in) to signify that you are submitting to them. This could be a submission that has been achieved through dominant position, an executed technique, pressure on a body part, injury, or from exhaustion. Ultimately, it signifies that a practitioner gives up to their opponent and is ready to "reset the roll". Once the tap has been executed, it is the "unplug" for the fight and a moment for both practitioners to reset their game plan, approach, and learn things they acquired from the previous roll. The real time feedback allows for resiliency to be built as practitioners have the chance to tap their opponent even if they have been consistently getting tapped through the duration of training. That moment of hope

combined with the refinement and maturity of their strategy and skillset allows for them to respect what the "tap" signifies and not view it as a loss, rather as an opportunity to reset, relearn, and rescript what the significance of that loss meant. This is an invaluable mechanism within BJJ that makes it incredibly unique. Having a manual "stop and reset button" allows regulation and temperance that separates combative engagement through martial sport from military combat where there is no "stop and try it again" factor. This is a profound attribute that contributes to BJJ's salience as an effective stress and assimilation mediator.

Practice and Structure

Throughout participant observation there were subtle nuances that had meaning and influence to not only the practitioners but also family members, prospective students, as well as to the instructors. Before class would begin there was always a few minutes of relaxed socialization between participants. Students would go in and out of the locker room, put gym bags underneath observation benches, talk about their day at work or particular rolls they had in previous training sessions, as well as what they were looking forward to review or try in that evening's class. As soon as the instructor would step on the mat and prompt the class that it was time to begin, everyone knew it was time to switch from friendly socialization to focused training. The instructor often lead warm ups through example, not simply telling students what to do, rather, telling and showing as a means of blending as well as leading through example. This sort of activity was replicated on several occasions throughout classes. The instructor, Matt Arroyo or Rob Kahn, always lead the class by first showing what he wanted them to practice then often going around to practitioners and doing a few repetitions with them and their

training partners. This active process of forging collectivity and confidence between practitioners and being led instead of told by someone higher up in the chain of command (as sometimes experienced in the military as well as the work force) held value for my research subjects. Frequent narratives post training would consist of phrases like, "damn Matt is good", "I can't wait until I can move and roll like Matt", "how in the hell did he make it look so easy?", "rolling with Matt is like rolling with a super ninja". These nuggets of affirmation and inspiration contributed to the fuel that subjects thrived off of and kept them training at Gracie Tampa South. As mentioned by Hall et al. (2017), having a sense of challenge and comfort with those in their direct surroundings matters when making commitments and displaying consistency in activity. Consistency in training is a necessity when considering positive psychological and psychosocial effects as a result of sport participation (Asztalos et al; Eime et al. 2009). Training and the relationships made on "the mat" become integral in one's life and serve as functional outlets for balancing primal instincts with higher level, intellectual states of being. For combatants who experience stress and are unable to express frustration in a socially, appropriate manner, BJJ offers an outlet where "everything is left on the mat" and emotions such as anger, frustration, disappointment can be expelled while constructing a positive, new sense of self and enhanced consciousness.

Participating in BJJ requires a steep sense of intestinal fortitude and grit (Silsbee 2016; Perkins-Gough 2013; Stix 2011) which is fueled by growth that is seen in performance on the mat as well as being able to push through failure knowing that things will get better over time; achieving little wins. Openly recognizing that combatants are indeed "winning" and becoming better is a pivotal element within positive identity growth and expansion. As discussed in

Chapter five, the Army's Comprehensive Soldier Fitness program uses the Global Assessment Tool (GAT) which provides a point of consistent measurement in one's resiliency. Similarly, consistent training on the mat provides a standard of measurement for being able to see growth within one's skill in BJJ. It could be in the form of being able to execute techniques that could not previously be performed or being able to submit a fellow practitioner that they have historically been unable to submit among other indicators.

Leadership At GTS

Gracie Tampa South (GTS) is a world class facility with tier one instructors who have competed at the most elite levels offered in BJJ as well as a handful of instructors/senior students who have competed in the Ultimate Fighting Championship (UFC). For the majority of my research subjects, being in a "world class" facility mattered to them and the decision they made to train at GTS. Knowing that the head instructor, Matt Arroyo, was an international ranking competitor as well as former UFC fighter certainly influenced them to want to train with him as he had been to the pinnacle of the fight world and that meant something. For my subjects who were from a Special Operations background, this seemed to have even more prevalence as they carried additional respect for Matt that he pushed himself to be the absolute best in his martial discipline. In a side conversation I had with Sean after a full night of rolling he stated, "The thing about Matt is that he is a solid dude. His BJJ is amazing and he is constantly improving himself even though he is already one of the best in the world. That level of drive is not something that can be taught. Either you got it or you don't. I recognize that level of drive as guys in my former unit carried it. It's that Alpha drive and it's recognized by other Alphas. He's the nicest guy you'd

ever meet; he'd give you the shirt off his back, but when he gets on the mat he turns into King Kong and Godzilla combined. You don't have a prayer. That balance between both gentleman and ferocious warrior is what I love about him and it inspires me to keep training with him."

Supporting this was a conversation I had with Travis while in-between rolls, "Every time I roll I try and roll like Matt. He is patient, calm and collective. He waits for his opportunity. He doesn't do any of the bullshit muscling through, he's chill as shit about it. As a matter of fact, he will be setting you up for a submission and make you think you are gaining the advantage and you are just walking right into the trap he is setting. He's smart like that. I need to be smart like that but I recognize that I have a long way to go before I get that kind of understanding of the game." What intrigued me about Travis's statement was his mentioning of "understanding of the game". When thinking about "the game" of BJJ there are variables offered that distinguish it from combative engagement in the military that allows for a mental reprieve that wasn't afforded to participants while deployed during war.

In Kardefelt-Winther's (2014) work on how playing games influence the mind's ability to weave in and out of reality, the suggestion is made that lasting impressions composed of an altered reality within "the game" apply to the daily lives and activities experienced outside of "the game". In other words, the experiences lived on the mat when rolling that are considered "play" have a ripple effect into the traits that are expressed outside of the academy when dealing with life's daily challenges. When applying the acquired traits of being patient, calm, and collective, as mentioned by Travis, to social situations experienced "off the mat" or outside of "the game" there is salience when considering them within the assimilation process.

Being on the mat provides an altered reality that funnels real time feedback and forces practitioners to figure out why a certain physical technique or movement didn't work. It does not permit them the ability to go home or hit their barracks and dwell on the moments of loss or trauma, rather, it forces them to make real time adjustments to their approach to the game until they "win" or achieve the technique or techniques they seek to execute. That is the value that is hidden on the mat and being locked into a combative sport that is as much collective as it is independent. Being led by a practitioner that is much more skilled than you instills a pinnacle to strive towards while allowing practitioners to forge their own path in achieving optimal performance. Pushing through constant "dead ends" and immediately figuring out why they hit those dead ends is powerful and forges resiliency knowing that they will eventually achieve the desired outcome; they simply have to keep pushing through the varying levels of adversity. When applying the model suggested by Kardefelt-Winther's on gaming and escapism, this ripple effect can transcend into their daily "dead ends" and can provide a resilient approach to assimilation that includes the multiple social spheres that combatants find themselves in as civilians. As seen in the 2007 article done by Dr. Daniel Lende on video games and cultural perception there are neuroanthropological traits that are found when immersing into the "game" which include a blend of emotions, cognition, motion, and perception. Though Lende refers to them in a virtual gaming context the same applies true for the physical game found in BJJ and pushes the neuroanthrpological understanding of altered realities and what they can actually do to help individuals with a tumultuous past. During one of the focus group discussions, Flanker stated, "Dude my life has significantly been impacted by BJJ. Having this place as a second home has transformed my home life. I am way more patient with my wife and daughters. I don't carry such a heightened need to constantly have my head on a swivel and I can actually sleep at night. That has been a huge thing for me. The lack of sleep and having my mind constantly on the move has been a serious challenge. I'm an irritable asshole who doesn't play well with others...especially when I have no sleep and am feeling froggy."

When I asked Flanker to elaborate on what the word "froggy" meant he stated, "You know, froggy.....frisky....ready to roll. I have to train dude. I have to get in there and mix it up. I have a household full of women and I spent over 16 years in special operations...I have to be able to do something that keeps me sane in this insane world. The VA wants to shove pills down my throat and have me talk to a shrink. I'm not that guy. I am not about to talk to white coat who has no idea what it is like to be down range and be in the fight. The time I get on the mat is all the therapy I need. It makes me whole bro, that's the best way I can say it."

Trait Resiliency

Trait resiliency is defined as seeing the good side to a bad situation and being selective of when to see that good side (Schafer et al. 2015). The socialization, framing, and combative embodiment that takes place on the mat doesn't come without challenge and requires participants to be selective and methodical within their reactions to ensure success within rolling or at least pulling out the positive pieces if they are tapped. Though the majority of moments captured throughout my field work lend themselves to being positive and showing assimilation growth, there were times where fostering trait resiliency was challenged. As preached by Matt Arroyo as well as his team of instructors, "showing up to class is half the

battle"; being able to have consistency in training to see the appropriate growth in one's BJJ game is a cornerstone that is pushed upon by Mat and his team.

For participants who had jobs that required them to be on call, experienced frequent injuries (often associated with time in-service), as well as financial hardship, being able to show up to class at least 2-3 times a week presented an additional pillar of adversity. This contributed to their sometimes felt lack of adequacy on the mat which trickled into their personal lives off the mat. Walking back to our vehicles one evening, Rudy (a participant but not a key informant) shared some of his challenges with showing up to class on a frequent basis, "it's not that I don't want to be here man... I need to be here. It's just hard not being able to get the reps in with the crew. I've got injuries that are over 15 years old that really get to me sometimes. It even hurts just getting out of bed some mornings not to mention making it into train. Knowing that I can't train because of my injuries fuckin' sucks. Everybody else is getting better and I am the douche in the back of the pack who can't keep up. It bothers the shit out of me. I will try and come in and just watch so I at least am up to speed on what is getting covered in class but not being able to be on the mat with the guys, roll, break a sweat and all that is what kills me. You can't get any better without putting in the reps." Additionally, Sean and I dove into some of his challenges when he can't make it in on a regular basis; he told me "Dude this is my religion. It's chicken soup for my mind, body and soul. It's the sanctuary that doesn't ask anything from you except your time and sweat. When I can't make it in because of work or family stuff I know it...my wife knows it...my kids know it. I turn into a dick and all I can think about is how bad I need to train. That's not even mentioning that I get behind and see other guys getting better and I am not. On days where I am feeling extra shitty it becomes a downer, dude. I measure

myself on the mat and know that is where I find peace...if I am not there it works against me and I start feeling like a shitty person." After these conversations with both Sean and Rudy I began exploring what life would be like without BJJ for my participants. What activity would they be involved with that could serve as a similar medium, or perhaps not, as the notion of not being able to attend BJJ had such a profound effect on their perception of the world, themselves, and the quality of interactions they had with others. After class on a rainy Tuesday evening I asked Rudy what medium he would be involved with if it wasn't for BJJ, his response was, "I have no fuckin' idea. There is nothing like BJJ to me. I picked it up during combatives training in the Army and have never left it. If BJJ wasn't around I quess I would do something like Muay Thai or Judo...something in the combative martial arts as they are part of who I am. BJJ is my medicine for all of the shit that is stuck in my brain from years of war and having to be a normal person in society now." Similarly, Sean stated, "You know I really don't know. BJJ holds a special place in who I am. It ties me back to my time in service and instills me with patience I haven't been able to get anywhere else. I guess being older now I view the world different than I did when I was young. Appreciating the art and lifestyle of training is what it does it for me now. At first it was being able to kick ass and be that much more dangerous. Now it is about making myself a better human being and better practitioner of the art. If it wasn't BJJ maybe something similar like wrestling...but it still wouldn't be the same as BJJ since it has been with me since I was in the military."

Retrospective Identity Growth Points

A recurrent theme throughout data collection was the constant referencing to time spent in the military and how great of a time it was as well as the catastrophic nature of the memories and impressions that were formed. This paradox of duality created contrasting pillars of identity and trigger points within participants that forged permanent traumatic moments that combatants often tried and forget about, but were not successful in doing so (Ley et al. 2017). Not having a physical + mental and social activity that could conjure up the emotions, adrenaline, cortisol, and impressions of combat that were lived during the initial trauma often left certain memories untouched with no possibility of rescripting what those moments meant and how they could make sense and cope with them throughout time. The camaraderie formed on the mat through ritual, high physical stress, independent mental challenge, and immediate negotiation of real time threats, creates a gateway for participants to make sense of the lived trauma they once experienced in combat; particularly within trusted social relationships that make it okay to open up and trust others. Though BJJ brought together the opportunity for forging these relationships there was still a clear difference between combative sport and enduring military combat. The participants made it very well known that the stakes were clearly different in combat than they are in combative sport but allowed for similar relationships with comrades to be formed.

Being able to reframe previously lived trauma as moments of not only loss but also growth is important. BJJ provides real time feedback to loss and challenge; equipping practitioners to keep pushing forward and apply a myriad of techniques to achieve the "win" or the "submission" to the particular threat they are facing within their opponent. When applying

this paradigm to previously lived trauma, participants are able to model old memories of loss and trauma as points they are able to grow from as those moments are associated with a previous version of themselves that is not at the skill level or understanding that they have grown into through BJJ. The ability to consciously reframe past memories as growth points for the future has neuroanthropological value that meshes learning models with cognitive embodiment of physical and mental activities. During a lunch outing between Travis and myself, he described in great detail previously lived moments of loss and trauma he experienced during his tenure in Iraq. He states, "I lost brothers over there. Men who were heroes, true heroes that were salt of the earth. They fought and killed to protect me and I fought and killed to protect them. I can't tell you how many times I replay in my mind the day that I lost my best friend. He was right next to me when he took a 7.62 x 39 to his neck. I remember the gurgling from him trying to gasp for air but couldn't because a round hit his lung. There wasn't a damn thing that I could do. We had incoming fire and I watched our corpsman work on him but there was nothing I could do. I remember his eyes going still....absolutely no life in them and just glassy looking up. That feeling I felt at that moment stayed with me for years. It's a pain I can't put into words and an anger that was more intense than anything I had ever felt before then. It wasn't until I started letting that anger out on a regular basis that I began to let it go. Having my family on the mat has helped me let go of that anger...I still feel the loss at times but the anger has subsided as I see his death as something that is part of war. It could have been me...and I wish it had been me...but it wasn't. So I honor his life and his sacrifice with me being the best that I can be in everything I do. Training has taught me that. Giving my all on the mat, in my marriage, at my job...all of it matters."

Reframing previously lived trauma as well as identifying growth in one's self is important when fostering trait resiliency (Schafer et al. 2015). Moments of extreme despair as well as loss leave a lasting impact on combatants that are often treated through cognitive therapy and medications.

As previously discussed in Chapter 2, clinical approaches certainly work for some but hasn't had success for all. Applying the notion of trait resiliency to a physical + mental and social model that is found in sport, particularly the game of BJJ, instills the power of choice through its transactional nature. The idea of having another player engaged with you with intent to put you into submission forces individuals to constantly choose how they are going to cope and react with non-stop attacks. The choice to simply give up and succumb to the adversity or to make efforts and attempts to thwart the danger and overcome it has power.

Choice is potent when considering the effects of resiliency building and assimilation. Murphy and Brown's (2007) work entitled *Did My Neurons Make Me Do It* shows that understanding the importance of choice is paramount when dissecting how it is that folks who are survivors of trauma are able or not to cope with trauma and stress which is often culturally influenced. A key driver is in how they choose to cope and when they choose to cope.

Given the constant reinforcement by Matt Arroyo and his coaches to have consistent participation and mat time, the socialization and comfortability with new individuals was a constant paradigm of the BJJ academy. This proved to be a pillar discovery within my research; immersing, acquiring, and maintaining social relationships through time off and on the mat and being able to see consistent wins within one's self that were not only actualized independently

but confirmed by others was keen. In a conversation before class one evening, Sean and I dove into some of the important elements that defined his experience with building "mental toughness" from BJJ, he states:

"I've never been a guy who has had a lot of friends. I grew up bouncing from one foster home to the next, my dad shot himself in the head when I was four and my mom was never really around so the state took me. As soon as I turned 17 I enlisted so I never really felt comfortable trusting people. Once I went into the Army I had a family but the loss I felt when losing team members hit me way harder than it did losing my father. Having guys getting killed that I knew or even those that I didn't, just knowing they were doing the same job that I was doing and on the same side hurt. You know that with every bullet or explosion you hear about that it could be you and that part never bothered me. Me dying was never a big deal. I had no wife, no kids, so it didn't matter; but losing the guys to my left and right meant everything. They were part of me and still are. You just get used to it. You get used to shitty news and having to endure the pain that comes along with war. It wasn't until I got out that I started learning the value of my own life and it really made a difference when I met my wife. She made life mean something to me...not to mention our daughters and the light they shine on all of the horrible things I have done and seen. Once I really started rocking and rolling in BJJ I found another group of guys I could relate to and could trust. With me, trust and loyalty is really all that matters. With these guys we are constantly trying to submit the hell out of one another which is something you don't do with just anybody. There has to be an understanding and a trust between us. That is why we get nervous with new guys that come in. They always want to prove something and muscle their way

through rolling and techniques...that's exactly how people get hurt. Everyone thinks it is the seasoned guys that hurt people...it's the complete opposite. It's the beginners you have to watch out for because they don't know what they are doing so they try and use muscle and do whatever they can to submit you. When you are acclimated to rolling and using technique over brute force and strategy over muscle, you start becoming enlightened and its noticed by the rest of us. That is when we know you are starting to get the hang of it and can be trusted with the rolls. There are times when I have an injury and still roll but I will only roll with my guys who I trust to have control. They will respect the injury and allow me to get my reps in while also making it a challenge for me. That kind of trust is huge for me. Being vulnerable, showing them I have a weakness and expecting them to help me work around my injury was not easy for me at first...but that is what trust is all about. That is something that was new to me in the civilian world...I trust these guys to have my back the same way I trust any one of the guys who I served in combat with. That is cool to me. Being able to find a group of guys out here that are tough SOB's that are trustworthy and look out for one another...it's like being back home in the army but not."

As I was having this conversation with Sean, it was clear to see where he found value in how his understanding of self as well as his potential relationships with others had grown since being discharged from military service. By no means does it signify that his growth was solely contributed to his participation in BJJ but the nuggets of combative familiarity, depth of trust, and increased social capital found on the mat certainly shined in his explanation of trust and how he made sense of it.

Similar sentiments to Sean's were spoken about between other participants; often alluding their shared experiences on the mat to be centered off "trusting your training partner" as well as being careful with the "new guy". This model of being cautious around new participants parallels the socialization process experienced outside of the mat and added value for my research participants. Being comfortable with meeting new people and knowing that there is a "process" involved with acclimating to that person and vice-a-versa created growth points that were fueled by principles of understanding and patience. For combatants to understand that they themselves need time to get familiar with someone else just as much as that other individual needs time to get to know them matters in the assimilation process; particularly since combatants became accustomed to Afghani and/or Iraqi military forces who they built rapport with to betray them while conducting counterinsurgency operations.

Regaining the ability to trust new social groups and individuals in the civilian world proved itself to be an important element of assimilation as it directly links with the concept of having social capital which has been proven to be vital in the assimilation process (Scott and Myers 2010).

BJJ presents a unique model within the martial arts. Its ties to modern military culture, the parallels in material culture and the camaraderie that is forged via a physical + mental and social model (similar to that which is seen in the military) give it versatility for assimilating veterans that stands out. It is clearly understood that there are many different sports that satisfy the physical + mental and social model but the focus of this research was to identify how martial culture within BJJ can help veterans reintegrate back into society. The structure, social relationships, and "flow" of interactions give participants a place where truth is constantly exchanged on the mat via a medium that is comfortable for them. The fact that the interactions

are based in combative sport and wrapped in the package of being a sport that is socially acceptable gives participants something to be proud of as a civilian. It's a combative theatre where they can have their friends watch them, build new relationships, and not have to bottle up emotions or keep things "top secret" as they were once conditioned do. The effects of time on the mat contributes to a much bigger picture of social transparency that is rooted in trust, fun, physical interactions, social bonds, and encouragement that lead to new understandings of self that are not rooted in loss, suffering, and pain found in war.

Chapter Four

Connecting BJJ To Veterans

The recipe that forged the importance of having a social sanctuary and physical + mental outlet which ultimately defined the bridge that brought the assimilation process into focus consisted of multiple variables. It certainly isn't as simple as just participating in a combative sport. The traditions, material culture, personality types, nature of training, introspective embodiment, constant struggles and little wins on the mat all played a large role in understanding the salience of BJJ to participants.

The results of my research proved to be fruitful as well as surprising. There were several innuendos that became apparent that I did not initially hypothesize. These ranged from individual perspectives on combat to the meaning of BJJ, as well as the discovery of inner monsters and how they matter when considering the complexities of the "Rambo complex", surviving atrocities, witnessing best friends die, and the importance of friendships and sacrifice once out of military service. Important to note is that this chapter solely gives a basic overview of the different types of results that came out of my research.

The initial method that was used consisted of a 13 question survey. This survey canvased the primary information that painted a picture of military service, BJJ, trauma, assimilation, and meaning making. Sixteen of the participants took the survey via the internet while four of the participants opted to take the survey via paper format in-person. One of the four participants who took the survey in person requested that I fill in his responses for him as he had an injured right hand and could not write on his own.

The age range of participants spanned from 27 – 54 years of age and included members from the United States Army, Marines, Navy, and Coast Guard. Important to note; there were two participants who had served in more than one branch at different points in their lives. One began his military career in the Air Force and eventually ended up in the Army. Another participant began his career in the Marines and eventually retired in the Army. This is not a normative practice but it is not completely uncommon either. There are many accounts of individuals starting their military career in one branch and switching to another branch once their original enlistment expires. Figure A, provides the ages, most recent branch served, total years in military service, as well as the amount of time in which the participant has been training in BJJ consistently. Consistently in this context is defined as at least five to seven times a month.

Figure A

Current Age	Branch	Years In Service	Years In BJJ
27	USMC	5	2 months
29	USMC	5	2
30	USMC	2	2
32	Army	12	6
32	Army	14	10 mos
33	USCG	4	9
34	USMC	5	6
34	Army	13	7 months
34	Army	11	10
36	Army	13	1
38	Army	20	2
38	USMC	4	2
41	Navy	22	16
43	USMC	22	3
45	Army	17	5 months
45	Army	7	2
47	Army	25	15
49	USMC	5	1
50	Army	18	1
54	Army	25	8

Of the 20 participants who were part of this research, all had been privy to combative situations while in the military. The nature in which the combative experiences played out were varied as some subjects were infantrymen, combat pilots, administrative officers who had been part of convoys that had been ambushed, and others were operators within the special operations community. This variation in combative exposure was crucial to understand as different roles or MOS's, ratings, etc. in the military come with a particular frame of reference as to the probability of being in combat. As seen in Korte et al.'s (2005) work, the sheer thought that trauma and stress could be looming increases allostatic load and can contribute to assimilation issues as well as contributes to the development of stress disorders. For those participants who were not in a direct combat role, it is possible that the combat endured could have a different effect as it is not seen as an immediate probability in their everyday operations as well as what they have trained for.

Administering and analyzing the initial survey presented strong evidence that there is a stigma associated with admitting to having some sort of clinical diagnosis or challenge with time associated with the military. Of the 20 participants who took the survey, only three (or 15%) admitted to having some sort of challenge with PTSD, stress, anxiety and/or depression. Though this was not surprising, there was cause for contradiction to this finding as the focus groups and semi-structured interviews painted a different picture. Nearly all of the participants suggested anxiety/stress challenges that were associated with their time in-theatre at different points within interviews and focus groups. Additionally, the collectivity and comfort of hearing other service members admit to having challenges with stress and anxiety seemed to play a

keen role in divulging information about challenges experienced within the assimilation process.

When exploring the initial perspective that participants carried on what changes BJJ has made in their life the majority of participants (15 out of 20) stated that they noticed a direct positive change with how they responded to daily stressors; responses included:

"I'm more patient and tolerant of others shortcomings and/or perceived lack of effort. [I] better recognize everyone has different strengths and weaknesses. Training is a great tension release like any exercise, but training for a purpose creates greater commitment than just working out."

"BJJ forces you to only think about what is directly in front of you. You have to be in the present. Stress and anxiety feels so much worse when you are left alone with your thoughts. If you can alleviate the endless thinking in your head and the inner monologue, that is a major relief."

"Any martial art practice balances my emotions, increases awareness and mitigates general anxiety, when practiced consistently."

"You can really focus on what is important when you are fighting to breath. Everything else looses importance and you can just worry about right now. You look forward to your time on the mat when you can ignore everything else and let all the daily worries go and just focus on your opponent."

"Yes a good change. BJJ provides a stress outlet that is both physical and mental - the physical is obvious but mentally, BJJ requires complete attention and concentration so it provides a mental break from daily stress that can dominate your thoughts."

"I notice that my confidence level is a lot higher. The stress comes from lack of confidence. Confidence in my surroundings...in people...my environment. Training takes away a lot of the unknown...and that is what everybody is afraid of."

Conversely, the minority of participants who said that they didn't really feel that BJJ made a difference replied with the following:

"I enjoy the outlet but I don't feel that I need it."

"No. But BJJ introduces stressful situations and teaches you how to get out of them"

"I have not seen a change at all."

When exploring the influence that BJJ has had on participants personal and social relationships, they all responded in the affirmative. Responses included:

"I tend to be more relaxed with friends and in social environments - I've also found that BJJ provides admission to a world wide social group. When you meet another BJJ practitioner there is an immediate bond."

"After serving in Special Operations since 2001 it has been hard to meet people with the same demeanor and drive that I found in the SpecOps community. In BJJ I am able to find non-military friends that bring different personalities and views in my life. It is nice to connect with non military people in my daily life."

"It brought along two friends that I feel the relationships have the potential to last for life. I have noticed that many long-time practitioners at the Black Belt level seem to have exceptional social skills. Some, not so much. But many, yes."

"Have made good friends on the mat with shared military and no military experiences. More comfortable in new environments and dealing with new people. Traveling on temporary duty and finding new places to train taught me how better to integrate into environments where I was the stranger with no credibility."

"The BJJ school provides a support system of people that are trying to improve themselves. These people lift you up and function like an extended family."

"Yes, very positive. There's a similar comradery in BJJ to that of the military"

"I'm more able to handle personal relationships. I can go out and have a good time with friends at a bar again."

Through indicating that participants found a difference in their relationships would suggest that at some point there were challenges. These challenges may not have emic recognition as they could be interpreted as a direct "weakness" which would be out of character for their roles within the military as well the institutional framing that may have been embedded as a warrior and having no fear, as well as the Rambo complex as discussed by Collura and Lende (2012).

Within my study population, three participants admitted to currently being on some sort of medication that had to do with their time in-service. One indicated that he was taking six different medications, another stated he was solely on insomnia medication, and one simply stated "yes", with no further elaboration within the survey. Throughout the semi structured interviews, there were several mentioning's of taking medication in order to "function" appropriately or to be able to sleep at night. Lack of sleep for participants was a consistent issue as many of them made note of the challenges associated with being in their "own head" and thinking about daily challenges too much, particularly when they first returned home from combat deployment.

When asked if there were additional comments that they would like to add in regard to their understanding of BJJ and its effect on stress and adversity, responses included:

"BJJ training is dynamic and set amongst peers and like minded individuals. There is respect and a camaraderie that we enjoyed on an operational team."

"While I consider myself very fortunate with respect to not having PTS, I have seen the positive effect it has on others with both Post Traumatic Stress issues and recovering from physical wounds. I have personally rolled with amputees who have found BJJ is instrumental in physical recovery, as a confidence builder and as vocational therapy."

"The BJJ community is full of level headed, goal orientated, even military veterans themselves from all sorts of backgrounds and experiences. Since the start my PTSD has almost become non existent."

"BJJ is a phenomenal activity to help someone let go of all the things you can not normally get out of your head."

"BJJ is an amazing outlet to get frustration/ anger/ depression/ stress off my chest. Also since I was wounded in 2009 I have had insomnia pretty bad. The exhausting nature of BJJ allows me to sleep 6 hours a night(without meds) which helps me have good days."

"BJJ is a skill. If you want to do it, you have to think about it and practice it. If you are focusing on your skill, you don't have time to think about those other things. If nothing else, it gives you something to look forward to."

"Great stress relief both through physical exercise and discipline, but also because you create a tight circle of friends to talk with - easy to share with some you trust with your neck and joints!"

"I use BJJ as coping mechanism."

"It gets me out of bed and doing stuff."

"I feel all warriors suffering from PTSD should train in some form of Combat sport."

"I used to always have to crawl around on the ground....my instructor showed me a way how to get up and get up on my own....to accomplish that was huge for me. Not having that dependence on needing things around me to get up has been massive. The relationships I have made with other military members who have physical challenges as well has made me find a place amongst my own in society...and for that I am very thankful."

Semi Structured Interviews

When conducting semi-structured interviews I was able to start understanding the complexities involved with the introspective meaning making process for participants. The context that was afforded throughout participant observation shed light onto the subtle innuendos that marcated the physical and social milestones that contributed to the little wins and losses that created the meaning making platform. Peeling participant layers back within the 16 interviews conducted unveiled some contradictions to the responses that were found on the initial survey. Interviews were scheduled in no specific order other than by when online surveys were completed and when participants had availability.

Themes that surfaced as a result of the interviews consisted of; enhanced patience, stress navigation, making sense of social relationships, being okay with failure, physical

exhaustion, and not losing combative identity. These six motifs create the paradigm for combatant-civilian resiliency that I display in Figure B below. The repetitive traits that were found between participants shed light into similarities as well as differences in both social and individual needs when building resiliency and tackling the assimilation process. Important to note is that the six motifs presented in Figure B are not dependent on the presented order. They can be connected to one another in various ways but the flow presented was witnessed most frequently within my study population.

Development of Patience — Throughout the interviews, the need for patience was discussed in great detail. From learning new techniques to controlling anger and mitigating irrational responses to stressors in everyday life, respondents carried a similar theme that training in BJJ allowed for them to create a new type of patience within themselves as well as with others. An underlying theme that was found was developing patience with systems they are participants in on a daily basis. This included systems at their places of employment, dealing with challenges of their daily commute, and systems that pertained to growth within BJJ.

Patience and the development of objective understanding, or being able to separate bias or "knee jerk" reactions, proved to be a cornerstone ideal when considering the value of BJJ participation. Quite often, hasty movement and actions that are not well thought out often lead to immediate submission or even injury. Maintaining a methodical approach when rolling, training, and interacting with one another is part of the essence that makes BJJ an effective sport and art and translates to the assimilation process. As mentioned by Flanker:

"The more you train the more you realize that you have to think. You can't just force your way into everything. Thinking about what he's going to do next or what you want to do next and the

counter he is going to hit you with makes the difference. It's the same thing that I deal with at home...everything I say to my wife or to my kids will have a consequence so I have to be patient and understand that they spent a long time not having me around. What is it they say, pick and choose your battles? Haha...yeah, that one has been hard for me to learn but because of BJJ I have been able to become way more patient and understanding of myself and others."

Stress Navigation – Building off the foundation of having increased patience, navigating stress was a recurrent theme within the interviews. The stress that was discussed with participants typically followed suit with perceived adversities that they did not have a response for. Rather, they presented moments where anger and frustration surged and either they walked away from the stressor or expressed themselves with vehement anger as a way of dealing with it. Through additional questioning, particularly on how men in the military deal with stress and trauma (interview question number 10), participants consistently shared the idea of "keeping it to themselves" and not openly discussing what stressed them out with others, or, "getting unhinged" and "ripping into people" with no clear articulation of what caused the stress in the first place. The idea of sharing emotional vulnerability or dealing with perceived adversity seemed to present a lack of confidence in perceived masculine attributes and could be counterproductive to their training and understanding of who they were as a combatant and military member. Yet, several participants alluded to the nuggets found within BJJ that forged a comfortability with talking about stress as participating in BJJ has allowed them to view stressors as tests which provide consistent measurements of their growth. This insight alone alluded to a much deeper understanding of their bodies in motion on the mat and what exactly is happening under the skin and the way it is that they view the world. Perceptually as well as collectively, the notion of exercising together and embracing the "suck", as many participants

termed unfavorable conditions and circumstances (mental and physical), proved to have a high degree of salience as it forged social bonds between one another. Having moments of challenge and stress that allowed for simultaneous growth increased rapport, trust, and reframing of stress. One participant states:

"Stress is every day. I think dealing with people is the most stressful part for me. People are generally pretty stupid and talk way too much shit about stuff they don't understand...not to mention they don't have experience in. Having to deal with all of that and learning to be as understanding as possible all comes from BJJ...if not it would boos. The more I train the more patient I get...I start seeing things I couldn't see before and it's all because of me knowing how to breathe and work through stress."

Building Relationships — Relationships are crucial in the assimilation process. This research unveiled that they are the binding element that keeps participants engaged, committed, and locked into seeing true progress on the mat. These elements matter as there is consistency in practice, sport, socialization, play, mental and physical challenge, reward, and collective reinforcement towards a common goal. When framing the value of relationships within the service member perspective it is consistently reinforced (from their initial training in boot camp) that they move and fight as a single unit and that they are a part of something much bigger than themselves. Once discharged and thrown into the depths of the civilian world, the "thing" that is much bigger than themselves becomes defunct and their primary concern is their own identity and making sense of who they are with no institutional support that thrives off of social collectivity and synergy. Witnessing death, killing, mass adversity and trauma in consistently social settings fosters a passion and dependency to always "do for your brothers and sisters in arms before doing for yourself" and creates an identity blue print rooted in servitude and social commitment. This foundational pillar of combative conditioning is deep

rooted and sealed in a physical + mental and social model. Such extreme levels of adversity in combat were the ultimate tests in dedication and commitment to the symbolic nature of their love and sacrifice for one another; much of which many participants felt they lacked due to social disconnection from civilians. Having a voluntary outlet (volunteering shows decision making agency for themselves as opposed to receiving orders) that requires another practitioner allows for something magical to happen on the mat. The bodies in motion not only communicate physically, but they grow each other mentally through consistently challenging each other's will, tenacity, and perseverance. This forges the commitment to not only each other but to the self as the familiar principle of serving their fellow combatant in arms comes to the forefront as they are battling each other's will to gain submission. This constant back and forth creates the "wins and losses exchange" that binds the participants together and fuels the resiliency they can use outside of the academy. A participants states:

"Dude this is my family. This academy, the people, the life we live here...it gives me hope and purpose. I am not joking when say that jiu jitsu saved my life...it really did. I didn't have shit when I came back home...I lost my wife, I lost my best friend who was sleeping with my wife, my parents are dead and I haven't talked to my sister in 7 years. So I literally had nothing. The brothers that I've gained from jiu jits mean the world to me and help me get through life."

Accepting Failure — Negotiating failure, making sense of it, and reframing what the "failure means" proved to be an important touchpoint. Framing failure in terms of absolutes often meant that the act of failing "cost lives" for the majority of participants. Given their combative background, failure was simply not an option as completing the "mission" at hand took precedence over all as it served the greater good. Failing themselves was not an issue, yet, failing the mission and their comrades was beyond unacceptable. Fostering an acceptance with

failure and reframing it as a learning opportunity as the stakes are not life and death mattered to participants. On frequent occasions throughout the semi-structured interviews, there was mentioning of how BJJ transformed their perception of "losing" and that tapping out simply meant they made a mistake that needs to be corrected in order to be successful. Stripping away the notion that they failed and would have been dead or severely maimed allowed for mental lubrication and plasticity in what "failing" or "losing" symbolically meant. Being able to reform failure to mean "an opportunity for learning" and not as a point of discouragement that can lead to social isolation, depression, anger, etc. proves essential in the assimilation process. Sean states:

"No one likes to lose, man. When you are taught that you can't leave a man behind or mission failure means people are dying you get rigid when people around you don't give it their all. Back then our all meant giving our life for the mission. As a regular guy the people around me would think I'm nuts if I said I'd die for whatever goal is at hand. BJJ makes you look at mission failure in a different way. It isn't that you lost, it's that there's a better way to do it and I just haven't figured it out yet. You get a direct response which is cool, but being able to accept that you can be beat and still come back better took me a while to get....but I got it and it has made a huge difference for me."

Physical Exhaustion — Enduring a challenging work out is not an unfamiliar notion for combat veterans. Physical training is a large part of what they are required to do in the military and being physically fit is demanded of them while deployed. This makes the neurochemical releases associated with physical stress an important aspect of who they identify as within the military as well as an individual. Adams and Kirby (2002) show the addictive properties associated with endogenous opioids, catecholamines, and dopamine pathways that are stimulated as a direct result of vigorous physical activity. Not having the consistent releases of such chemicals can cause imbalances that have grave consequences on perceptions,

relationships, patience, and functionality within the civilian work force. Additionally, the ritualistic attributes associated with physical workouts creates a place of serenity, stress release, and builds upon previously established physical baselines for themselves. Having tangible milestones such as growth in physical ability, mental prowess, and an understood identity within a chain of command (ruled by skill and experience) has value. Witnessing growth and the accomplishment of goals with desired physical outcomes builds confidence and is an activity that requires discipline, consistency, and structure. All elements that are reminiscent of the identity that service members carried while in the military and can carry into their assimilation journey. A participant states:

"The workout you get from rolling is hard core. When I tell you that you literally use every muscle in your body you literally do. You are sweating like a pig, defending one second and attacking the next all the while making sure you don't roll into other cats on the mat. After the second or third round of rolls being able to breathe starts to become challenging but that's what makes us have to be smart about how hard we roll....it's a marathon not a sprint. The cool thing is the feeling you get when you're done rolling for the night. After the showers and during the drive home there is literally nothing that can bother me. I leave all of it on the mat."

Combative Identity — Based on the semi-structured interviews, a majority of the participants responded that they identify themselves as warriors and will be until they die. Having the "warrior ethos" engrained into their identity as a soldier, marine, airman, or sailor held introspective value with social rewards and consequences that identified who they were within society. Losing the "active duty" title and transitioning to being a "veteran" created a new body of social capital but also created a new social divide amongst the veteran population where most are not combat seasoned individuals. As stated in one of the interviews:

"I have a hard time identifying with snowflake veterans. Those who think that just because they put a uniform on and spent time at a FOB [Forward Operating Base] that they know what sacrifice and suck is. A bunch of damn Nancies looking for a handout is what they are and they piss me off more than civilians do. They forget that they volunteered to go into the military, no one forced them. They got a paycheck, healthcare, food, housing, and a shit ton of other goodies from Uncle Sam. Then they come home, haven't done shit but shuffle some papers and play too much xbox and all of a sudden have PTSD and need disability money. Fuck off! My brothers and I who stacked bodies week in and week out don't want shit from anybody...we made the decision to serve and knew there were consequences to choosing the path of a warrior. You have to be a man about it and take your punches...not ask for handouts after something you volunteered to do."

Being able to carry on the combative identity that was forged during military service and using the aforementioned attributes to reshape what the warrior role looks like is vital. The extreme adversities experienced in combat cannot be replicated in a first world, western society and being able to release stress, aggression, and hone in one's quest for perfection is keen to maintaining an equilibrium within the assimilation process.

Figure B

Patience Acquisition

-With Others -With Perceived Systems

Combative Identity

-Growth takes time and requires constant little wins and losses which grows patience and understanding .

-Maintaining the "warrior idenity" and the physical + mental and social relationship it calls for.

- **Stress Navigation** -Applying acquired patience to make sense of adversity.
- -Reframing stress to symbolize growing pains instead of negativity.

Physical Exhaustion

- -Opens the gateway to make sense of failure and knowing your best was tried.

 -Fosters identity tentacles that root back to the physical + mental model that was conditioned in the military.

Building Relationships

- -Pushing through stress to maintain and build relationships.
- -Seeing relationshops as good and necessary for growth.

Accepting Failure

- -Utilizing support from relationships to embrace and learn from failure.
- -Leaning on different relatiionships to find the good in the failure.

The process found within this model allots for a full cycle of experience and immersion that is needed to achieve combatant-civilian resiliency. Building the initial framing of acquired patience at an individual level as well as a social level paves the path to begin navigating stress. If veterans are able to navigate stress or at least increase their ability to not over react or act outside of social norms they will begin creating new relationships which will allow them to negotiate failure and disappointment better. In blending in better with civilian norms they increase their social support system that perhaps was not present once returning home from deployment. With the enhanced ability to negotiate failure they will be able to push through physical exhaustion and accept the fact that they do not have to exclude themselves from civilians as they are humans just as civilians are. The need to feel they cannot connect with civilians is overcome through shared sweat and physical adversity as it serves as a binding mechanism which pushes their identity to grow and identify with civilians. This feeds their needs as a combatant and also grows their ability to be more patient with themselves, civilians, and processes that make up the civilian world which ultimately allows them to lean into the sharper points of identity growth and embody the new chapter of their life as a civilian.

Focus Groups

Being in a group setting and tackling tough questions changes the comfort, access, and willingness for participants to share intimate details. I conducted two separate focus groups as a means of accommodating schedules for participants. Attendance to the focus groups was relatively small; four attended the first one and three attended the second one. Themes that emerged out of the focus groups consisted of BJJ bridging the gap between participants and

civilians, the symbolic nature of material culture, the importance of meaningful relationships, fostering of confidence and strength through BJJ, and the enhancement of the warrior identity because of BJJ.

As previously discussed, the physical side of BJJ has both biological and physical ramifications. Pushing these two themes forward are the social rewards and challenges that are captured in the participation of BJJ. When asking participants what difference, mentally, has BJJ made in their lives, the majority of participants suggested that it has allowed them the ability to make sense of civilian life. Being able to have an outlet that is martial in nature, has structure, like-minded individuals, and fosters a strong sense of community all had salience. Additionally, having an environment that encourages competition that revolves around physical prowess, skill, tactics, attributes, and measurable progress had reward for participants.

A unique facet that was unveiled was the importance that participants put on rank and uniform within BJJ. On several occasions throughout the focus groups, it was mentioned that earning a stripe or advanced belt meant a lot. One participant mentioned, "Earning my purple belt has been my proudest moment outside of my son being born. I busted my ass for that belt and have spent years going through hell for it. It is a big deal to me." Another participant stated, "Putting my uniform on is like having a breath of fresh air. As soon as it is on and my belt is tied I am ready. I let go of all the shit from the day and I get into my zone where I am most comfortable." The symbolic nature of the material culture associated with BJJ creates a connection between participants where there is automatic understanding of one's prowess on

the mat as well as a degree of expectation of how controlled and tempered they should be on the mat.

This matters in a big way. For participants, having a rank structure and material culture that requires them to learn and respect civilians who do not come from a military background but have combative prowess that they respect and admire forges a new understanding between service members and civilians. All of the participants admitted to carrying a bias when it came to understanding civilians that BJJ has helped to close. In a military culture where there is an expectation that you are "hardened" and "square" if you have been in combat, it seemed to be an often characteristic that participants would view civilians as "sheep" who had no idea of what it was like to be tough, elite, and superiorly masculine. Participating in BJJ pushed forward the cultural construct of that understanding and re-centered them as simply a "man" with different facets of their identity that were more developed and less developed than others. Being put into submission by a civilian who has never served in the military or seen combat was a profound ego check for participants, particularly for those who were newer to BJJ. One respondent stated, "The first time I got tapped here was by a dude who weighed 40 lbs less than me, looked soft, and had never been in a fight in his life. He had been training for a little over a year and whooped my ass. He not only tapped me once but four times. I was so pissed with myself. I was thinking, how in the hell is this dude beating my ass....I'm a damn Green Beret and I'm stronger, more athletic and quicker than he is. It just didn't make any sense but it really made me think about my ego and that my skills as a Green Beret didn't necessarily translate to this style of combat. Fast forward to three years later and me and that same guy are best friends and roll together all the time....and yes, I have tapped him...[laughs]".

This "bridging" of the gap between combatants and civilians through a combative medium is one of the additional attributes that makes BJJ unique for the assimilation process. Being up close, intimate, and put into awkward, physical positions with a civilian that perhaps combatants don't hold esteem for breaks a lot of misconstructed perceptions that veterans who participate in BJJ may carry. Being able to understand and appreciate the skill level of their fellow participant through patches and belts that are worn on their uniform allows for a different lens to be adopted of just another "civilian" who doesn't understand. As stated by Steve, "probably the second time I ever rolled outside of the military was with a female...and a female who was 100lbs lighter than me, very soft spoken, but was wearing a blue belt with three stripes on it. I didn't even hold an official rank... I just had the training that I got from Army Combatives so I knew she had been training longer than me but I wasn't sure what exactly that meant at the time ...once we bumped fists she closed the distance, took my back, and locked me in a rear naked choke....fast...really really fast. At first I thought it was cute...I thought she took advantage of me being new and being a bigger guy so she probably thought I wouldn't actually try. Well the next round I plugged into the game and really did try to not let her tap me...we battled for about a minute and next thing I know she had me in a triangle choke and I was tapping....and dude, I actually tried!! I couldn't believe it. I legitimately got beat by a petite little girl. It dumped a lot of misunderstandings I had of women on my head and opened me up. I was ashamed at first but in time I became thankful for it...it was really a big learning curve for me and my understanding of interacting with others and my opinions on their abilities and potential." Breaking the chains of masculine understandings of others, their abilities and their

role in society, and using material culture that has combative esteem to garner respect for others proved to repeat itself throughout our discussions.

Additionally, structure and expectations of relationships mattered to participants. Frequently, terms such as "brother" and "family" were repeated when diving into the mental differences that BJJ makes in their lives as well as how they deal with stress, anxiety, adversity and depression. Every single participant contributed thoughts that revolved around the collectivity fostered in BJJ and having support from their "brothers on the mat" and how it is that those relationships created the outlet to make sense of every day adversities. One participant noted, "jiu-jitsu doesn't work alone bro. You have to have a training partner for it to work...there's no kata, no forms, no punching bag to hit...there is the direct response that you get from your training partner which makes you better...you have to trust that person you are rockin' and rolling with to help you learn jiu jitsu and become better. Its like a marriage...there is no marrying yourself...hahaha...it requires another person so it forces you to train with all kinds of people from all kinds of backgrounds...you may have just met them or you could have known them for years...your etiquette on the mat doesn't change...you roll the same way with all of them....well unless they are a best bud and you play around a bit...that does happen hahaha." What struck me as incredibly rich is the mentioning of "your etiquette on the mat doesn't change...you roll the same way with all of them", that particular line suggests a loaded innuendo of how it is that BJJ practitioners strive to interact with one another. Stripping away any misconceptions, preconceived constructions, and dependence on "the way" of BJJ when it comes to socializing with others and the absolute dependence that is necessary of "the other"

suggests unit characteristics and being a part of something that is not just about the practitioner but the process on the mat that requires another body in motion. When translating this over to attributes necessary for civilian socialization, there is a blueprint that is forged which creates a roadmap for practitioners to use in their daily lives. Being able to deconstruct previously learned modalities of socialization and being "different" than civilians as a soldier, marine, etc. provides the know-how and understanding of how to respect others and "go with the flow" within the socialization process. This is seen within the strict adherence that is required in bootcamp as well as respective trade schools in the military that demand specific requirements, structure, and behavior in order to be successful. Not wanting to ever stand out and be "that guy" who sticks out of the crowd and is "different" is a constant goal that was often discussed between my participants. Just as there are requirements for successful socialization in the military the same holds true for civilian reassimilation as customization to norms and not wanting to be "that guy" still holds true. The stripping of isolating tendencies that are often felt once home from combat is necessary as rarely do military members find themselves alone in the communal institution that is the military. Whether or not they fought in combat with individuals they socialize with, the need for approaching the socialization process with consistency, patience, and understanding is paramount as tolerance for others, their abilities, and perspectives is essential in having a peaceful existence that promotes productivity and the maintaining of important relationships.

The quality of relationship interactions also matters. The motto of "there is power in numbers" has salience but the quality of those numbers and what they mean to the support and comfort of the participants plays a factor. One participant stated, "the difference for me

has been the kind of dudes I am surrounded by. I have to deal with a lot of retarded people at work and haven't been able to find a group I gel with. My peeps in BJJ are my family...legitimately salt of the earth kind of people who genuinely care. They aren't trying to get anything out of me...they just want to train just like I do. I sacrifice for them just like they sacrifice for me and that mutual sacrifice is what makes us click. It's cool to vibe with them because they share the same frustrations that I do when it comes to dealing with outsiders but at the same time we all understand that we have to deal with those people because they are part of our culture. Can't help that they are stupid or lazy...they just are....well that's not true...not all of them are...just a good bit of them. Having my safe haven of peeps that are my family has given me so much...without them my life would be in shambles...I would lose my rocks."

Consensually, the value of those around them and how ethics, morals, and perceptions are shared between participants provides the social support system that lubricates their ability to move in and out of different social domains. Difficulties still remain, but the navigation process certainly becomes more palpable and executable because of the relationships they have built and depend on that push forward acceptance of others.

About half way through the second focus group, a participant stated, "A big thing for me was breaking a lot of the anxiety I carried about being around different types of people. People who were crazy different than me...gay people, muslims, buddhists, atheists, fat people, people who weren't in the military...just all kinds of people. I always felt weird or would always judge...combat changed that for me...it didn't matter what or who they were...what mattered

was that they were people. All that mattered was if they were good people or bad people. Bad people had to die...good people we protected. Training has kept that for me...that understanding of keeping your world simple...there is good people and there are bad people...spend time with the good people and stay away from the bad people...understanding who the good people are is very different than understanding who the bad people are....you have to figure all of that shit out on your own. In the military there are orders that tell you who the bad people are....back here there aren't...you're on your own and that part sucks but training has helped me with that. Being able to find the good people and spend my time with them has been life changing for me...who knows where I would be if I hadn't."

The strength that is found in the physical + mental and social model powered through BJJ also unveiled an important emotional pillar that held salience for participants. It isn't that the specific techniques within the art held the value to assimilation. Rather, it was the relationships which forced the participants to create social bonds which spawned strength and built confidence. Multiple times throughout both focus groups the power of "family", "brotherhood", "strength", and "friendship" were consistent ideals that connected one with another. Each participant contributed to the importance of these elements and how it is that it made them better people, more well-rounded, and able to deal with varying social circles. This pushed the strength and confidence motif of being "comfortable with the uncomfortable" and shed light onto a tribal mentality of belonging and social significance. Having a place to call "home" with brothers in arms who understand them and sacrifice for them made the courage and strength necessary to socialize with others a reality. Breaking through social boundaries

allowed for them to foster a different way of viewing the world as well as their place in it which contributed to their ability to navigate through the assimilation process.

Adding to the understanding of relationships, introspective confidence, and social strength is the continued cultivation of the "warrior identity" and building on the engrained warrior ethos that combatants forged. The "brain washing" process endured throughout their initial boot camp experience as well as reinforced group expectations within different units they were a part of pushed forward a macro culture of military service while infusing micro-cultures that were specific to the branch, job, and mission within their specific unit. The entirety of the military institution vehemently relies on social collectivity and clear hierarchy that is represented by material culture through displayed ranks and colors. All of these attributes contribute to the constructed notion that there is a "warrior code" shared between service members, particularly combat seasoned service members. Abandoning the "warrior code", call to duty, and purpose found in combat to live a life that is based upon annual income, participation in "meaningless" (as one participant stated) social circles, domestic pressures associated with intimacy and deep rooted communication, as well as the lack of high stakes sacrifice, creates a playing field in the civilian world that very much challenges the warrior doctrine that was conditioned into participants. The lack of pushing one's self to the depths of death for a fellow comrade as well as the high that is felt when a mission objective is achieved is a missing link within the typical assimilation process. The sense that there is a lack of meaning making in everyday life as a civilian degrades the understanding that veterans have of themselves and their role in the world; simply hitting the "off switch" and putting the civilian "hat" on is not feasible as the deep fibers of who they were conditioned to be as well as the

warrior pillars that were forged into their essence must be nurtured, remolded, and applied with a different set of objectives.

When asking participants to dive into the relationship that BJJ has with the warrior identity that they fostered in the military, participants overwhelmingly alluded that it brought them the relationships, camaraderie, and sense of earned rewards that they got while in service. One participant stated, "for me....when I started up BJJ classes...it was about needing to lose the beer gut that I got after being out... I got a little bit of training in MCMAP [Marine Corps Martial Arts Program]...but that was it. Then as I kept going week after week I started feeling alive again. I got back to a place where I felt good about myself, didn't need the beer anymore, and felt like I had something to contribute to my life as a civilian. The thing about being a Marine is that once you are a Marine, you are always a Marine. I knew I wasn't making the Corps proud being a fat drunk so BJJ changed that for me. The 'motivate-kill' motto left me over time as it became much more about being a Marine in the civilian world and being a leader and example to others. I got that through the brothers I have found in BJJ and how it is that they conduct themselves. The guys that I train with are absolute animals on the mat...the best in the world. But the cool thing is that they are very gentle and humble...they don't boast about it or show ego...that kind of attitude will get your ass kicked fast. They are relaxed and can roll with the punches in any situation. They remind me a lot of the tier one guys I used to know over in Afghanistan...they were subtle and calm...but you knew not to fuck with them. Training has created that same space for me but here at home. How I reacted to danger over in Afghanistan and how I react to it here are totally different....here I walk around in shorts, flip flops, and a Tshirt....if something dangerous happens I am looking to get others to safety and even if an idiot

starts talking shit, I am not looking to kill the guy...just submit him and get him to realize he is being an ass. That's been the biggest thing for me...I will forever be a Marine but the way I see threats as a civilian is different...it's not about killing...it's about being calm and still carrying the warrior and marine code...just applying it differently...if it wasn't for BJJ, I probably would have ripped a bunch of people's heads off by now...not even kidding."

The concept of maintaining the warrior ethos and what it means for participants to be a part of something larger than themselves that is rooted in combative sport drives the vehicle which morphs their warrior identity. The structure, expectations, and rules of conduct that are demanded creates a platform which invites participants to challenge themselves through combatively engaging another human being with no weapons and no back up, simply one body and mind against another. Just like boot camp where they were expected to challenge themselves mentally and physically (without instruction of how to use complicated weapon systems and combative strategies), the focus is on understanding the bigger picture and being a part of an institution that supersedes their understanding of self and how to view the world. Flanker mentions, "Being a warrior has been my calling since I was a young boy. I knew I didn't belong behind a desk in front of a computer. I was meant to be operating at a high level surrounded with other alphas. That's my life's calling. Since being out I have only found that same calling in the confines of the BJJ academy. I feel it at church as well but it's different. In church I work on my understanding of past lived horror and there are a lot of those. BJJ is my second religion that keeps my calling alive...especially since I am now that guy who sits in front of a computer at a desk everyday hahaha...it's bloody miserable but I can tolerate it. I know it is what I have to do for my family and it's a way for me to make a good living...but if it wasn't for

me feeding BJJ to my inner monster there is no way I could be a functional regular guy....I'm just not that dude...I'm a war fighter and I always will need a battle to fight. Having the academy as my place to feed the monster and control him is necessary."

This response was loaded with innuendos that seemed to share consensus with the other participants in the group. The referencing of "controlling the inner monster" and what that meant seemed to be bleak at first; with further exploration on this topic with the group it seemed as if they all shared the understanding of what "the monster" was.

"It's the inner beast dude...the thing you unleash once your boots hit the ground and you know you are going to be stacking bodies or getting into a shit storm of a fight. It's the piece of you that gives zero fucks about the enemy and your sole purpose becomes the complete destruction of the evil that is trying to kill you and your team. You keep it locked up until it's time to let him out."

"We say monster but what we are really talking about is the worst of us. It's the anger and the hatred but at the same time we need that monster to keep us and each other alive. You rehearse and drill your ass off in preparation for the fight...once you're in it you are out for the blood of bad guys...you can't do that and be nice inside...you have to be angry....you have to have a healthy dose of hate...it's necessary....and believe me, once you see how those goat fuckers treat kids and women on top of killing fellow Americans...the hate flows."

"Monster is a good way of putting it. For me it's the absolute worst of me. I never want to be that guy again. It's there...I know it's there. I have nightmares about it still. I just don't want to ever be back there. Without a doubt it is the worst of the worst. You see the evil of what we as

human are capable of...it's sickening. Training allows me to keep it in check and work out the demons that come along with having done horrible things. It isn't that the training keeps me in the fight....for me that ain't it...it's that training is the fight that I need to beat down my own demons."

Fostering the warrior ethos isn't just about maintaining and morphing their combative identity; rather, it's also about giving them an outlet that allows them to fight their own battles and guilt that they may carry from actions done or not done on the fields of combat. That element within my research proved to be very fruitful. The understanding that the fight wasn't about fighting a bad guy or group, rather, it could be fighting the internal dynamics at play with what their perceived lack of action or leadership meant and the time they have to think about those "failures" once home. In a sense, BJJ serves as a way to recapture the morality that became lost due to perceived failures, violence, loss, and disjunctures experienced due to previously lived trauma. As discussed, idle time can lead to non-productive behaviors that lead to addiction, sedentary behaviors, health issues, unemployment, lack of social integration, and the like.

Moments shared within the focus groups lead to a collectivity between participants and shed light into the need for discussions to be had in settings with individuals they trust and can relate to. The idea that I was not only a researcher but also a student of BJJ made them comfortable with sharing warrior-specific notions with me:

"I just want to say something, Gino. I think its pretty badass that you are doing this work. You are doing God's work brother. Guys like us are tough to talk to and deal with. Seeing you get down and dirty with us on the mat and ask us questions instead of telling us to feel a certain

way or consider feeling a certain way goes deep with me. More people need to know about how jiu-jits is changing lives. Me having done the shrink thing a time or two...I know how they do things and all they do is shove a ton of emotional horse shit into your head and down your throat. You taking the time to watch us roll, roll with us, bleed and sweat with us is the shit. We aren't feeble fucking retards who don't know how to talk or that ignore emotions...we have just been through shit that shrinks and most people can't understand. This shit works for us...and you putting skin in the game and rocking with us makes me want to help others get the word out."

"Yeah man...you going through the suck with us has been cool as shit. I know you have trained before but seeing you do what you are doing and getting our story out there is legit as fuck. If you were just some pog [term for a non-combatant in the military typically seen as non-useful to combatants] in a white coat I wouldn't tell you shit ...hahaha...no offense....but you aren't...you suit up and get tapped out...and mayyybbeee tap some of us out if you are lucky haha....but seriously...this opportunity has made me talk about shit that I never would have and has made me see things at a much different level."

The intimacy of the focus groups held tremendous value. While at first I believed the small number of participants would create challenges, I was proven wrong. The intensity of the topics, the unveiled innuendos, as well as the bonds that were formed between the participants were all positive notions that contributed to the understanding that BJJ has with the assimilation process.

Chapter Five

The Calling

"It's the one thing that gave me purpose. My time serving was the highlight of my life but also the thing that left stains in my brain. I am grateful but haunted."

-Rudy, Research Participant

The roots of understanding the pillars of military culture as well as what motivates combatants to push forward into adversity or succumb to it are vast. Previously lived trauma, socioeconomic background, family framing, age, and more go into the folds of understanding the psychosocial building of military members. According to Elnitsky et al. (2017), military members thrive off of values such as loyalty, pride, and honor which serve as a "code" that is forged through camaraderie, consistency, and shared trauma. Such culturally charged values can run into conflict when breaking down subjective interpretations and embodiment from time pre-service as well as behavioral adaptation during service. This matters when considering the gaps that exist between combatant perspective and civilian framing of stress and social collectivity; the nature of the social bonds at play and what binds them together can often be different between both identities and can cause conflict between one another.

When thinking of military service as a processual endeavor, the initial motivating elements of entering the service facilitate important pillars of exploration. Within my research, many participants felt compelled to serve in the military as it was family custom, others for financial incentives, and the majority because of the terrorist attacks of September 11th, 2001. This "call to arms" because of being "under attack" proved to have many significant points as it set up the justification for making life changing commitments, voluntarily exposing themselves

to harm, as well as disrupting previously made plans for college, career advancement, getting married, having children, and other civilian based moments of growth. Voluntarily diving into the rigors of military service and committing to combat as a reaction to being attacked has deep rooted sentiments that are often filled with anger, emotions of retribution, and a focus on eliminating the enemy that caused a rift in the ideals of patriotism, pride, and understanding of what it means to be American. Given the deep rooted and interwoven fabric of patriotism that participants in my research have, it is essential to understand how and why they adopted the combatant mindset and the process of becoming an instrument of war.

The Beginning

When exploring how and why it is that boot camps are so mentally and physically challenging, there is robust evidence that shows the military does this as a means of "brainwashing" service members to share the same "code" and to push their military identity as the tip of their character spear. In Edward Tick's (2005: 54) piece on *War and the Soul* he states, "In basic training, recruits are stripped of their civilian identities. They are shaved, renamed, reclothed, and retrained to behave according to the belief that loyalty to the group matters above one's own life. Their value system is transformed; they are indoctrinated with the group's higher purpose they are now meant to serve. They are taught they are no longer individuals; their autonomy no longer matters and in fact can be dangerous." Taking new recruits and putting them through a traumatic event such as shifting their identity through operant conditioning (Skinner 1948) that is both physical and mental frames the onset of what they can expect in combat as well as how they "should make sense" of life and death situations that await them

on the battlefield. This was seen in my research, as participant Flanker stated in one of our informal interviews, "When you get indoctrinated into military culture there are firm expectations that you follow. You don't follow them because you like them, you follow them because that's the job. The job to your fellow soldier, the job to your country, and the commitment you made to duty on the day you swore in. There is no longer "you"...there is the mission and the men beside you. That's it." Seeing the lasting impact of the conditioning process he went through displays how deep the operant conditioning process works within the military as well as the accumulation of years of deployments, hundreds of combative missions, and several instances of loss and trauma. The initial framing and "recalibration" (Fleming and Robichaux 2013) that is done within boot camp sets the tone for constant cultural shifts in and out of combat; yet, it does nothing to instill a balance of how to make sense of trauma and loss endured and how to mesh it with pre-service understandings of loss and trauma.

When thinking of the "meaning making" process, militarily, it is vital to address the transition that takes place between the civilian-military mindset and the changes that come with becoming institutionalized. Collins (1998) elaborates that that there is a wide gap between what civilians are conditioned for, in a processual sense, as opposed to the shift that happens once entering military service as well as leaving it. Relationships, perspectives, as well as feelings of being in "control" all experience change that can be very different than what military members had in mind (Ford et al. 2013; Rupert et al. 1980).

Research has shown that long term commitments coincide to individuals' interpretations of things that are "bigger than themselves" or "things that must be done" or

because it is the "right thing to do" (Cudd 2014). These notions are loaded with cultural framings and interpretations that have to be studied and applied to make sense of how identity construction synergizes with major life choices, particularly when voluntarily committing to putting one's self in harm's way for a prolonged period of time or leaving an institution such as the military. An element that presented itself within my research is the smaller commitments that were made within the larger commitment of military service. This could have been to a particular unit, trying out for special operations, volunteering for high risk missions, etc. As discussed by Grossman (1996), the higher the risk and more that is it at stake, the tighter the bond is between the unit. When looking at the work done by Couch et al. (2008) on the bonds and commitments shared by survivors of the September 11th, 2001, terrorist attacks, there is strong evidence that life threatening experiences bring people together. Such experiences transcend group and cultural boundaries and link people together who would otherwise not have socialized or committed to one another. When thinking about the military as an institution, we see a familiar outcome in the sense of not giving care to race, age, or religious affiliation when in the face of uncertain outcomes, particularly in the middle of combat.

Throughout my data collection, all participants mentioned that they would happily leave the comfort of their home to go and fight side by side with their brothers in arms again. When thinking of Grossman's take on high stakes and commitments to one another, there is a conditioning process and embedded commitment that combative military members have to one another. Given the life or death commitments made to one another while being deployed

it is not surprising to grasp how and why they would be willing to commit to return to combat with those they served with.

Anthropology and Warfare

Anthropologists have stated for quite some time that a more robust approach to conflict ethnography is needed (Lutz 1999, 2000a, 2000b; Scheper-Hughes and Bourgois 2003) as well as an approach that fosters the skillsets to make sense of trauma within counterinsurgency operations. Within the context of this research, counterinsurgency is defined as "the complete range of measures governments take to defeat insurgencies. These measures may be political, administrative, military, economic, psychological, or informational, and are most always used in combination" (Kilcullen 2010: 1).

In Gusterson's piece (2007) on anthropology and militarism, a call for remodeling anthropology's conflicting lens of military involvement and combative conditioning is pressed upon. The need for the discipline to take a more aggressive position in contributing to the bodies of literature pertaining to critical and conflict ethnography as well as the cultural milieus which exist within the military are needed; fostering applied research that has more to do with what is happening within the military as opposed to for the military is becoming necessary with each year that passes. The disjunctures that are a direct result of consistent conflicts has created ripples within military culture and how it is that the institution is adapting its culture to optimize its personnel at an individual and collective level. Brief examples of this sort of approach can be seen in the work done by Price (2016) and Link (2017). The concept of "dual use anthropology" is an ever increasing issue where the "advancements" of the discipline are

potentially done in vain as a means of serving an agenda where "do no harm" is ignored, yet, rich ethnographic data is able to be gathered and analyzed and is creating and shaping a military that is directly influenced by anthropology through more intelligence gathering of "the enemy". This creates quite the quandary for anthropology as the dual use is not only being applied to the field to shape the mission of the military but also to shape the members of the military and the interactions they have with their peers and command which seeks to make them more efficient and save military lives while in war. This paradigm is also problematic at a social level. The introduction of combat and war video games is directly shaped by the data and experiences lived on the battlefield which are charged with symbolic representations of trauma, cultural misinterpretations, and premature actions that are mentally conditioned in youth.

Ignatieff (2000) buttresses Gusterson's piece through a call for a critical perspective of the increasing "virtual realities" in which issues of death, trauma, and atrocity are becoming topics of close, yet, distant realities within the U.S. The modern use of video games and Hollywood movies create fantasies of glorious satisfaction regarding combat and portray a reality that couldn't be farther from the truth. Understanding how this cultural phenomena of buying into the imaginative hero and the Rambo complex (Collura and Lende 2012) is further causing difficulties in the assimilation and acculturation process by producing conflicting belief in pseudo-realities and the realistic circumstances of going to war, particularly for the families of deployed personnel as well as young recruits is important. The "Rambo Complex" refers to the constructed identity that individuals can become the characters they see in video games and movies with no consequence of injury, loss, suffering or pain. The thought of being

consistently conditioned to fight in a war and being able to achieve constant victory without being scathed creates a dangerous game of fiction and embeds identity pillars at a cognitive and neurological level that don't actually play out since they are virtual and not physical.

Though emotional arousal and excitement may be present, the relationships, sensations, and actuality of killing is not. This creates a false construct of "how it will be" and "what they will do" once going through the process of joining the military and volunteering to fight in combat.

Additionally, increasing technology in combat (i.e. unmanned drones, long-range missile systems, etc.) has made combative engagement possible through the push of a button in an airconditioned room hundreds of miles away. Though the incorporation of this sort of military technology saves lives, it has the potential to make engagement and subsequent killing of another human being much easier as there is no imminent threat directly in front of a service member or sensory overload associated with confirming the kill (Ignatieff 2000). Continued desensitizing of combat and simply dehumanizing an enemy combatant to a number or specific target coordinates has the potential for creating a culture of combatants who do not understand the extent of their actions and are susceptible to delayed-onset Post Traumatic Stress Disorder (PTSD) (Fikretoglu and Liu 2012). Anthropologically, this has the ability to begin fostering a culture of "virtual warfighters" where the consequences of their actions have very real consequences that are potentially delayed until they embody the loss and destruction at a later time. It isn't the same as actually being on the ground but the sentiment that their actions inflicted loss of life and destruction to an enemy that is not an imminent threat is a very real concern.

From Malinowski's work in the Trobriands to the development of the Human Terrain System (Mountcastle and Armstrong 2010), anthropology for the military has often experienced backlash and negative press (Lutz 2009). Anthropology can provide necessary analyses of pertinent cultural constructions needed to understand problems such as PTSD, second-hand PTSD, suicide, prostitution use, domestic violence, sexual orientation, and gender inequality within the institution (Collura and Lende 2012). The specifics of cultural models found in basic training, combat units, military recruiting, conflicting ideals of suffering and identity, as well as a plethora of other interactive issues (sexual preference, gender identity, social media, Hollywood portrayals, etc.) have not received attention even those are issues of contention in U.S. Society. Catherine Lutz (2009) emphasizes the critical need for anthropology to establish a more robust approach to understanding the pit falls of militarization and the tumultuous history shared between anthropology and the military. Additionally, there are issues of interpersonal communication between service members, conflicts between existing military doctrines and progressive, social movements, fragging (the killing of a military member by his/her own unit), as well as unnecessary violence and rape that are silenced and bound in a cloak of shadows to which anthropology can bring data.

On COIN

In taking a critical look at understanding military trauma and assimilation it is necessary to dive into the term "Counterinsurgency" (COIN) and the rationale the U.S. military and NATO forces have engaged in this methodology as the most viable means for combating the enemy. In David Kilcullen's book entitled Counterinsurgency, insurgency is described as "an organized,"

protracted, politico-military struggle designed to weaken the control and legitimacy of an established government, occupying power, or other political authority, while increasing insurgent control". Conversely, he defines counterinsurgency as "the complete range of measures governments take to defeat insurgencies. These measures may be political, administrative, military, economic, psychological, or informational, and are most always used in combination". Kilcullen describes the particular importance of understanding the "human environment" in which an insurgency is occurring and the differing cultural values which are present on a hierarchical basis in order for a counterinsurgency to have efficacy. Particularly unique to Operation Iraqi Freedom, Operation Enduring Freedom, and Operation New Dawn is the "hearts and minds" training that has coupled the combative conditioning troops are immersed to. In both the U.S. Army and Marine Corps field manual on counterinsurgency (2009), General David Petraeus attempts to transform the way combat is viewed through applying a "soft" side to war, particularly within the counterinsurgency efforts in Iraq and Afghanistan. His consistent push for intelligence driving operations and having his command pose questions such as "What have you done for the people of Iraq today?" creates a respectable effort, yet forges a paradox which contradicts recruitment campaigns and media ploys to entice young, combat soldiers for volunteering and committing to go to war. Equipping combat troops with mentalities for killing and neutralizing the enemy is remarkably different than posing them with questions of what they are doing to help potential insurgents or what they interpret to be insurgents. Given the minimal cultural education that troops have historically been given regarding the various tribes, groups, and beliefs within both Iraq and Afghanistan (McFate 2005), the common misconception that anyone wearing a burka or a

group of males congregating in a corner must be Al Qaeda or Taliban has created a lot of grey area or confusion about who the fight is with as well as why NATO forces are helping potential affiliates of terrorist organizations. This exposes a tremendous flaw in the way in which combat service members have been trained to understand their "human environment" as well as their ability for making sense of highly traumatic events that are endured while in combat.

From Mao Tse Tung's text entitled On Guerrilla Warfare in 1937, to Che Guevara's published manual entitled Guerrilla Warfare in 1961 and David Kilcullen's most recent piece on counterinsurgency, a commonality exists in insurgencies which rely on guerrilla warfare tactics to cause confusion amongst the occupying force (or counterinsurgency); they all blend in with normal populations (via dress, speech patterns, etc) as a means of creating stigma and confusion amongst counterinsurgents. This sort of tactic inherently conditions service members to not trust or rely on anyone who is not part of their fighting force which causes increased hypervigilance and the inability for creating solid relationships with anyone outside of their unit. When considering the issues of avoidance and hypervigilance for returning veterans, these sorts of field experiences matter. For U.S. troops having difficulty assimilating back into civilian society, the ability to gain social capital through trusted relationships is directly challenged by the training and experiences lived while deployed in counterinsurgency operations.

In a bleak instance, soldiers can be called to turn their rifle on Afghanis and Iraqis they have befriended as they could be plotting his/her demise and relaying intelligence to terrorist alliances, or could be "sleeper" terrorists themselves. Conversely, military members could be helping a group that truly is not associated with a terrorist organization but lack of education or understanding of customs could cause confusion for US combatants and ensue lethal force that

was not necessary. Additionally, making sense of exactly why they went to war and witnessed/participated in violent acts is consistently questioned (Gutmann and Lutz 2010).

This area of misunderstanding within counterinsurgency matters when considering the taboo of killing and the justification of loss and trauma that service members go through with when assimilating and returning to civil society. Culturally valued ideas such as trust, understanding, and loyalty go into the recipe of making groups and individuals resilient when faced with adversity (Ong et al. 2010). Though this sort of an environment enhances the camaraderie between fellow service members (as they view each other as the only ones they can truly trust), it creates a very difficult paradigm to shift from when having to forge trusted relationships within a civilian context. Being able to have the same level of trust, commitment, and understanding with a fellow co-worker in a 9am-5pm, Monday – Friday, civilian job, is very different than the level of trust that combat service members have with one of their "brothers."

As detailed by a US Army combat infantryman named "Cortez" in Sebastian Junger's, WAR, when asked if he would risk his life for other men in his platoon, he responded, "I'd actually throw myself on the hand grenade for them...I actually love my brothers...I mean, it's a brotherhood. Being able to save their life so they can live, I think is rewarding. Any of them would do it for me" (246). Considering Panter-Brick and Eggerman's piece on resiliency (2012), there is a clear alignment with the necessity of this sort of mentality which makes soldiers inherently resilient in combat and willing to commit to dying for their fellow service member. The idea that they are fighting for each other so that each other may live is a notion which is absent within the civilian world and certainly forges a gap within their ability to accumulate social relationships which assist in the assimilation process.

Building off this notion and search for meaning within the assimilation process, my research contributes to the socialization and meaning making gaps that are missing for military members. Shifting the focus to the institutional processes that contribute to the success and/or failure that combatants have once being discharged attempts to build a bridge between civilian identity and their life in the military as a means of understanding the importance of social influences for military members. As suggested by Rogoff (1994), learning is a process of transformation found in the participation of community activities; a primary principle explored within my research is how participation in multiple communities with different identities contributes to the learning and acquisition processes that contribute to integration.

In Erin Finley's work (2011) on challenges that military members face with PTSD, there are multiple accounts of service members having a "now what?" mentality. As one of her subjects stated on his return from deployment, "I went from getting shot at to sitting in my recliner [in a matter of seven days]. And pardon my language, but that's called the Afghanistan mind fuck. Because you go from, 'I'm here,' to What the hell do I do now?" (1): such "what now" moments were scattered throughout my field work. There were moments where three of my primary research subjects, Flanker, Sean and Steve, would mention a feeling of helplessness as if they had no place stateside and that combat and their brothers is what gave them purpose. Repetitive phrases such as "civilians just don't get it", "they will never understand", "I was alive when I was over there" came up within focus group as well as informal interviews. Having to adopt an immediate meaning in the civilian world and become a "productive" member within society didn't make much sense to them after returning back home from deployment.

One evening after a two hour session of training, research participant and former Marine, Travis, stated "the [BJJ] gym is my new Afghanistan. It's much nicer, has air condition, and no one is trying to shoot me or blow me up, but it gives me purpose and meaning. It keeps me in combat while also making the best friends anyone could ask for. We all share the same struggle on the mat but are all here for one another at the same time. We sacrifice ourselves not only for our own betterment, but also for the betterment of our team mates." This insight sheds light into the symbolic nature that is felt and seen with sacrifice; sacrifice of self for others and the bond that inherently forges within a squad, platoon, or amongst BJJ practitioners.

Contrasting the amount of sacrifice and shared commitment that is found between military members as well as BJJ is the lack of sacrifice and team commitment that may be perceived in the civilian world. In a nation where capitalistic structure reigns, the feeling that your employer or colleagues are willing to sacrifice for you in the same manner your former combatants were is not apparent. In Macdermid et al. (2008), three pillars of American employee health and welfare were found in generic despair; 1) Respect from management and coworkers, 2) Management's commitment to employees, 3) Lack of employee input. When considering these themes and how they compare to the "work" environment that service members may find themselves in a fairly short amount of time after being in combat contributes to reassimilation challenges as well. Not having bonds, mutual understanding, and relationship "hardiness" (Bartone 2013) may push the social needs of service members into further despair as they are trying to make sense of previously lived trauma in combat. Being able to have an association with folks who understand their lived trauma, what it meant and

why it is pivotal in their identity adaptation is absent as well as the possibility of building new relationships rooted in the same ingredients that was lived while in service.

Psychology In The Military

Western psychology has attempted to tackle pieces of the assimilation and resiliency puzzle and has created approaches such as the Comprehensive Soldier Fitness (CSF) program but it has hit large hurdles along the way (Eidelson et al. 2011). The CSF program is based off of Martin Seligman's Penn Resiliency Program that was not designed for a military population dealing with high levels of combative stress and has been repackaged for use by branches of the U.S. Military. Its fundamental elements are rooted in "positive psychology" (Cornum et al. 2011) and seeks to have consistent measures of five resiliency pillars: social, spiritual, emotional, family, and physical resiliency. The program relies on the "Global Assessment Tool" (GAT) which is an online assessment that is taken every 90 days and consists of "105 questions that are quickly evaluated by scientifically validated scales" (Leipold 2011) that give a real time account of a service members resiliency level. Beyond CSF, the field of psychology has infiltrated the armed services with differing elaborations of Psychological Operations also known as PSYOPs (Starunskiy 2003), productive versus toxic leadership paradigms (Donofrio 2015), operational psychology to include torture (Staal and Stephenson 2006), and trauma mitigation (Dillahunt-Aspillaga and Powell-Cope 2018). Due to its clinical applications, military commanders have relied on western psychology to assist in both wartime efforts as well as well as operational efficiency. There have been many areas where psychology has excelled and made the military a

much more efficient and successful institution, yet, there are areas within trauma mitigation and making sense of introspective adversity that psychology has contributed to but not solved.

An area that is growing in efficacy and application is the clinical medium of Accelerated Resolution Therapy (ART) for military members who suffer from PTSD and anxiety disorders that are associated with their time in service. This particular method has been forged forward by Dr. Kevin Kip of the University of South Florida and has been evaluated within several different demographics that have gone through high levels of trauma and stress (Kip et al. 2015; Kip et al. 2012). ART aims to treat the cognitive and physiological challenges associated with the aftermath of highly stressful events while affording patients a way to replace traumatic memories with more benign ones and "rescript" the meaning and significance of previously lived trauma.

My research, though based in anthropology, has psychological implications that can be adopted and meshed with current ideas of psychological resiliency as well as assisting in bridging the gap between anthropology and psychology. Recognizing that standard scales, labeling and diagnosing is not always the path to take for embodying resiliency is important; cultural nuances and niches do not always allow for standard approaches in exploring how and why groups push through adversity. As seen with programs such as Psychological First Aid (Forbes et al. 2011), combining culturally sensitive foundations with both social and personal interpretations of stress, adversity, identity and trauma is important when pushing a medium forward that can help those in mental need.

Attempts In Addressing Trauma

Outside of the proactive sentiments seen in programs such as CSF, the military has been working diligently to establish practices and paradigms to keep combatants operational and functioning after experiencing grave levels of trauma. As research participant, Flanker, mentioned, "anytime one of the guys was feeling out of sync, command would set up a doc to talk us through whatever shit we were dealing with." In saying patch in, he was referring to teleconferencing a mental health professional to help with any challenges that soldiers may have been experiencing. The notion that the military has implemented tools such as teleconferencing, master resiliency training, and operational psychology is a sign that there have been shifts in the priority it puts on combatants' mental health. However, there has not been deep exploration as to how service member's interpretation of trauma shifts from the time of service entry to their time of military discharge.

Mental Framing

When considering a longitudinal approach to viewing trauma exposure and its effects on their civilian assimilation, diving into the fibers of their initial motivation and framed notion of what going to war would be like is important to capture as it leads to a better understanding of the gap they struggle with when returning home from combat. Throughout my research, BJJ participants openly displayed that they wished to be part of a community they believed to be "elite" and the "best" as that is what they saw as spectators of the Ultimate Fighting

Championship (UFC) as well as what was told to them while undergoing combatives training in their respective military branches. Participant Sean M. stated, "I started my BJJ training about

five months after I got out of the service. I learned some BJJ in Army combatives. It was a familiar activity for me and I knew I could meet some like-minded dudes and I did. Not that we all want to be a badass like Royce Gracie but we kind of do [laughs]. I knew if the Army had us learning Brazilian Jiu Jitsu that it had to be the best and I wanted to carry that into my civilian life."

Understanding the importance of mental "framing" (Ilyas 2017) is valuable as it sets the standard of expectation and infuses a pre-conditioned neuro-circuitry to make sense of why it is the body is participating in a certain activity (Hamalainen and Saarinen 2004). The military does a very powerful job at marketing itself to the youth of America and subsequently 'frames' what the experience of combative service could be like. Promises of serving their country, financial security, being all that they can be, and being the elite of the elite all carry masculine optimism with little to no mention of trauma, adversity, and the like (Collura and Lende 2012). This sort of an approach is effective at capturing the attention of young Americans but in no way does it help them with the realities of war, trauma, loss, and adversity that await them on the battlefield. In Zoe Wool's (2015) account of what it was like to endure repetitive trauma on the battlefield and have to endure life at Walter Reed Hospital, one of the premiere hospitals for veterans who have experienced grave wounds on the battlefield, she elaborates on issues such as dependency, self-doubt, and lack of confidence that wounded veterans experience. This is a direct result of the trauma and loss they were unprepared for as well as the road to recovery they are faced with as a civilian who may be handicapped in a physical, emotional, and cognitive sense. In Mike Stajura's piece (2014) on why veterans struggle when trying to return to civilian life, he states, "when Veterans leave military service, many of them, like me, are

leaving the most cohesive and helpful social network they've ever experienced. And that hurts. Most recent Veterans aren't suffering because they remember what was bad. They're suffering because they miss what was good." When tackling the effect that trauma has not only on battlefield prowess but also how it plays out within the assimilation process, permanent markers of orientation to a service member's identity can often be recognized. A constant theme that repeated itself within my research was the "brotherhood" and it had a tremendous amount of saliency that bound participants together. The action of putting each other in detrimental and dangerous positions or techniques (chokes, joint locks, etc) was the same thing that bonded participants together.

Much like potentially lethal adversity lived on the battlefield; potential trauma within BJJ brings participants together while also sharpening their combative wherewithal. The paradoxical relationship unveiled in this regard can be equated to a sense of social collectivity where individuals come together through situations that are life threatening and have the ability to reconstruct them together at a later time (Couch et al. 2008). This reconstruction process allows for both convergence and divergence within a particular time and place in recollecting events which mesh individuals together while also separating their identities through differing interpretations.

An example of this was seen when participant, Steve M., stated "the fun part about training in BJJ is that your brother is laughing with you one second then slappin' a rear naked choke behind you the next; it's a constant game of cat and mouse where roles are constantly reversing on one another which allows us to bounce between aggressor and defender....it is very similar to being in a close quarter gunfight except you constantly hate the guys you are fighting

against in the gun fight." The nuggets unveiled in this statement shed insight into the parallels felt and seen between adversity lived in BJJ and how it parallels, yet, differs from military combat. His reference to a close quarter gunfight and how training in BJJ is similar creates room for exploring the nature of the social bonds that are formed in BJJ and how it may be the same type of camaraderie that is experienced by military members who are deployed.

Buttressing the model of convergence through shared trauma, there is the element of bonding through consistent levels of shared adversity that was unveiled within my research. As seen in Tedeschi and McNally's (2011) work on growth after enduring a traumatic event, there are five elements that contribute to positive growth in self and others: (1) understanding the meaning of lived trauma and adversity; (2) emotional regulation of self; (3) social support and social fitness; (4) scripting and refining personal trauma narratives; (5) developing new ways of thinking about adversity and its meaning. Throughout the data collection process there were several occasions within participant observation where I noted "growth moments" between subjects where a potentially catastrophic injury was sure to take place but was avoided through quick decision making skills. These "growth moments" had one of two different consequences; (a) they created social rifts between participants and put a "bad taste" in their mouths about one another; (b) they were seen as potentially harmful moments that were avoided due to respect and wherewithal for one another that led to subjects becoming closer and more trustworthy to each other. Consistency in these sorts of moments permitted practitioners to build a strong wall of resiliency as it allowed for consistent wins or at least positive lessons learned through moments of adversity. Understanding that adversity is constant with every roll, embodying and accepting it, as well as enhancing their emotional regulation of what the

adversity meant (or not) was present and fed into the paradigm of scripting challenges as moments of growth and optimism. Particularly fascinating is how participants would converse with one another about what the potentially traumatic event meant to one another as well as what it could have been. The more severe the potential risk for harm often lead to greater bonding between participants as the stakes were higher and put them in situations with more to lose (shoulder locks, chokes, knee bars, etc). Thinking of the social consequences outside of the personal ones also shed insight into the saliency of how subjects constantly formed new ways of dealing with adversity on the mat as they tried to "play it cool" in uncomfortable situations. Within the military, this sentiment is sought after as young recruits often look to the "battle hardened" combatants who are "cool under fire" and able to stay calm in some of the worst situations possible. This display of being calm and collective in situations of chaos or while all odds are against them is an indicator of combative resiliency that often signifies the combatant is a professional and knows what he is doing.

When sharing the burden of lived trauma with others, positive gains can be made for some but not necessarily all; this was seen in my research where some participants saw BJJ for nothing more than a sport that allowed them to "fight and not get in trouble". The deeper medium that it served for the majority of the participants wasn't shared by all as two participants participated because they wanted to "fight and kickass". What was unique about the two individuals who did not embody the deeper correlations was that these two participants experienced significantly less combative encounters during deployments than the other subjects. Whether or not there is a concrete correlation is unknown and would require

additional subjects who did not endure as many combative engagements or lived trauma, yet, it does open a door of worthy exploration as to frequency of lived trauma and meaning making activities and their symbolic construction during reassimilation.

Acculturation and Civility

In Erwin Cook's (1995) classic deconstruction of Homer's Odyssey, he suggests that civilized behavior is characterized by friendliness, respect, and astute socialization. He contrasts such characteristics with reference to mythological beings named "Cyclops" that were known as havoc makers who always sought death, destruction, and barbaric endeavors; essentially, the opposite of civilized sentiments. In Daniel Quinn's novel (1992), Ishmael, we learn that civility is the distinct idea that there is a quest for constantly striving to live in balance, peace, and harmony with one another, yet, there is a constant battle with hegemonic forces swaying us to lose sight and balance of how to treat one another. When diving into the complexities of how service members re-adopt civility, this is not to say that they are already not civil. On the contrary, given the ritualistic nature they are accustomed to in battle they may very well be more civilized than most folks who have never tasted the likes of battle. Yet, the notion of civility and the ritualistic and expected components within a non-war torn environment is vastly different than what they had become accustomed to while down range. As discussed with Flanker, challenges he faced with civic rituals such as political correctness, tolerance, and patience within the work environment were legitimate challenges for him. He states; "Going to work every day is a damn nightmare. I enjoy my job and what my duties are but having to deal with the people is what chaps my ass. These assholes are lazy, unmotivated, and have no idea of what it is like to be in a stressful environment. They bitch and complain about their eight hour days and having to be stuck inside...give me one day with them in the heart of Afghanistan with 80 pounds of gear on, a weapon, and incoming fire...then they will know what a real day's work is. The soft ass attitude and pansy bullshit is what is impossible to tolerate. I want to put fire in all of their asses." Supporting this was Rudy's take on blending in with different social spheres, he states; "I always feel different than others. How I view issues and my answer to fix them is way more extreme than others. I don't understand the need to make everybody happy or the need to respect everyone's feelings. No one gave a damn about my feelings when deployed. All that mattered was if it affected the mission. That was it. It didn't bother me one bit because we had a job to do. This isn't elementary school and coming back home was like going from high school back to kindergarten where everyone has to play nice. It makes no sense to me."

The "hardened" approach displayed by both Flanker and Rudy can be characterized as not particularly "civil" and perhaps a bit brutal. Yet, their adoption of such behaviors were a matter of institutional necessity as well as pertinent to their missions while deployed. If adopting a stateside approach to civil behavior while deployed, they may have very well been ostracized by their peers and seen as a detriment to completing their mission, thus the distinction and difference between civilian behavior and that of a military combatants. In Kivisto's (2017) piece addressing "new assimilation theory" he elaborates that the challenge of assimilation is a fine balance of "cultural pluralism" (1420) where individuals must maintain an astute awareness between cultures they frequently navigate. Putting this in context of veteran assimilation the process of balancing balance between cultures opens the gateway for war fighters to ping-pong from one social sphere to the next. This matters as the platform required

for successful adaptation to civilian identity is a sea of transient cultural milieus filled with different etiquettes and expectations depending on the social role that they are occupying at any given time. Kivisto's mention of cultural pluralism fits the mold of building off the warrior ethos that combatants carry as the acquisition of new behaviors and perceptions adds to the repertoire of perspectives and framings of the world through a medium that is physical + mental and social that bridges the gap of civility that may otherwise be void.

Mission Focused Identity

Identity construction and making sense of why one does particular things, carries certain perceptions and invokes particular emotions is crucial to explore when tackling the complexities of reassimilation. As discussed earlier, the military has a blue print that it follows in order to inject its identity and enforce adherence amongst its service members. As explored by Paul Higate's (2003) book, Military Masculinities: Identity and the State, there is a "soldiery-equals-masculinity" sentiment (Kaplan 2006) that presents itself as a recurring model within military identity. Forging principles that are rooted in aggressive behavior, decisive action, and unwavering discipline lends itself to forging an identity that is constantly based off of "mission completion." A recurrent challenge that is seen within the assimilation process is that the majority of daily habits and activities as a civilian are sustainability based as opposed to a particular mission/objective with an immediate measurable result, often displaying the epitome of masculine and aggressive behavior. Buttressing this notion is the lack of continuity or unit cohesion as most civilians have not served in the military and do not carry a mission based mentality nor do they depend on the same social group for physical survival. My research

unveiled that participating in a combative sport with the same group of individuals on a frequent basis created a mission based prerogative that could be measurable if the participant chose for it to be. Through voluntarily participating in competitions as well as setting recurrent goals that practitioners hold themselves mutually accountable for, a strong sense of social continuity is forged within the BJJ community that relies on a combative medium, much like that experienced within the military while deployed on missions. Having a task or objective assigned, receiving direction and guidance from superiors (higher ranking BJJ practitioners), relentlessly conditioning both the body and the mind, as well as participating in a measureable outcome all lend itself to fostering the mission focused identity that they are familiar with.

Weaving in additional tentacles of association within BJJ and their identity is the notion that veterans are not only stakeholders in the mission (as it is self-propelled and defined) but also an integral part of the social support of their BJJ family. As seen in military based Family Readiness Groups (Parcell and Maguire 2014), participants become both spear tip and facilitator of support for their fellow practitioners. This shift opens up new avenues of development within their assimilation process as they are not solely focused on their mission, but also the mission and well-being of those in their BJJ training circles. During an in-depth discussion I had with research participant Travis A., he stated, "A big change that I felt was how much I began to care about the guys I was on the mat with. When you first start training it is all about imposing your will. Over time, you realize that the guys you are on the mat with are your brothers. You wish them no ill-will and you appreciate them and what they bring to the table for you. They are the ones that allow your jiu jitsu to grow and become better and you are theirs. You begin to care for them like the way I care for the guys I fought with while in Afghanistan.

You share life with them and walk the same path on a weekly basis. If it's not them prepping for a competition it's me and we are always here to help one another out. Just the other day one of the guys ran into a pinch with his car and Ben [fellow BJJ practitioner] owns a garage...he fixed it for him for free because that's what we do. We take care of one another so we can all grow together and see each other reach our fullest potential." This testament to the shift in the mission that most of the veterans who participated in my research shared has value; value in identity adaptation as well as acquisition of social capital which has often been discussed as "pivotal" when coping with severe levels of trauma, adversity, and making the assimilation process possible (Scott and Myers 2010).

Where most civilian activities have become sedentary in nature (due to technological advancements and shifts in the work environment), maintaining tasks and objectives that are mental + physical as well as social in nature are important. Considering the work done by Greg Downey (2005; 2008) on the strong influence that the Brazilian martial art of Capoeira has on community building and identity scaffolding, there is much to be learned about bodies in motion in a particular time and place and the collectivity that contributes to identity adaptation and building as well as "learning by doing". Putting the wheels in motion of identity scaffolding as a means of ever shifting missions and objectives within the civilian realm opens the door for veterans to reframe, learn, as well as build off their current identity. Being able to continue their quest for measurable outcomes through mediums that not only challenge them but feed the social cups of influence needed to push forward successfully in civilian life is vital. Having multiple mediums that allow for positive growth that require challenge, discipline, social communication, and tenacity are familiar elements that allow them to stay in a familiar space

(Burkhart and Hogan 2015) which is important as it does not create an ambiance of feeling ill equipped or hopeless which can contribute to depression, addiction, and deep levels of anxiety (Matazzaro et al. 2014). As seen in anthropological works that dive into embodiment and phenomenology (Candea 2018; Jensen and Moran 2016; Ram et al. 2015; Csordas 2011) there are well-developed understandings of interactions, their meanings as well as the effects of their outcomes. What is not as clear (and a contributing factor of my research) is the nature of intimate interactions that puts individuals in compromising positions and what transpires between them; either good or bad. Analyzing the embodiment of intimate interactions that have combative qualities, promote positive social outcomes and mitigate previously lived stress creates a different type of phenomenology that hasn't been deeply studied yet.

BJJ As Therapy

Social interactions, commitments and meaning making processes that combatants go through when training are a major value in BJJ. Clinically, the participation in BJJ could potentially be viewed as 'play therapy' (Schaefer 2003) where bodies are in motion and in a play-like state with one another. It is well studied that there is much to be learned about bodies that are together, in motion, and in communication in some form or fashion.

From Durkheim's elaborations on social collectivity (1893) to Gerbert Mead's writings on self and society, there is much to be gained through the linguistic interaction, emotional framing, and cognitive processing that takes place within a group. When adding stakes into the role of "play" as something much more than just arbitrary activity and in the form of combative

sport, a shift in what it means to participate in that activity takes place and elevates the meaning making process to how participants are self-scripting the interactions that are taking place as well as processing challenge and adversity.

In Loic Wacquaint's (2004) ethnography on boxing in Chicago, he dives into the importance that the pugilistic sport holds for inner city individuals and the value it gives them to make sense of their adversities as well as the hope, structure, and identity it instills.

Understanding the ritualistic elements of martial habitus (Bourdieu 1990), interpersonal growth, and identity cultivation offered in my own research, I was able to explore play therapy that was sport based while capturing vital ethnographic data that can buttress existing notions explored in psychology for reintegration and assimilation (Smith and True 2014; Owens et al. 2009; Witvliet et al. 2004).

Buttressing much of the ethnographic work done by Downey (2012; 2008; 2005) as well as his recent piece on apprenticeship (Downey et al. 2015), there is value found in actually "doing" something as opposed to reading or watching media about it. The importance of "apprenticeship" that is seen in most scaffolding activities requires learners to put their "bodies in motion" in order to capture the complete phenomena that is associated with the activity. My research pushes this element of neuroanthropology forward and contributes psychological, social, and biological aspects of anthropology in general. Recognizing that there is value in learning through bodily immersion for individuals who have a grave amount of previously lived trauma fosters an understanding that a physical + mental and social model charged with identity elements of their previously lived trauma has an impact.

Expanding The Physical, Mental and Social

Throughout participant observation I closely noticed the power and influence that ritualistic practice had on my research subjects. The consistency in academy etiquette, uniform, mental challenge, pushing through physical limits, as well as increasing social capital all contributed to positive and familiar growth factors. Much like their initial indoctrination to military life in boot camp and basic training, the assimilation process into BJJ life proved to be both a physical and mental fusion with their understood identity. Of interest within this model are the biological consequences associated with physical activity and the "pain vs pleasure" sensations that are induced after great physical challenge. Release of protein contributors such as mechanistic target of rapamycin (mTOR) (Lloyd et al. 2017) as well as the neurochemicals serotonin, dopamine, and endorphins (Raichlen and Alexander 2017) are all products of intense physical activity that have been shown to contribute to neuroplasticity (Raichlen and Alexander 2017). When thinking about the necessary elements needed to push through adversity, challenge, and cultural acquisition, having a reward based approach to small wins is important and is a contributing factor in understanding brain plasticity. In Bartone et al.'s work on mental hardiness (2009) they discuss the need to have robust mediators in place that will allow for a healthy cascade of paradigms that are meshed together at both a physical level as well as a mental level. When exploring how neuroplasticity works, building up mental hardiness lends itself to increased neuroplasticity (Davidson and McEwen 2012) which thrives off of the release of neurochemicals such as serotonin and dopamine.

Knowing that there is an inherent relationship between the physical and the mental, it makes sense that a social activity is needed for veterans that permits a physical + mental outlet that is reminiscent of what they experienced while in service. Beyond mental framing, actually putting bodies in motion for an objective/task that is combative in nature yet still acceptable and civil can possibly boost neuroplasticity and enhance the assimilation process. Currently, the military is undergoing ground breaking research to understand the essence of neuroplasticity and what it takes to achieve it. The Defense Advanced Research Project Agency (DARPA) is exploring a program entitled Targeted Neuroplasticity Training (TNT). According to DARPA (2016), "the new program, TNT, seeks to advance the pace and effectiveness of a specific kind of learning—cognitive skills training—through the precise activation of peripheral nerves that can in turn promote and strengthen neuronal connections in the brain. TNT will pursue development of a platform technology to enhance learning of a wide range of cognitive skills, with a goal of reducing the cost and duration of the Defense Department's extensive training regimen, while improving outcomes."

The process being explored by DARPA requires the implementation of a neurostimulation device that will manually boost synaptic plasticity. Differing from DARPA, my research converges physical activity with mental prowess through exercise, sport, play, and socialization rooted in familiar neuropathways while generating new ones and effecting how participants make sense of their world, both past and present.

A fascinating theme that repeated itself throughout my field work was the emphasis that participants put on the physical benefits of training BJJ. All twenty of the subjects involved within my research stressed that the physical challenges involved required during both warm

ups and rolling were strenuous and required the entire body to be in sync with itself.

Participant Travis A. stated, "I am used to going to the gym and lifting weights. Doing two body parts a day or even doing a circuit routine can be challenging...but not as challenging as rolling.

The idea that you are having to make real time decisions on your movement, technique, and monitor your stamina depending on who it is you are rolling with gives it a whole new challenge. You learn real quick what true strength is that is functional...not fancy but functional. When thinking about my time in the sandbox all that mattered was what was functional. We didn't care about any of the frills on our equipment...it either worked or it didn't and if it didn't it was out the damn window. BJJ is the same exact way. You are in a fight...a strategic fight that pushes your body and mind past its comfort zone so you have to rely on efficiency to stay in the fight and grow as a practitioner."

Buttressing Travis's comment, Flanker stated, "Every time I train I leave dripping sweat and I love it, it's a rush that relaxes me like nothing else can. If I don't train literally at least 3 times a week I become a raging asshole. I can't talk to people, I can't sit in traffic, I can't do shit at work...it's the ultimate addiction for me. Being able to roll with my brothers and put myself to the test throughout the week keeps me in the fight and helps me deal with bullshit in the civilian world. Without the rolls and my brothers I would be on meds out the ass and stuck in a shrinks room...hell, I may even be back out contracting because being in the fight is all I know."

Considering the physical effects that BJJ has on my research subjects it is worth noting that being in "the fight" matters to folks within my demographic. The sheer notion of a physical fight calls upon synergy between the mental and the physical to combine in order to achieve "victory" which runs parallel to accomplishing a particular task or mission. This framing allows

subjects to root themselves with a dependable and constant combative outlet while acquiring new skills, perceptions, confidence, and understanding of the civilian world through self-made tentacles of association to their past, present, and potential future.

In Stanley's (2010; 262-263) work on mind fitness and neuroplasticity she states, "Each time we choose to ignore an old maladaptive habit, we weaken the neural circuitry associated with that pattern (what we would call a 'brain groove')...[through this approach] it is possible to change our conditioning toward anxious or angry trains of thought. To do this, when the anxious or angry thought arises, rather than follow the impulse, a person can turn his mind elsewhere, "starving" the old thought pattern, and consciously choose to the see the situation in a different way, feeding a new thought pattern". Though I agree with the idea that humans can make conscious decisions to "think about" a situation in a different way, I argue that it takes more to "starve" conditioned brain grooves than just conscious decision to make timeefficient changes. For physically capable and able combatants there must be a physical element to the decision making process that induces additional neurohormones that forge new brain grooves and create a reward/consequence pathway within the brain. In Caddick and Smith's (2017) piece on how exercise is medicine for military veterans, a proposal for imploring more exercise-based interventions is called upon. Getting combatants' bodies moving and increasing oxygen, neurohormone release, and socialization with others all contributes to the betterment of mental prowess and being set up for success when dealing with the challenges of assimilation and pushing through past lived trauma.

Of noteworthy significance is the work by Whitworth and Ciccolo (2016) where they examine the effect that exercise has on veterans who suffer from PTSD; their findings conclude

that there is a positive effect on the mental health and well-being of veterans suffering from PTSD but more longitudinal evidence is necessary. Though the focal point of my research was to examine the effect that BJJ has on the assimilation process for combat veterans there are certainly strong connections to PTSD that this approach can have. Given the longitudinal nature of training in BJJ, there is an opportunity to examine the long term effects of participation in military members who suffer from PTSD and how they can cope with the symptoms and challenges of the disorder.

Within anthropology there are several accounts where the physical + mental and social model shows value. Wacquaint's (2003) work with inner city boxers in Chicago, Downey's (2005) work with native Brazilians and the martial art of Capoeira, as well as Pettinen's (2012) work with the Japanese martial art of Taijustu all contribute to an understanding that having bodies in motion, conducting ritualistic behaviors, and embodying martial culture creates additional brain grooves that allows for growth, coping, enhanced cognition, and the forging of mental toughness. Converging combative activities together through sport and play allows for a sense of civility and acceptance amongst mass society that distinguishes them from raw combat. This matters when thinking of how to incorporate the physical + mental and social approach to assist combat veterans in the assimilation process.

Chapter Six

Mental Toughness and Post Traumatic Stress

Currently, the American Psychiatric Association's, Diagnostic and Statistical Manual (ed. 5) defines PTSD as a disorder which spawns from an individual having "exposure to actual or threatened death, serious injury or sexual violation. The exposure must result from one or more of the following scenarios in which the individual directly experiences the traumatic event; witnesses the traumatic event in person, learns that the traumatic event occurred to a close family member or close friend (with the actual or threatened death being either violent or accidental); or experiences first-hand repeated or extreme exposure to aversive details of the traumatic event (not through media, pictures, television or movies unless work-related)" (American Psychiatric Association 2013). Symptoms associated with the disorder consist of intrusive memories of the traumatic event(s) where patients have consistent flashback or nightmares, social avoidance where human interactions become numb, and increased emotional arousal which can manifest in substance abuse, anxiety, or constant irritability (among other things). Currently, it is estimated that 2% - 31% of all U.S. military personnel who were involved in Operation Iraqi Freedom, Operation Enduring Freedom, and Operation New Dawn are suffering from PTSD (Kip et al. 2013; Crum-Cianflone 2015, Hall-Clark 2017; Armour 2017). This wide gap in assessing the disorder's prevalence is a testament to the confusion about the nature of the disorder as well as the appropriate modes of diagnoses. Given the subjective, emotional states which depict symptoms such as irritability, anger, hypervigilance

and the like, the importance of recognizing culturally standardized behaviors as well as socially accepted behaviors are important when assessing the universality of the disorder.

Typically, PTSD symptoms are set off by "triggers" (Finley 2011) which take a service member or veteran back to a time where they endured combative trauma or significant loss and suffering. These particular instances consist of certain sounds, smells, movie/TV scenes, or any other stimuli within an environment that reminds a service member of conditions lived while in combat. For the individual who is going through the assimilation process, the constant interruptions that are caused by triggers creates a major hindrance in the ability to respond to "normal" social stimuli. Such interruptions can highlight the importance of having enhanced plasticity in order to navigate between different identities and lived trauma. Being able to scaffold one's identity is challenging enough without the added burden of enduring PTSD and when considering the additional challenges associated with the disorder it makes the prevalence of PTSD triggers much more impactful. Not having control on when something in their direct physical or social environment that can kick off PTSD symptoms is problematic and can create additional stress on veterans. The constant immersion in dual environments, contextually, conjures a massive disjuncture in behavior when appropriate mediators are not utilized. To have been conditioned for counterinsurgency where military members are expected to be able to deal with civilians on a regular basis and in a moment's notice be able to take the lives of terrorists who may have the same physical appearance as civilians is not easy. Simply forgetting about their training, experiences, and dual perspective is not possible as those moments contribute to the overall identity of military members and mesh into who they are when they are discharged. Balancing a healthy duality requires mediators. Such mediators

should mesh who they were with who they are and who they aspire to be as a person, or at least elements of it.

When considering the challenges associated with PTSD is the understanding that PTSD is very much a result of Western medicalization and mental health discourse. As alluded to in Watters' (2010) piece entitled Crazy Like Us: The Globalization of The American Psyche, there is ethnographic indication that symptomology and methods of treating PTSD are not universal. Rather, there is a clear divide between the processual components that make up negotiating trauma and the right steps to take in order to move forward with one's life post-trauma. From a process perspective, the coping that is needed in a clinical sense has certain mile markers that contribute to "getting over" trauma and pushing forward with one's life. When considering the right steps to take to embody that trauma and not chunk it into processes and have it contribute to the person that they need to be in order to assimilate and become productive civilians. Culture, value systems, emic understandings of etic interventions, social constructions of horrific, and previous exposure to traumatic incidents contribute to the recipe of what trauma is in a given culture and community as well as the most effective ways of creating positive gains after a traumatic event. According to Watters, Western philosophy of trauma and horror has applied itself in a universal sense with an over-zealous approach to imposing things such as "psychological first aid," "eye movement desensitization and reprocessing (EMDR) therapy," psychological inventories, administration of Paxil and Zoloft, as well as other Western techniques of traumatic relief which could very well cause more harm than good in Non-Western countries. These approaches can undermine local understandings of trauma and stress and have the ability to create an identity disassociation from the traumatic event due to

external and new ways of having to verbalize lived-trauma as well as engagement in modes of therapy that are outside of culturally practiced understandings. Watters (2010) provides a solid account in his description of the 2004 Tsunami in Sri Lanka in which drug companies, clinicians, NGO's, and "parachute researchers" flooded the country within 72 hours of the tsunami making landfall as a means of testing out their proprietary methodologies of addressing trauma. This led to Western ideologies on ways of thinking about the event that were pressed upon natives who were not accustomed to viewing or discussing trauma within a Western lens (Watters 2010; 81-87). Instead of taking the time to understand trauma and stress in the lens of locals, there was an invasion and "psychological colonization" of Westernized ways of viewing the world which has very real danger of amplifying the effects of the original trauma ensued. This happened in the 2004 tsunami, but also in Watter's account of clinical depression in Japan (2010) where large pharmaceutical corporations "created" a market for anti-depressant drugs (i.e. Paxil) by playing on cultural constructions of sadness, suicide, idioms of distress (Nichter 1981), and explanatory models of illness. The ability to manipulate the significance of symptoms and globally, promote medications which undermine culturally appropriate modes of understanding illness contributes to the disjunctured views on temporal issues such as trauma, adversity, and stress. Recognizing this manipulation matters as ethnopsychological phenomena continue to be rebranded with western ideologies (Kirmayer 2007) as a means of expanding pharmaceutical companies' reach into the global market.

Trauma Blends

Experiencing trauma in itself blends a multitude of meaningful emotions, cognitive processes as well as biological consequences that often are imprinted into the conscious and subconscious of the endurer (Jenkins and Hollifieid 2008). As alluded to in Jenkins and Hollifield's (2008) piece regarding postcoloniality after the Vietnam War, and subsequent birth of the label "PTSD" as we know it, there is often a challenge in making sense of external violence while having a "fragmented self" which affects both colonizers and the colonized during war and after war. Often, the colonizers or invaders carry misplaced notions of their role and rationale for colonizing and frequently shift their psychosomatic understanding of alterity once socialization occurs with the oppressed populations that do not represent a threat (innocent civilian). Building rapport, creating human tentacles of association and identifying with the everyday lives of those being invaded provides a blurred mesh that can spark fragmentation in the mission of colonizing a particular group or region (Gutmann and Lutz 2010). Equally substantial is the mentality of the conquered, or owners of the territory being invaded. Often, their perceptions are based upon a constructed, conscious awareness of alterity that is perpetuated by domestic combative forces seeking to oust the invader. When trauma is endured in this sort of setting, their subjective processes of environmental meaning making are blended between the two realities of pre-trauma identity and post-trauma identity (Parrish 2008); respectively, the change in perceptions, emotional processes and social interactions depends on the severity of the trauma endured (i.e. difference between witnessing a close relative get shoved to the ground versus watching one's entire family be tortured to death). With the participants of my research carrying the role of the "invaders" there is a very real sentiment of fragmentation

when making sense of the trauma endured while deployed once stateside and going through the assimilation process. The emotional "triggers" as well as the shifts in their identity contribute provoke questions about why they did what they did when deployed and how to make sense of it as a single person not attached to something bigger than themselves.

Nevertheless, the presence of "vehement emotion" (Jenkins 1991) is always conjured when considering trauma severe enough to invoke the onset of PTSD and is correlated with attachment to the traumatic event which hinders one from moving past the brutality of what they endured. This has consequences within identity construction and consistently affects previously acquired cognitive abilities to reasonably make sense of surroundings, social relationships, and moments of high stress. In a sense, it falls in line with the old saying of "two steps forward and one step back" as progress that is made in pushing through trauma is hindered by triggers that keep that trauma and its consequences at the forefront of an individual's mind. This challenge lends itself to increased personality disjunctures where an individual rebukes prominent understandings of personhood and isolates their ability to share meaningful interactions (Seligman and Kirmayer, 2008) which are crucial in the reassimilation or "redeployment" process (Robichaux and Fleming 2013). Such disassociation can lend itself to the drying up of the emotional well that perpetuates positive outcomes post-trauma and hinder cultural understandings of the social being as a means of creating social capital. As stated by Parrish (2008; 186), "Emotions...define and orient the self; they help produce the will-torespond, the gritting of the teeth, to go on, just a bit farther, whatever life brings."

On PTS and Reassimilation

As described in an interview when asked if he was afraid of dying in war, service member O'Byrne who had fought in Afghanistan states, "No, I was too numb. I never let my brain go there. There were these boundaries in my brain, and I just never let myself go to that spot" (Junger 2010: 64). Being "numb" and not embodying the totality of traumatic situations as they occur creates compartmentalized understandings of the self which typically become unraveled once returning from deployment. Though these sorts of delays in emotional processing allow for functionality to occur within combat, their long-term psychological effects are grave (Gutmann and Lutz 2010). In considering physical survival, it is a necessity to relentlessly be aware of one's surroundings and be ready to act while in a combative theatre, particularly when there is no certainty of when a threat will be eliminated. The battle could last for two minutes or for two days; this type of ambiguity creates a niche (Mackinnon and Fuentes 2012) model of quick reactions which depend on the stress response system at an individual level that is collectively shared at a group level for warriors that are fighting to protect themselves as well as one another. Through conditioning, replication, and repeated coordination the model that is created is specific and unique to the combative variables at hand which makes the niche elements particular to the specific unit that the combatant is a part of.

Displacement from combat environments where quick reactions, hyperarousal, and avoidance are not considered social norms can intensify the symptoms embodied due to lack of socialization with like-minded individuals. What were once necessary behavior patterns and ways of thinking, interacting, and embodying an environment changes to a new place where

social expectations do not require the same models of interaction. The shift in culture and lack of understood milieus can bring about a new type of trauma where one's identity is further fragmented and pushed farther away from integration. As discussed in Turner's (2012) work on "Communitas" generating positive emotion after trauma lies in collective resilience, grit, and shared positivity with individuals that have gone through the same trauma or can at least identify with similar experiences. Having the ability to negotiate and cope with trauma with individuals who can identify with similar, if not the same, experience serves as a vital element in maintaining a sense of independent and collective identity.

associated with PTSD are contextually appropriate and served a purpose to keep them "in the fight" while deployed. Hyperarousal, avoidance, and restlessness are attributes that are part of surviving while at war and requires physical and mental resilience. Such behaviors that are found in the ingredients that make up "PTSD" have often been challenged within portions of the veteran community. For more than a decade, it has being argued that PTSD is not a "disorder", rather, a natural response to the environmental conditions and challenges they were exposed to; a necessary adaptation for survival. As elaborated by Georgetown University School of Medicine Psychiatry Professor, Dr. Janice Krupnick, Post Traumatic Stress (PTS) is not necessarily a bona fide psychiatric condition; it is a natural response to a stressor (Krupnick 2017). This adaptation process is seen not just in the wake of trauma, but also in how trauma is made sense of and the activities that individuals involve themselves with to either shift their focus on said trauma or to live in a repetitive cycle of reliving that trauma in hopes that they will someday make sense of the initial "why" and "how." Buttressing this is Army General, Peter

Chiarelli (2011), who states the following in regards to PTSD, "I drop the D. That word is a dirty word. I believe it's post-traumatic stress — I really believe it's probably closer to shell shock."

A Disorder or Not

Though the focus of my research was not on PTSD, the disorder was certainly a topic of conversation at the beginning of my data collection as several participants had worries about the meaning of my research and that it would unveil that they suffer from PTSD. Furthermore, many of them disagreed with the idea of "PTSD" and believed that they endured "PTS" as a direct result of living through extremely stressful events and the only way for them to have survived was to have hypervigilance, rapid arousal, and other symptoms associated with the clinical definition of PTSD. None of them saw themselves as having a disorder or viewed other veterans who had been officially diagnosed with PTSD to have a "disorder"; rather, prolonged reactions to stressors that were developed to keep them alive. When asking participants the following question during semi-structured interviews, the responses from my key informants elaborated a profound perspective about the meaning of trauma as well as its aftermath:

"How do you make sense of the trauma you endured while serving in combative deployment?"

Steve: "Man it's just part of what you sign up for. I don't think you ever make sense of it...it's more of accepting it as a part of being an operator. You know you're not signing up to bake cookies...it's a job where you are volunteering to go into the most dangerous environments to

do bad things to bad people. The tough part is dealing with the loss of your friends and the younger soldiers. That part is very very difficult. I try not to remember those moments but there isn't a day that goes by where I don't remember my brothers who fought side by side with me and didn't make it home.

Travis: "Make sense of it? That's just war. I never lost any of my best friends but dealing with trauma when you are 30,000 feet up in the air is intense. If it wasn't SAM's or other fighter jets our main concern was always having enough fuel. The sky is unforgiving...there is nowhere to hide and when you go down you go down very fast. One of the things that still haunts me to this day is the potential loss of fuel in my vehicle. It sounds stupid and my wife thinks I'm nuts but I never let my tank get below ½ full. My head is constantly on a swivel when I am in traffic too. The whole thing about having PTSD because of what I went through during combat missions never really got to me. I have always thought that it's a tradeoff you knowingly are doing. I joined the Marines to be a Marine. That title comes with a cost. The cost is different for each Marine but being comfortable with combat situations is part of what you do. You can't expect for that understanding to just go away. I know people do have that expectation but it's just not reasonable. I have had to see and do shit that I would never want my family to do but that's because I volunteered to do it. With that comes the cost of being okay with a lot of things that aren't okay back here at home. It just comes with the job. It does not mean that there is something wrong with me or that I have a disorder."

Sean: "I come to terms with it. I can logically make sense of why certain ambushes happened.

Tactically it lines up. When it comes to dealing with the event itself I embraced it as its what

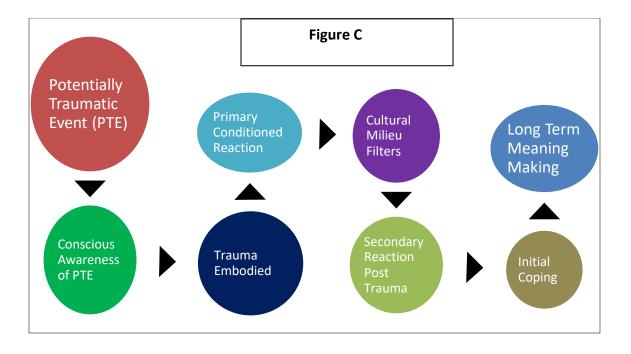
makes you a member of the military. The military is about defense, war, and doing things that regular people don't. I don't like to complicate the trauma that happened over there...you always know in the back of your mind that it could happen so when it does it is no surprise.

That's not to say it doesn't suck when it is happening and you're in the middle of it...when you have the time to process everything afterwards you realize that it's part of your duty and what you are trained for."

Flanker: "Damn, that's a heavy question....not really sure where to start with that one. There are so many things that I haven't been able to make sense of. They stay in the back of my mind as unknowns...no rhyme or reason....they just are. At the point of life where I am, I turn everything over to God and allow him to take the burden of all that trauma off. Big questions used to really play through my thinking....a lot...not to say that I don't get them still.... There's so much I don't know and recognize that I don't know when it comes to what happened in the sandbox that I don't spend too much time trying to think of how to make sense of it. I tend to live in the world of certainties now. I'm certain that I will honor those who fell...I'm certain that they fell for a just cause...and I am certain that their memory will always be with me. If I got consumed by all of the miles that I have been through...I would be in my head all day every day. I have a life to live and lives to honor...if it ain't useful and productive it's gotta go. Period. To the men I lost that I fought with...I always remember that they died for a just cause and that does give me a sense of peace though I would love nothing more than to be cracking open a cold one with them right now...that's not how the dice were rolled so we roll with what we got. That's it."

Contextually, applying the idea of PTS as an umbrella term that describes all of the adaptations that are associated with combative trauma is dangerous. There are ethno-innuendos particular to each person that may stem from trauma lived in childhood or pre-service that lends itself to truly having a disorder as opposed to necessary adaptations needed to survive in combat. Yet, it is important to note that PTSD is not a universally accepted diagnosis, rather, it is a construct of Western Psychology that does not take into account the ethnocentric nuances that dive into the "how" and "why" lived trauma has a lasting effect (Kienzler 2008). Tackling this disjuncture in interpretations on the effects of trauma, there is room for exploration between potentially traumatic events and what actually makes an event become traumatic as well as the effects that it has within identity and social interactions.

Seeing the perspective of the majority of my participants and their preference of PTS as opposed to PTSD, it does ring true that there is the possibility that fear of stigma or perceptions of "weakness" keep them convinced of having nothing more than an adaptation to lived trauma. While this may be the case, it does leave room for further investigation into the construct of PTSD as being a legitimate product of going to war as well as living in a medical environment of western influence where labeling and varying degrees of diagnosis reign.



Of keen importance is to consider the cultural milieu filters that exist and discern the lasting effects of trauma. The meaning making process as well as decisive action in the wake of trauma often has strong connections to previously lived experiences as well as subjective interpretations of what the specific event symbolizes. As discussed in Mahat-Shamir's piece (2017) on the need to discern between PTSD and adjustment challenges post trauma, there is a convincing push to understand that PTSD is not a universal diagnosis as different cultures have divided scales of what trauma is and means. Buttressing this are the individual micro-cultures that are particular to each person and makes up the ingredients to the many lenses that interpret information and experiences. In Figure C, there is a model that I developed that combines sensory perceptions with conditioned responses as well as cultural milieus that shape the overall impact and meaning making of lived trauma. The model begins with a potentially traumatic event (PTE). This terminology has been used by several scholars as a useful way of

tackling events that have been perceived and lived through as traumatic by some but not all. In Overstreet et al. (2017), Peterson et al. (2008), Goldberd and Freyd (2006), and Goodman et al. (1998), there are researched examples of natural disasters, car accidents, sexual abuse, war, and other events that can be labeled as PTE and how they play out with adjustment disorder, anxiety disorders, as well as PTSD. Immediately following the PTE is the conscious awareness that a PTE is happening and there is a reaction (it can be biological as well as physical). This reaction leads into a primary reaction that has either been conditioned or not (soldiers responding to gunfire, driver slamming on the breaks of a speeding vehicle, sexual assault victim screaming for help, etc.). The mediator of it being traumatic or not begins to take hold and if indeed it is seen as a traumatic event, the trauma is embodied and an impression is left on the individual. That impression is then seasoned by cultural milieus that dictate the beginnings of the meaning making process, coping, as well as secondary responses to the PTE depending on the degree of it. It can easily be argued that there is not always a secondary response, yet, the idea that there is a follow up or subsequent reaction to a traumatic event seems likely even if it is a biological level and not expressed physically.

Applying this model to combative trauma, the need to understand trauma compartmentalization becomes important as often compartmentalization allows for service members to keep their primary reaction to trauma in "the game" and not have secondary emotional responses or stress take over the clarity needed to stay in the fight and push through the adversity at hand. Towards the end of participant observation, I was diligently watching Steve roll with Travis on a Wednesday night. Steve was recovering from an injured shoulder and self-testified that he shouldn't be rolling but couldn't take it anymore and needed to hit the

mat. Once they fist bumped they began slowly working different positions and combinations. Steve would adjust from attempting to put Travis in an arm bar to a triangle choke while inherently setting up a sweep to attain mount. Simultaneously, I could see Travis looking for openings and playing defense while also seeking to pass guard. In one quick movement, Steve attempted to sweep Travis onto his back but failed; Travis passed his guard and got to side mount and quickly to full mount. No sooner that Travis got to mount, Steve trapped Travis's left arm and left leg to roll right into his guard. The entire time both were laughing and egging each other on as was common for the two of them to do. Yet, once Steve landed into Travis's guard, Travis immediately went for an *Omoplata* which is a submission that isolates the shoulder and will dislocate it if your training partner does not tap out. As soon as Steve found himself being dominated by position and leaning into the shoulder submission his laughs and jovial banter with Travis completely stopped and it was clear that he was now facing a PTE. The shift from playful interaction and rolling to an increase in pace as well as the stakes for potentially facing a traumatic injury changed the landscape of their interaction and what it meant in that very moment and time. His primary reaction was the *Omoplata* defense which is to roll through the submission and end up on his back to defend from side mount or mount. Being that he had a conditioned response to alleviate the PTE he built the confidence to know how to respond to the PTE and ultimately avoid a catastrophic situation which would have had him out of training and work for months. Once he defended the submission, it was clear to see that the environment between both practitioners had changed and the social oil that kept their camaraderie strong at that moment became challenged. Immediately, Travis apologized to Steve and said, "Shit bro that was my bad... I forgot that that was your bad shoulder." Steve

responded, "Close call dude...watch it next time." Immediately, they both slapped and bumped hands and began to roll again. This type of exchange and interaction between others observed throughout my data collection leant itself to understand how PTE's can play out when there is conditioned resilience built through repetition, confidence, trust, and rapport between two practitioners sharing the mat. Additionally, pushing the limit with one another as well as pushing the limit for one another opens up the transactional nature of how combatants build themselves up through extreme circumstances, yet, are willing to do anything for each other another which contributes to successfully dealing with PTE's.

The Daily Grind

Daily rituals, habits, and perceptions matter in the assimilation process. Of particular interest are the common struggles veterans have in making sense of stress associated with non-life threatening decisions. Getting accustomed to "a world where the stakes are rarely life and death" and where military training is not valued makes it difficult for veterans to find employment as well as maintain a sense of purpose which often fragments their identity. Finley (2012) makes valuable reference to Clifford Geertz's (1973) book The Interpretation of Cultures, in which the process of meaning making is described as culturally-dependent and conditioned through acceptable responses to specific cues and events. In the case of veterans, many conditioned responses that had acceptable meaning in the military or in a combative realm share a different meaning within Western, social norms and are often not favored. For example, public displays of anger, lack of interpersonal communication, and numbness to

socially, important interactions can often times lead to diminishment of social capital and further hinders their ability to make a smooth transition into a "normal" civilian life. This notion is buttressed in Matthew Gutmann and Catherine Lutz's book entitled, Breaking Ranks, in which six veterans give their account as to how experiencing combat has led all of them to protest the war in Iraq. Challenges of divorce, loss of religious faith, psychological strife, and putting pieces back together of their fragmented identities are accounted for as well as the "disillusionment" of America, the military, and the symbolic nature of what being a "soldier" really means (Gutmann and Lutz 2010). Of particular value within this text is an account given by research participant Demond Mullins. Demond was a former dance teacher in New York City who enlisted in the army as a means of receiving tuition assistance for college as well as for subtle notions of patriotism. Once he was deployed to Iraq, his perception of war, Iraqis, and America's role in OIF was altered by his belief that he had been tricked, fooled, and manipulated by his government. Seeing innocent civilians get shot by US forces, framed for being terrorists when in actuality they were not, and the constant dehumanizing of the enemy played a toll on his ability to maintain a healthy perspective of himself and his subjective reasons for justifying actions in combat. He states, "...there was something I honestly admired about the people we fought and killed in Iraq. A lot of people were saying, 'Allah Akbar' at the time they expired. I admired that because they believed in something so much that they were an oak tree. They were an oak tree, and they were willing to die for it. I was not willing to die for what I was doing in Iraq" (126). This lends itself to Panter-Brick and Eggerman's (2012) account on resilience and how belief, hope, and faith are crucial in making sense of one's purpose within traumatic environments.

In Hauxtinger and Scandlyn's book entitled Beyond Post Traumatic Stress (2013), ethnographic accounts are given of the challenges experienced by not only veterans who suffer from PTSD but the individual family members of those service members. As one Army wife recounts about three different deployments her husband had been on, "I've gotten a new husband three different times...so much changes...it's like bearing a new person" (138). This matters when considering the lack of social capital that most service members have when entering the civilian world and the need for close family members and loved ones to assist in coping with displacement, stress, and lifestyle changes associated with war. For service members having reassimilation challenges associated with their time in combat, they view their adjustment challenges through military enculturation and civilian understandings of what trauma and stress is and the expected timeline necessary for the effects of trauma to play out (Kilshaw 2006; Messinger 2010). Family members who have not undergone the same enculturation through the exposure of combat, suffering, and trauma associated with participating in war share a different temporality of their service member's psychological wounds as well as their role in making sense of those wounds. Messinger's piece (2010) suggests that expectations of rehabilitation time for psychological wounds makes a difference in the ability to maintain social bonds that are meaningful. For many redeploying into the civilian world, time is not a linear temporality. Rather, the past, present, and future are bundled together where lived traumatic events depict current perceptions and abilities to foster hope and navigate social challenges both present and in the future. This is particularly true when considering the consequences of multiple traumas occurring at once.

Events such as displacement, being shot at, exercising constant vigilance, suffering physical injuries, watching comrades die, and killing other human beings have neuroanthropological implications which alter value systems, social priorities, and deplete luxuries of abstract thought for making sense of horrific acts. Fostering social tentacles of association where familial interactions can provide the type of unwavering, solid, experience based social support needed is not as easy as saying "lets talk about it, I am here for you." There is a thirst and need for service members to be around their "second families," the men and women who fought with them, bled with them, and shared the same "local world" (Messinger 2013) while deployed. This experience is keen as it takes veterans back to their traumatic experiences and makes it a present reality which can be verbalized and shared with cohesive understanding of subtle nuances such as smells, sounds, and other individuals present during the trauma. These experiences matter and allow for social bonds to be reinforced, yet creates a potential challenge for veteran families as they do not share the experiences necessary to make intimate connections and open the box of trauma encapsulated within their loved ones cognitive awareness.

Consistency and fostering "incremental resilience" (similar to having "little wins") proved to be a niche offered within BJJ. The social structure, dependability, intensity, and combative innuendos needed for social "meshing" were all apparent. The quenching of the thirst for camaraderie and the creation of a band of brothers that is forged through blood, sweat, and tears are attributes that participants frequently discussed and that I found to be particularly salient within their participation. A fruitful account on the importance of consistency in training came into play when I would keep track of who was on the mat

throughout the participant observation process. Those who were not in class on a consistent basis and showed up intermittently seemed to lack the camaraderie that others who were there all of the time had. This was noticeable through the social interactions that were seen at the beginning of class. Those who would show up without consistency seemed to have more of an isolated rapport with only 2-4 other BJJ players. The exception that existed with this is if the participant was a seasoned player who had a high ranking, though it was rare to see inconsistencies in attendance from those participants. For those who did not put in the "dirt time" (a slang phrase that is used to depict training time on the mat), the consequences within their ability to socialize with others practitioners as freely wasn't constrained, yet, there was a sense of awkwardness or social bridge to cross in order to plug back into the brotherhood that perhaps was once shared when having more time with one another.

During a Monday evening class on the fourth week of participant observation, I saw an interesting interaction take place between Travis and Joe, another member of the academy who was not a participant in this research. While practicing a new choke sequence with each other, Travis told Joe that it was good seeing him on the mat and that he should make it in more often. Joe responded subtly that he had been busy traveling for work and had missed being on the mat. Travis told him that he completely understood and that he knows how the "grind" is. After the initial conversation, both began bantering back and forth as if they had been best friends for years. What was unique about this particular situation was that Travis led the conversation in motivating Joe to train more often and found a common ground to understand his civilian "grind". Creating an environment of support and encouragement for

each other, not just as vets, but as civilians and leaders in their respective communities proved to be an element that was fostered within BJJ.

Additionally, sharing previously lived traumas with others who were not in the military and being comfortable doing so played a role. On several occasions there were instances where Flanker and Steve would both talk to younger practitioners about their time in the service and the things they saw in combat. They seemed to do it not from a position of bragging or boasting, rather, from a position of teaching "young bucks" the realities of war. While there were many moments of younger students being fascinated with combat, Steve and Flanker would often share narratives about the loss and trauma they endured as well as their victories. In a sense, there was a tribal vibe where many of the participants within my research got to a point of feeling responsible to help those who were not experienced in combat actually learn the harsh realities involved with warfare. The fact that they were motivated to talk and felt the need to connect about their experiences leant itself to pushing the reassimilation process forward. Having something positive to contribute and being comfortable volunteering their experience for the betterment of others showed the value of BJJ and the combative socialization that consistently is shared.

Having the academy to go to on a daily basis and knowing that there are others who were eager and passionate about time spent on the mat proved to be important. Kinniburgh et al. (2017) shows the importance of community support and reinforcement when fostering hardiness, grit, and comfortability with unknowns. In the following interview question, Sean provided a strong frame on how he viewed the role of BJJ outside of training and how it has helped him reassimilate.

"Has BJJ helped you be able to handle things outside the gym? How does it help with stress?

What about dealing with anxiety or feeling down?"

Sean: "I will tell it to you this way, BJJ has completely changed my life. I have always respected it even when I didn't train in it. When I got introduced to it I focused on the fighting aspect of it. BJJ is a diffuser. It takes everything you are wound up about and completely unravels it. It's like you walk into the gym like a tight ball of rubber bands and once you walk out after a hard night of training you leave without a care in the world. The workout is incredible, the friendships are the best I have ever had, and the challenge has become more mental than physical. Once you know what to expect in the physical portion the real fun begins. I push myself to understand it as a human chess game where I'm constantly trying to predict the next few moves of my training partner. You get to that point through skill and confidence. That confidence helps to deal with things at work and at home...I mean, I have always been into fitness...being in shape has been a lifestyle for me but the difference between lifting weights and doing BJJ is enormous. The brotherhood you gain when you are committed to BJJ is like the ultimate fraternity. You don't really see that in other types of workouts...the way I look forward to training is definitely different than the way I used to get motivated to lift. The people I have met, the things I have learned about myself, and the ways it has helped me deal with stress in life has been awesome.... The kicker that folks don't understand is that real jiu jitsu is a lifelong journey that has multiple levels of mastery...I am just getting started and that's cool to me. Each day on the mat is challenging...or at least it should be (laughs)... If it's not you're not training right. I look

back to where I am in my understanding of jiu jitsu compared to when I first started and it's a completely different jiu jitsu. Hell...I look back at where I was six months ago and my understanding of jiu jitsu is completely different. Each practice that goes by evolves me more and more and more...the more I understand the better I get. Being able to take the experience that I am getting on the mat goes way beyond me. It is a bridge that helps me with my kids too. My son just started training and it has been the coolest thing to be able to get on the mat with him. It's a place where I can help teach him a skill that he will have with him for the rest of his life...beyond that he also gets to see that his old man can throw down pretty damn good and it will get him thinking twice the older he gets (laughs)...where else can you go and have a father and son try and choke each other and laugh while doing it...it's pretty awesome (laughs).

Sean's response opened up a new door of significance to this research that will require further investigation. Mentioning his son and being able to teach him and roll with him has innuendos for potential relationship building and layering communication between family members.

Having a medium that can create a bridge that lends itself to a "bodies in motion" model between veterans and their families fosters a lived experience that pushes the reassimilation value forward for both service member and their family. The feeling that veterans are able to connect with their family/close friends while also having mutual participation in a combative sport that meshes with their previous identity calls for further inquiry as BJJ may serve as an adjustment buffer for bother veteran and family alike.

Arthur Kleinman states that experience "involves practices, negotiations, contestations among others whom we are connected" (Kleinman 1998: 358-359) and "takes place in a local

world with a specific history and operates within specific constraints" (Messinger 2013). With the proper physical + mental process, BJJ unveiled itself as a portal for relationship and communication building that could be consistently positive if veterans are willing and able to commit to it, communicate about it (Glynn et al. 1999), and share their experiences with those they care about it. Taking Kleinman's (1998) understanding of experience, the contributors to growth, grit, and resiliency all include practices that are routine, structured, have challenges, and the ability to discuss those challenges and wins with those we are sharing that particular time and space with. When framing BJJ as a practice that is consistent and gives practitioners an altered reality that buffers their daily assimilation grind, the possibility to have those elements present exist and can contribute to the lived experiences that build incremental resilience.

Time Matters

When historically comparing the amount of time spent conditioning for war and the amount of time spent conditioning for reassimilation, exiting military members have gotten minimal to no support or training on how to appropriately reassimilate back into being a civilian. This challenge recently shifted in 2012 with the implementation (by the Army) of "reverse boot camp." This program begins 12 months prior (Tice 2012) to service members' transition into the civilian world and assists them in making themselves marketable for employment (resume writing, translatable skills, interview techniques); yet, the much needed support at a psychological and emotional level in making sense of suffering and trauma is not a focal point

within the effort. Though this is a step in the right direction, vis-à-vis the assistance with civilian employment, the larger picture of receiving help with psychological and cultural imbalances is lacking heavily. In Finley's (2011) book entitled Fields of Combat: Understanding PTSD among veterans of Iraq and Afghanistan, an elaborate, ethnographic account of six veterans who struggle with assimilation post-combat is given as well as rich anthropological insight into the suffering these individuals endure. Finley provides a clear case that the "greatest challenge for many returning veterans is not just dealing with PTSD but also trying to manage their suffering while trying for a normative life in American society" (7). Achieving civilian "normalcy" calls for having structure and routine and requires time and commitment, being deployed to a war zone for 8-14 months at a time creates milieus that make combatants comfortable and ready to deal with life threatening situations and conditioned to high levels of violence. Not having the same amount of time with the appropriate mediators to make sense of lived trauma as well as preparing them to redeploy into the civilian world negates the importance of routines, structure, socialization, etc. that would be considered "normal" and set veterans up for success as a productive civilian. The challenge is in their ability to have the time to acquire the skills and understandings that can mesh with their new understanding of the world and how they view their place in civilian society. This process takes time and a vehicle to use for reassimilation; the lack of both has absolutely contributed to the many challenges that have been lived by veterans across the country.

Participating in BJJ has the ability to create new experiences in which potentially traumatic events are shared between practitioners in training and can reframe the associative experience connected to previously experienced trauma. This has the potential to serve as a

mechanism for reassociating one's identity from past lived trauma to an activity that is gradually conditioned to make sense of trauma and create a bank of social capital where practitioners can work through adversities from an internal to external approach, otherwise known as Hippocrates's "vis medicatrix naturae" (Jenkins and Hollified 2008; 393). As professed by Hippocrates to his disciples, suffering and labor endured over time are merged with the body and mind's ability to fight through and make sense of the suffering in order to repair itself and maintain optimal functionality (Jenkins and Hollifieid 2008). The question lies in what type of functionality is culturally appropriate depending on the ecological demands of differing landscapes, how much time one has dedicated to repair itself, as well as social expectations from multiple fields of interaction. BJJ can serve as an outlet where shared physical activity gives rise to a blended collective conscious where the warrior ethos that identifies with combative prowess can emerge with restraint, relaxation, subversion of anxiety, and increased interpersonal awareness through the acquisition of new skillsets which make sense of adversity, trauma, and exemplifies Hippocrates's "vis medicatrix naturae". The key is in pushing forward a consistency in training that allows for "vis medicatrix naturae" to actually play out and allow for the adaptation and trauma rescripting associated with jiu jitsu to take place. Considering Figure C that was previously discussed, the process of trauma embodiment as well as its connection to conditioned reactions calls for a mediator that filters the gravity of a PTE or trauma itself. Culture and its ability to get under the skin is important to consider as it contributes to the framing of trauma and how it is initially framed and later reframed within individuals (Goodman 2013). Downey's work on Capoeira (2008) describes the need to consider "bodily enculturation" as a means of cultural transmission. Such transmission is the ground work for

collectivity as it introduces the necessary elements for acceptance within differing social circles over time. The process of reassimilation and its consequences on identity layering (Van Meijl 2010) creates challenges which require a uniquely analytical view when considering cultural transmissions that take place through practice, sparring, and implementation of structural normalcies. It is much more than simply going to BJJ practice for one month. There is a deeper ritual taking place (Malaby 2009) that takes time to enculturate and it is one that requires engrained cognitive processes that rescript conditioned reactions acquired in combat and preparing for combat. The preparation for training, the acquisition and maintenance of material culture, the thoughts of how to strategically gain an advantage over your opponent, as well as consistently looking out for your team mates on the mat are present daily and requires prolonged immersion.

The formula that is BJJ is one that takes time to adopt, understand, and apply, particularly in the sense of being a transformative mechanism for those who have lived through grave trauma and are undergoing the challenges associated with reassimilation. Typically, becoming proficient and being able to gain "wins" or "taps" takes many months. It certainly is not something that is seen by a beginner unless that beginner has a background in some other form of grappling. It is customary that once a new BJJ practitioner is ready to begin rolling (typically at least 1-3 months of understanding basic positions is necessary before a brand new practitioner is allowed to roll), they are placed with a more advanced student to roll with. This is done for two main reasons; a.) to prevent injury and over aggressiveness; b.) to ensure they are practicing BJJ and not just rolling around on the floor with no direction of what to do.

Rolling with a senior student allows for control, safety, as well as consistency in what has been

termed "humble pie". Humble pie is the idea of getting tapped on a regular basis and learning from each tap. It is an ego neutralizer for practitioners who roll with senior students (sometimes not) and get tapped multiple times in one round without a chance of even coming close to tapping the higher belt. This is important within the BJJ model as it sets the precedence that failing is okay and with each failure you can learn what you did wrong and relinquish any thoughts you may have about being a better practitioner than you actually are. The key with humble pie is that through commitment and time, practitioners shift from receiving the humble pie to serving it to the new students as a rite of passage which contributes to the fabric of BJJ. It is not that it is something that is done with ill intent or bullying, on the contrary, it ensures that new students stay safe and breaks down their ego and pride to a level that will make them susceptible to learning and being open to understanding the art and sport that is BJJ. When asked about "humble pie", Steve and Flanker had the following to say:

Steve: Yeah, I've eaten plenty of it and still do. There's no not eating it...you run your mouth in here, you walk in thinking you're tough shit, you are absolutely going to get served a warm plate. What we do in here is not about being a tough guy...has nothing to do with it actually. We are here to train and become better at jiu jitsu and better people. Every single guy that has hit the mat and had a chip on his shoulder eventually gets that chipped knocked off....you just can't survive in this art with it. There is always someone bigger, badder, faster and better. You can't hide from it....and you shouldn't...that's just how it is. That's life too, by the way. (laughs)

Flanker: I get served it all the time. Not that I am looking for it but it's just part of rolling. You have dudes who are stronger or can do movements that at my age and miles can't be done. Not

to say that I don't serve it myself because I do...but BJJ is cyclical...sometimes you are the bear and sometimes you get mauled...that's the reality of combat. The sooner you come to terms with that the sooner you stay humble and go into a roll with the right perception. It should never be about anger or fighting....it has to be about you staying calm and finding your opportunity to impose your will...that level of understanding takes time dude...I am still working on it....but until you understand that there will always be dudes that can destroy you, you're mind isn't in the right place and there will be humble pie to be had.

Chapter Seven

Applied Conclusion And Outcomes

"BJJ could help so many veterans battling with demons at home. The problem is that it is expensive to train...it would be incredible if the military or VA would help pay for the cost of training. It could save lives."

Flanker – Research Participant

The spear tip of my research was the hypothesis that BJJ helps combat veterans with challenges associated with the civilian assimilation process. Specific challenges that were explored were BJJ's contribution to the managing of grief, anger, lack of socialization, domestic challenges, reframing stress, and the need to have an outlet that builds upon previously established combative identity formations. My hypothesis was supported as BJJ proved to be a worthy outlet of exploration that assists combat veterans with the reassimilation process.

Important insights that emerged are that the physical + mental and social model is important in the identity formation process; combative sport allows for acceptable engagements in civilian roles that would otherwise be deemed unacceptable; material culture has strong value for combat veterans participating in BJJ; and BJJ gets under the skin with biological consequences. These things promote growth as they encourage socialization, exercise, a healthy and acceptable outlet to build upon combative identity, and a material culture framing that is rooted in familiar notions of hierarchy that give purpose to participants' place on the mat and subsequently in the civilian world. Additionally, my research unveiled that assimilation is a progressive process that requires the acceptance of previously lived trauma,

reframing of ones self in the world, and consistent exposure to activities that combine identity elements from time in service.

Through my research, I discovered several interactions and understandings that not only contributed to my hypothesis but also negated it as well. It is true that the majority of participants within my research did allude to assimilation growth because of BJJ but it is also true that some of the participants didn't see BJJ as a contributing factor to assimilation progress. Though contradictions can be found within some of their responses, their own framing of BJJ had value as it contributes to their identity and the importance they put on participating in BJJ in relation to other activities they may be involved with.

Throughout this chapter I present a recap of the physical + mental and social model, significance of combative sport for veterans in this research, the significance of material culture in BJJ, biological conditioning, my positionality as a researcher, financial cost of training, and implications of my research for anthropology. I conclude with applied recommendations that can help veterans in need of assistance with the reassimilation process as well as strategies that can be implemented by the Veterans Administration that will serve individuals with a physical + mental approach.

The Physical + Mental and Social Model: An Overview

An appealing characteristic of BJJ to the veteran community is the dependence on others to make the sport and art come alive. The need to have other bodies in motion, mutual trust, and the understanding that an intense game of combative chess is in progress weaves the fabric that makes BJJ potentially beneficial in the assimilation process. Embodying similar characteristics that are found within the combative indoctrination of the military at both the boot camp level as well as the deployment level cultivates a notion of familiarity that allows for veterans to refine a forged identity that has potentially traumatic experiences and life marcations attached to it. Though the notion of lived combative trauma is common within the population sampled in this dissertation, it does not necessarily mean it is the binding factor of adversity to negotiate while going through the civilian assimilation process. Challenges such as displacement, loss of spouse due to deployment, loss of their military family, as well as disjunctures between veterans and their children could serve as greater adversities that hinder the assimilation process. Other subjective factors exist (i.e. substance abuse, lack of social skills, dependence on institutional support) that could potentially create adverse responses to the assimilation process and do not have to be rooted in trauma. Being able to push through the "dark" side of assimilation and focus on a medium that is both physical and mental in nature allows for an introspective, symbiotic relationship with other veterans and civilians to be forged as well as a direct attachment to having their bodies in motion.

When taking a deep dive into the nature of military boot camp and the "brainwashing" that takes place, the physical + mental and social model reigns. Physical exhaustion, mental

stress, and the implementation of a new identity become engrained and expected. Service members create bonds with each other that are rooted in exhaustive experiences, collective challenges, and new understandings of themselves in the world and introspectively. Similarly, BJJ offers the same style platform without such rigid expectations that are micromanaged by a cadre of staff on a 24 hour basis. The nature of life in the BJJ academy requires physical effort, social growth, mental application, and collectivity amongst other practitioners. The indoctrination and acceptance process calls for cultural expectations to be met, social acceptance by others in the academy, as well as physical performance and execution of techniques that have been taught.

The unique aspect within the cultural indoctrination model as well as the ability to progress within the sport is the execution of techniques while rolling. This real-time test of skills, patience, and mental application puts all of the psychosocial elements that have been indoctrinated to the test while under physical stress and mental pressure. This makes the physical + mental model shine as it stimulates mental expectations and processes while forcing biological responses that are required to stay within a certain frame of application of combative sport. Through the use of BJJ, participants are able to mesh physical goals with mental growth milestones. This matters as advancing within the art requires immense levels of physical fitness, social collectivity, patience, and the ability to work with a range of personality types regardless of background. The ability to have physical expectations segway with new mental maps and reconditioned neuropathways allows veterans to immerse themselves in a socially acceptable activity that demands a new form of assimilation that builds off of familiar expectations of physical performance and social growth.

Additionally, the mental side of BJJ proved to be important for participants. Engaging in a sport that is deep rooted in warrior ethos and creates limitless room for growth proved to show salience and correlations to their time in service. This appears to have pushed forward the social building blocks necessary to make sense of civilian life while still allowing participants to not forget their combative roots and traumatic events that contributed to the way in which they currently view the world and their place in it. Neuroanthropologically, this brings value as it meshes neurological processes and pathways that have been pre-conditioned and can be potentially re-conditioned as a result of cultural framings that are built via sport participation. The mesh between neurological, psychological, and cultural inquiry creates a wide area of investigation that can lead to future research within BJJ.

The physical + mental and social model has value for other types of research using a neuroanthropological lens. Any activity or experience that requires the mental to coincide with the physical has cultural and neurological implications. Whether it is evaluating dance and its effect on diminishing depression (Pylvanainen and Lappalainen 2017), the role that playing an instrument has in decreasing autism severity (Broder-Fingert et. al 2017), or the synergy that exists between performance in training and results on the field in professional athletes (Mirifar et al. 2017), there are several areas where the physical + mental and social model approach can bring value and understanding. Highlighting the need to go much deeper than the subjective experience, neuroanthropology identifies collective models at play where components of strength, resiliency, and collectivity may exist or not.

Combative Sport Crafting Assimilation

Sport, the rules it creates, and the social framing it allows is a pillar of my research. Very few social vehicles exist within the civilian realm that encourage the warrior ethos, applaud combative prowess, and encourage a similar brand of combative camaraderie that service members created within the military. My research unveiled that participation in BJJ allowed for a social forum of combative exchange that also built relationships that matter. It highlights the same mental pathways of "fight or flight" that were set in the military and re-conditions participants to fight within a set of conditions that serve as new "rules of engagement". Additionally, there is the element of combative "play" and having bodies in motion through sport that proved to be useful to veterans. BJJ requires a regulation of physical intensity in order to prevent injuries and ensure learning is indeed taking place. This exchange established a safe environment where veterans could combatively engage with one another without the intent of permanently hurting each other. Though it was not the type of combat they had become accustomed to while deployed, it pushed forward the sport aspect of BJJ and built important avenues of competition and team structure that is not seen in other aspects of normal civilian assimilation.

Having an academy that participants belong to and represent at competitions as well as forging bonds with team mates that are sealed in sweat, blood, and injuries allows for the play aspect to be amplified into something deeper. BJJ is not just a utility sport that is fun to do from time to time; for most participants it is something that represents a vital part of their warrior identity that has been suppressed because of civilian social expectations. Having the experience

of rolling on a regular basis that is accompanied by brotherly embrace and physical exhaustion allows for veterans to rekindle aspects of their previous time in-service.

For those participants who take to competition, knowing that there is an impending battle on the horizon gives them a reason to train hard in BJJ. This encourages consistent socialization, physical challenge, structure within their daily lives, and a reason to excel in the sport. This proved to be useful when considering the idea of being a "productive" veteran that is fueled by the accomplishments of future endeavors instead of getting stuck in a cyclical cycle of introspection that dwells on "what they used to be" and what they used to "do" when deployed in combat. As discussed with several participants, their time in war fostered both the best and worst times of their lives; such a heavy pendulum of extremes proves difficult to negotiate when dealing with the challenges of assimilation.

The concept of "winning" and building confidence and continued success as a warrior proved to be fruitful for participants. From initial acquisition of BJJ etiquette to adaptation of advanced techniques, there are a vast number of hurdles that participants must go through in order to build a level of competence that prepares them for competition that will put not only their prowess on the line but also their respective academy. For all intents and purposes, "a tribal nature" is found within respective BJJ schools that demands allegiance, loyalty, and putting forward your best as a means of representing the credibility of those who are part of the same academy. Competitions and winning go far beyond the individual interpretation of the competition. It is a representation of the senior instructor, their lineage, and the etiquette that is fostered within their respective school. This generates an incredible sense of loyalty and

honor to the academy, very similar to that which is often seen within respective branches and units within the military. Since BJJ fosters cultural elements that resemble military culture, it helps veterans transition into civilian life that is more acceptable than bureaucratic and medical models that are often pushed by policy makers and traditional institutions.

Additionally, BJJ enforces specific things that assist with the transition into civilian life. When diving into the themes that emerged in Figure B (recognizing the relationship that exists between stress navigation, social capital, acceptance of failure, physical exhaustion, morphing of combative identity and acquiring patience with self and others) we see how having consistency in training and continuing to build upon an identity that was forged while in service matters in the integration process. The inherent and cyclical nature of the model calls for a holistic understanding of the physical + mental and social approach where cognitive and emotional abilities coincide with physical processes that are catalysts for biological responses within a combative context. Not having to turn the warrior switch off and start a new beginning allows for elements of confidence and self-awareness as a combatant to be preserved while building new relationships in a medium that is socially acceptable. That is what makes BJJ unique amongst other mediums that may use the physical + mental and social model to achieve a similar outcome. Maintaining the warrior ethos and a sense of being elite and "tough" while planting seeds of patience, understanding, and physical release makes BJJ a viable option to help with reassimilation for combat veterans.

Material Culture: From Military Back To Civilian Roots

Going through the assimilation process and facing a lack of social uniformity mattered for my participants. The lack of structure, objective focused missions as well as increase in responsibilities both professionally and domestically created a sense of a chaos for many participants. For several subjects, having been conditioned to a material culture that relies on ribbons, berets, labels, and badges which provided an immediate résumé as to who they were interacting with and the type of conduct they should have with that person forged a blueprint for their behavior. Diving into a social sea of folks that share different material styles and express themselves via a material culture that is not based on merit or achievement can create a screen of confusion that may lead to "misconduct" depending on who they are interacting with.

Not having a way to measure or understand individuals, what they have accomplished, and what they stand for was an identifiable disjuncture for many participants, particularly in the early stages of the assimilation process. For veterans in my research, the requirements of having a gi, respective labels, patches, and appropriate belt color with stripes facilitates a powerful story with no words needed. Though there are differences between ranks, the uniformity that exists of having to wear a gi as the initial building block instills a sense of hope and aspirations for junior level practitioners to one day have a uniform that boasts a black belt as well as competitive patches that signify something much deeper than just words sewn onto material. On several occasions, participants eluded that the "black belt" in BJJ is something that is coveted and is respected in a different way than other martial arts. The idea that the only

way to achieve such an elite level is through years of real time rolling, competing, and countless hours of training on the mat with a myriad of practitioners demands respect. Garnering that level of admiration and respect through the initial impressions of a belt parallels the impression that service members used to get when around high ranking officers, elite commandos and other coveted ranks/personnel within the military.

The material cultures that surround veterans in both the BJJ realm and the military share the commonality of having symbolic value displayed on their daily uniform that paints a picture of who they are, what their experience is, and the appropriate conduct that should be displayed. Respectively, participants found value in putting their uniform on in a consistent fashion. The transformation that occurred once they walked into the BJJ academy and changed into their gi with appropriate belt provided the physical shifts and ritual necessary to frame their warrior identity. The feel of the gi on their skin, the sense of pride felt when tying their belt, and the feel of the mat beneath their feet were all salient attributes that allowed them to let their warrior code shine and be sharpened. Experiencing this shift on a regular basis conditioned the balance that is necessary to make strides within assimilation. The symbolic nature of being able to maintain and grow their warrior identity while negotiating challenges with reintegration made all of the difference in their ability to handle consistent levels of adversity.

Having balance between what once was and combining it with the understanding of who they are now proved to be gradual and not something as easy as flipping on a "civilian switch". My research unveiled that assimilation is a progressive hack that requires the

acceptance of previously lived trauma, reframing of themselves in the world, and common threads of comfort that have been reshaped to apply to the many challenges experienced as a civilian. Having familiar notions such as a uniform, symbolic niches within the uniform, structured goals, and a sense of collectivity and belonging that is spearheaded by material culture proved to be useful to my participants and contributed to their different identity blocks. When considering the different events, traumas, dislocations, successes, and challenges endured throughout their life leading up to military service as well as within military service, the capturing and remolding of those identity blocks becomes integral to the balance of reintegration.

Maintaining elements of being a combatant and building upon previously lived trauma is important when enduring the assimilation process. To simply start "cold turkey" and forget about the life and experiences lived when in the military and be expected to blend in with everyone else who has never experienced combat or consistent levels of trauma is simply unrealistic. Traditional medical and "civilized" approaches call for therapeutic interventions that often require a clinical setting and/or prescription medications. This approach may work for some but for those involved in my research they make it very clear that participating in BJJ helps with fostering a more natural response and opportunity to "grow into assimilation" as opposed to flipping a switch and immediately assuming civilian perceptions and norms.

Biological Conditioning

Every research subject alluded to positive physical benefits due to their participation and how BJJ has served as a stress reliever. There was an overwhelming consensus that the workout received from BJJ participation created a productive addiction that otherwise may have turned into substance abuse or medication dependence. The high associated with "winning" as well as "rolling" proved to be vital in understanding what kept practitioners committed to the art and kept them returning regardless of interpreted adversities.

When tying in the physical + mental and social model into my research identifying how BJJ got "under the skin" (Goodman 2013) was important. Undoubtedly, the element of physical exhaustion was obvious given the sweat that would be dripping off their bodies during every practice. The physical acculturation and biological adaptations that result from BJJ immersion appear to be positive though there were instances throughout the research where that was not the case. For example, a handful of participants conveyed the amount of times they have been injured due to training and how those injuries caused mental anguish as they felt they were "falling behind" their peers and were embarrassed to return to the mat carrying the concern they would not be on-par with their peers. This was not the case for the majority of participants but it is worthy to note that this sort of feeling could reverse the progress made within their transition and perhaps amplify challenges. If a service member feels they have lost their warrior identity or do not have a place to express it post military service combined with a loss of identity and worth within the BJJ academy, their sense of identity could be challenged and force them down a road of negative consequences that could lead to depression, anxiety, and

potentially suicide. Though this was not seen within my research it was discussed with participants who ran into mental adversities within the assimilation process.

There is a strong sense of pride that comes with the biological transformations associated with BJJ participation. Physical attributes such as "cauliflower" ear, foot and hand callouses, enhanced grip strength, and increased flexibility are adaptations that often result from BJJ participation. Adaptations such as "cauliflower" ear and enhanced flexibility are often touted with pride as they represent a sense of toughness that is a result of experience on the mat. On a few occasions, participants would point out the beginnings of cauliflower ear to one another as a badge of success and would make jokes about how tough it would make them look outside of the academy and how others would perceive them; almost a sense of material culture that was biological in nature as it symbolized something about who they were and what defined them.

Internally, participation in BJJ pushed my research subjects to a higher level of performance at both the cardiovascular level as well as the neurological level. The neuroanthropology of BJJ contains elements of neuroplasticity, decreased/increased allostasis, reframed stress responses, and social collectivity that forge a strong sense of belonging to something much bigger than the individual. Overwhelmingly, this combination proved to be positive and though the negative elements do linger and may present themselves, the majority of subjects conveyed positive experiences at a mental and biological level. Additionally, the neurological consequences associated with negative consequences on the mat had value. Outside of experiencing injuries, the negative components of getting tapped on a repetitive

basis or being socially embarrassed generated an outlet for veterans to constantly rehearse how they will deal with adversity outside of the academy. This forging of new neuropathways and encouragement of neuroplasticity creates a unique playing field where biological pathways can become "rerouted" and funneled into a "reset" motion that allows for participants to reinterpret their surroundings and the appropriate way to deal with challenges in other aspects of their lives. Through the demand of having to practice techniques and strategies in a repetitive manner with unknown outcomes, the notion of becoming "comfortable with the uncomfortable" forges the acceptance necessary to deal with external stressors outside of the academy. Building up the necessary resiliency to not know how things are going to turn out and being "okay" with that is an attribute of BJJ that directly contributes to its reframing ability.

Positionality

As a practitioner of BJJ, I originally approached my research with a strong sense of confidence that BJJ was a useful tool for the assimilation process for all veterans. My experience rolling, socializing, and being a part of a niche community led to my framing of the physical + mental model being a "cure all" for veterans battling with reintegration challenges. This was debunked by a few participants who did not share the same perception of BJJ I set out to unveil. The value for some was found in their aspirations to become professional mixed martial artists or simply to gain a better sense of self-defense. The deeper layers and connections to their military identity that were explored within my research were not recognized or found at all and that mattered. This meant that while BJJ was valuable for many subjects within the reassimilation

process it does not mean that it was valuable in the same way. This signifies that the symbolic nature and importance recognized by the majority of my participants may not play out if the model is rolled out on a broad level. This point buttresses the need for additional research and more inquiry as to the wide spread salience of BJJ as well as the physical + mental and social model approach that can assist with reintegration challenges. Specific research that targets assimilation challenges before involvement in BJJ as well as any change in behavior or perceptions once immersed in BJJ culture would be helpful in identifying the value that BJJ holds for individuals who feel that participation in the art is not beneficial within their reintegration process.

The shift from practitioner to participant observer was enlightening. Seeing BJJ in a therapeutic sense and watching bodies exchange combative movements, participants' interactions with the material culture of the academy, and witnessing the emotional growth and combative maturity of the research subjects certainly fostered a stronger understanding of the strength that BJJ instills. I learned that though participants may get involved with BJJ out of a sense of combative aspirations, they can grow and reshape those aspirations into a strong sense of community that promotes healthy social interactions, perceptions of stress as well as self, and positive physical habits that can expel substance abuse as well as sedentary behavior.

A consistent challenge that I ran into as a researcher was being able to silo my want to constantly train with the participants as well as maintaining non-bias throughout the data collection process. Being able to collect data, observe interactions, and watch participants roll without interjecting my own interpretations was certainly tough. As a BJJ practitioner and

lifelong martial artist, there were many points where I wanted to interject ideas, thoughts, and meditations that were introspective reflections and conclusions that I fostered as a result of my own experiences. As a researcher, interjecting such personal thoughts and niches could have swayed responses that participants gave me as well as jaded the organic growth that my research was designed to capture. Additionally, this could have presented challenges with identifying a true micro-model of how BJJ could play out at a macro-level and serve as the building blocks to a much larger research endeavor with real applications that could alter the assimilation funnel that veterans go through. There were moments during conversations with my key informants where I shared my personal insights and feelings about BJJ. These exchanges were done in a conversational format off the mat and contributed to deeper insights about how BJJ made practitioners feel about themselves and the value put on BJJ in their lives. The sharing of my personal opinions about BJJ lead to closer bonds with my key informants as they became more comfortable with me as one of their "brothers on the mat" instead of an outside researcher who couldn't relate to them.

Implications For Anthropology

My research highlights a combatant anthropology that has not received a lot of attention. Far too often, anthropology for the military as opposed to of the military has reigned. Anthropology for the military has historically been used to gather intelligence on foreign cultures and groups as a means of achieving a combative or humanitarian objective. Anthropology of the military

requires research of the institutional pillars that make the military work, the groups and cultures within it, and the consequences and rewards of being a part of it.

Identifying and understanding the permanence of the warrior ethos and the need to build on the identity engrained within military service is important. The experiences, relationships, and trauma endured while in service are all built upon being a warrior with elements of patriotism, pride, and social collectivity with others. Spending time understanding this phenomena and the longitudinal nature of it has value as it allows for anthropology to unveil the layers which exist between civilian and veteran identity that is collective as opposed to segmented which is a common characteristic in more clinical settings. Having veterans' lives equated to chapters or phases as opposed to an inter-connected continuum that blends identities together at different points is important (Elnitsky et al. 2017). The thoughts of closing the "combative chapter" and moving on with life is often discussed and it is seldom attainable as the experiences endured leave a profound mark on the perceptions and understandings of the world around them. Recognizing the challenges and cultural disjunctures that exist for assimilating veterans is a body of literature and research that is continuously in development (MacLeish 2013; Sorensen 2015). Anthropology has been capturing the veteran and military experience with challenges such as traumatic brain injury (TBI), PTSD and social discord (Gutmann and Lutz 2010; Finley 2011; Finely 2012; MacLeish 2013) but more research is needed in understanding the warrior ethos and how it becomes a part of the identity held by those who have served. My work on combative culture and assimilation highlights nuances and niches that make BJJ a viable medium for assimilation for those combatants who show an interest in committing to the sport. Analyzing an integrated approach that encourages a

ethos with perceived adversities as a civilian and how those sub-cultures and identities can coexist productively with one another. Shifting the focus to an anthropology of veteran assimilation contributes to qualitative recommendations that are grounded in ethnographic data and adds value to the field as it brings viable solutions that are proven to work.

Though not clinical in nature, my recommendations and data bring forth a unique perspective that is combat centric but aims to do no harm. My concluding recommendations are designed to bridge gaps that cause strife and suffering amongst a population of individuals who have experienced things that no human being should. The sense of guilt, loss, anger, and lack of support are all issues that have very real consequences at an individual and group level. Highlighting these experiences with an anthropological lens allows for interdisciplinary bridges to be cultivated between medical anthropology, cultural anthropology, neuroanthropology, psychology, and therapeutic techniques.

Cost Of Training

The results of my research form the beginnings of a deep-rooted approach to reframe the way in which the military and Veterans Administration approach the assimilation process. Currently, the out-processing funnel is relatively hands-off as far as preparing service members for the socioemotional challenges associated with reintegration into the civilian realm. With stress and anxiety disorders being the third most prevalent disability amongst the veteran community (Congressional Budget Office 2012), there is approximately \$2 billion dollars a year being spent on stress-related disabilities for veterans. This comes out to roughly \$8,300 per veteran needing

some form of treatment(s). This tax payer investment assumes that the treatment veterans are seeking is actually working and making a positive impact on their daily lives and their ability to acquire the necessary social milieus to make the civilian life a positive experience.

When exploring BJJ as a vehicle that may be useful for easing the challenges associated with veteran assimilation, there is a financial cost that comes with it. On average, the cost of being a part of a BJJ academy is roughly \$150 - \$180 a month which typically includes 3-5 nights of training and at least one "open mat" session a week. On a yearly basis, this cost comes out to be between \$1,200 - \$2,160 a year. This cost is the responsibility of the veteran and often can be a challenge to cover particularly when negotiating employment challenges.

An applied outcome that is a direct result of this research is creating a proactive platform where the cost of training BJJ is covered by the VA. The idea would be to get participation in BJJ approved by their "Arts in Healing" program and have the cost fall under a "Play Therapy" classification within their "Patient Centered Care" Division. Approaching assimilation with a medium that is similar to time in service and creates a safe haven of social relationships is important. It creates an immediate structure for veterans that builds upon the warrior ethos that was engrained within service while reshaping their perspective on how their understanding of violence, trauma, and combat play out in their civilian life. From a dollars and cents perspective, taking a proactive approach to assimilation makes sense. Given the average annual cost for treatment of stress based disorders is nearly \$8,300 per veteran, having a medium that could potentially augment or even replacement traditional cognitive therapy and decrease the dependence on prescription medication could eventually cut away at the current

\$2 billion dollar expenditure that exists. This does not mean that BJJ participation is a replacement for cognitive behavioral therapies or medications; rather, it presents a potential outlet that could shorten the amount of time in which traditional avenues of assistance are needed as well as equipping veterans with salient social networks that matter within civilian integration.

Additionally, a salient outcome of this research is the reinforcement of focusing on community based approaches to stress mitigation. The clinical approach that is pushed in cognitive behavioral therapy can often seem foreign and threatening for many individuals.

Having methods of stress and trauma mitigation that relies on peers, interactions, biological releases, and social cultivation is an avenue that should continue to be explored. The model found in BJJ contributes to other models that are similar in nature such as Downey's interactions with Capoeira in Brazil (2002) and Walker's interaction with soccer in Peru (2013). Applying these models in the context of mental health and social well-being are new to anthropology and should continue to be built upon.

It can be argued that BJJ is not for everyone. Given the subjects who did not find correlations between reassimilation and BJJ it is viable to say that it won't be of interest or have the same impact for all veterans. Given the need for more research of the physical + mental and social model and its potential contribution to veteran reintegration more research is needed to find additional options for other individuals.

This proactive approach could eventually alter the way in which assimilation is approached. Strong points that do not specifically pertain to BJJ are the need to have a mental

+ physical model, the value of camaraderie, the value of material culture, and the identity blocks that should not be forgotten but built upon and remolded to apply to veterans' lives. These foundational elements leave the door open to explore several different mediums that could include other martial arts, dance, sports, amongst other activities that can assist with the assimilation process. These alternative approaches could provide quicker assimilation possibilities, reduced tax dollars for the VA, and a sustainable platform that allows for veterans to grow in ways that are not permissible in current VA programs.

Looking into the future, much more research is needed. The data in this dissertation is one brick in the house that is to be built. There is a need to have quantitative data that can be analyzed by third party decision makers in clinical settings to push forward a mental + physical and social option as a salient solution for progressive integration and assimilation.

Quantitatively, there would be great value in having a meta-analysis done of different academies across the country with perceived stress inventories. Capturing levels of stress and anxiety before BJJ training, during, and after would be valuable as well as identifying an average of how many veterans would actually be willing to commit to training in BJJ. Additionally, it would be valuable to analyze the participation of women veterans in BJJ and how it could potentially assist them with assimilation challenges.

Qualitative data of different locations throughout the country would be beneficial.

Identifying cultural interpretations, participation, and accessibility to BJJ academies are all factors that matter in ascertaining the value that BJJ has that I would like to capture. Having a model that works for some but not all is to be expected but making sure that the valuable

points and depths of penetration to the assimilation process are fully identified is essential. This pushes anthropology's ability to identify collective sources of strength, resiliency, and cultural bonds that make individuals want to interact with each other and build bonds together. When highlighting the importance of camaraderie and recognizing that having "brothers on the mat" has value, this experience, approach, and research matters.

Moving Forward

Looking to the future, this baseline data and analysis can serve as the backbone of a national level research model that identifies veteran nuances and niches using a physical + mental and social model. I seek to design a research plan in collaboration with the Veterans Administration in different cities throughout the country to establish a more robust collection and analysis plan. The first step would be to work with anthropologists at the VA in Tampa, Florida, to give a talk and introduce my research. Identifying the aims, outcomes, challenges, and goals would provide a platform and conversation to build upon based on current research and programs they have in-house. Following that talk I would create a guide for them that correlates with Figure B and discusses the cyclical nature that was unveiled within my research and how that matters when identifying the consistent challenges within the reassimilation process. From there, we could begin talks about how to shape the research to capture additional locations with more participants.

The goal of my dissertation was to identify the niches that are found in BJJ that can contribute to the successful integration of veterans into civilian life as well as overcome

assimilation challenges. I was pleased with the results of my research as the majority of participants identified positive growth points in their civilian lives a result of their participation in BJJ. Pushing forward an applied model that will have a broad impact and potentially pave the way for a VA sponsored BJJ program is the larger applied goal at hand. Identifying how many BJJ academies exist in cities with high populations of veterans as well as differing interpretations of what BJJ is and means in the lives of those struggling with challenges requires the help of the VA and is part of future research plans.

The rich conversations, invaluable time, and deep rooted trust that my participants shared with me made this research possible. Had it not been for their willingness to give to this research, I would not have been able to unveil the truths of BJJ and its impact on the veteran community. Additionally, the assumptions that I carry as both a practitioner and researcher would have remained the same and the models that propel veterans to participate in BJJ would have not been understood. Though all of my participants were vital, the relationships that were formed with my key informants will forever leave an impact on me as a researcher. The vulnerability and trust they put into the research process are the building blocks that made this research successful and for that I am forever grateful.

Additionally, the research site at Gracie Tampa will forever be a very special place. The environment, the culture, and the practitioners create a habitat that breeds collectivity, camaraderie, and a family atmosphere that is impossible not to get addicted to. Both Rob Kahn and Matt Arroyo have taken their skillsets as instructors and created academies that demand excellence from their practitioners while also remolding "failures" to truly be learning

opportunities that only make practitioners better. Working with them to approach additional research inquiries will be vital as they have created academies that understand the veteran experience and seek to build on the warrior ethos that veterans already carry. My assumption is that there are other academies throughout the country that share similar structure and interactions between practitioners but until further research is complete I cannot say with certainty.

This research marks a milestone for the BJJ community, reframing BJJ to be something much more than a self-defense system. Pushing forward a mental + physical model, identifying the importance of material culture, understanding the biological consequences, building and reframing warrior identity, as well as applying the niche model presented by individual and team sport participation contributed to the integration hacks found within BJJ.

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