

CALL AND RESPONSE: TRENDS IN CAPOEIRA PEDAGOGY

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ABSTRACT

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The purpose of this study was to inquire into the promotion of longevity within the Brazilian martial art form capoeira by investigating learning environments created by capoeira *professores*, with specific attention given to (1) pedagogical techniques used to pass on capoeira in a way that promotes longevity and (2) injury prevention practices present in capoeira instruction. This qualitative study utilized capoeira *professores* recruited amongst known teachers in the Itu community via email and word of mouth. These *professores* completed questionnaires, participated in oral interviews, and further discussed emerging themes and practices in a focus group. Results indicated themes of injury specific preventative stretches and strengthening, inclusion practices, pedagogical tactics, and a typical class format of warmup, stretches, specific skill work, and practice. By examining current practices, this study creates space for questions and dialogue about existing techniques and provides a comparative marker for future generations to reference.

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CHAPTER I

INTRODUCTION

Evolution of Capoeira

As a blend of athleticism, combat, culture, camaraderie, and music, capoeira typically is described as one or more of the following: a martial art, a dance, or a game. Traditional interpretations of its origins imply capoeira began as a preservation effort for martial art techniques of African slaves transported to Brazil beginning in the 16th century. The story continues that in order to disguise their practices in the plain sight of their masters, the slaves set their movements to a cadence to conceal their fighting as a dance using musical instruments and songs. Over time capoeira has passed from generation to generation, expanding its audience and evolving as an art form. Once outlawed and its practitioners (*capoeiristas*) persecuted by the police in Brazil, the form eventually became accepted and moved from the streets into the academies and soon throughout the world (Capoeira, 2002; Essien, 2008; Lewis, 1992). As Nestor Capoeira (2002) researched for his third book, he realized that material presented in his first book as history proved to be more legend than fact, although *capoeiristas* even today treasure

the folklore and myths that have grown around the game. In the preface of this book, Capoeira (2002) illustrated deeper roots under the surface:

More than a dance, a fighting technique, a game, a patrimony of Brazilian culture, capoeira is a form of ‘seeing’ and living life. It is a specific point of view about the world and mankind, transmitted from teacher to pupil throughout the generations. (p. xv)

Pedagogy

Years of purposed pedagogy and the school of hard knocks have passed forward the traditions of capoeira from the *mestres* (masters) and *professores* (teachers) to their *alunos* (students, and in current times *alunas*- female students). Once taught through observation and mentoring, capoeira has now made the shift into academies and formal training circumstances. Reflecting the call and response nature of the sport, *mestres* encounter the question and answer cycle verbally and physically with their students. As students themselves, they have acquired movement skills and information over time, and now as teachers, they listen and respond to pass on their knowledge.

Injury Prevention

Whether a kick to the head or degenerative postural patterning in the spine, risks arise in capoeira as a martial art and athletic endeavor. Capoeiristas fine-tune their bodies through repetitive action and physical conditioning. As training and experience increase, so also does the propensity for injury. With strikes that could kill and

takedowns that will sweep a person right off their feet, playing capoeira opens the door for both acute and chronic injuries.

Looking Forward

Benefits of capoeira exist on a spectrum ranging from personal to communal and from physical to emotional. Access to components of physical wellness exists across age groups and emerges in flexibility, balance, and muscular strength and endurance. Translating the practices of the capoeira *roda* (the circle that hosts the action) into everyday life, capoeira play has provided exposure to principles of inclusion and creativity as *capoeiristas* gain confidence and new perspective on the world. The discipline of training yields great fruit, and at the same time, *capoeiristas* find great joy in their investment and hard work as the game has often been described as *vadiação*, meaning “to play like a child, to have fun and enjoy, to waste time doing nothing, as opposed to ‘serious’ and ‘hard and honest’ work” (Capoeira, 2002, p. 198).

In examining the history of capoeira, the game and the practice have been likened to a capoeira player who “fakes” and “returns” (Capoeira, 2002, p. 232), hiding away and disguising intentions. Capoeira has “fueled the souls of those held in the most horrific oppressive conditions. It energized their spirits to carry on, to overcome whatever obstacles they could. Capoeira nourished the existence of countless downtrodden spirits” (Essein, 2008, p. xvi). Remembering these roots while looking towards longevity, the need to carry forward on this cultural and athletic tradition arises—not merely preserving what has been but rather creating a new future altogether.

For thousands of years, survival was linked to our ability to kill and destroy.

Today and in the future, survival will depend on our capacity to live in peace with other men and with nature. Modern man needs to reprogram his mind. He needs to channel in another direction the energy used in war and in the killing of other men and animals.

We think capoeira can make a contribution to this process.

(Capoeira, 2002, p. 39)

How this energy is channeled will affect the future. Capoeira stands ready to play its part.

Problem Statement

The purpose of this study is to investigate the promotion of longevity for capoeira by examining pedagogical and injury prevention practices used by capoeira *professores*.

Research Questions

1. What pedagogical techniques do teachers use to pass on the craft of capoeira in a way that promotes the longevity of participation?
2. What injury prevention practices, if any, are used within capoeira instruction?

Definitions

Aluno/Aluna: Student.

Axé: Energy of the capoeira game and in the *roda*.

Capoeira: Definition disputed, but generally described as a dance, fight, or game.

Capoeirista: One who practices capoeira.

Esquiva(s): Dodge(s).

Ginga: Rocking step used to transition movements; one of the most basic capoeira movements and one of the first steps learned.

Golpes: Strikes or kicks.

Graduado: Graduate; one who achieves graduation by progressing through the cord levels (like a belt system in karate). One must continue progressing to become a *mestre*.

Legitimate Peripheral Participation (LPP): Technique by which the participant learns initially through observation as a transition of information to the next generation.

Malícia: Cunning or trickery; “refers to the act of hoodwinking one’s opponent using one’s intellect rather than physical strength and mastery” (Fuggle, 2008, p. 213).

Mandinga: “Embodies the humour [*sic*] and play at work in capoeira, counterbalancing the slyness of *malícia* and diffusing the tensions that *malícia* would otherwise inevitably engender” (Fuggle, 2008, p. 213).

Mestre: Master; used for capoeira teachers acquiring a prescribed level of proficiency.

Negativa: Movement that involves knee flexion beyond 90° on the weighted leg.

Roda: Circle of play within which the action occurs, composed of a pair of *capoeiristas* playing, those surrounding the play, and those playing instruments.

Professor(es): Teacher(s); ascribed to a teacher not yet a *mestre*.

Pedagogies and Teaching Practices: Methods and techniques used in teaching.

Assumptions and Limitations

Assumptions of the study include: (a) sufficient study on behalf of the capoeira *professores* to have a knowledge of material to share with students, (b) honesty on behalf of the participants about their experiences, (c) the *professores* actually teach their students and/or the students learn from the *professores*, and (d) *professores* want to prevent injuries and poor patterning.

Limitations of the study include (a) geographical location of the São Paulo state in Brazil, (b) the style of capoeira taught and/or trained by the *professores*, and (c) available time of the *mestres* and *professores* aligning with the available time of the researcher. Delimitations restrict participants (a) to those who have teaching practices in the geographical location of the Itu, São Paulo area and (b) to participants over 18 years of age.

Significance of Study

Practical applications for injury prevention in addition to the connection and inspiration of learners emerge as teachers presented in this study revealed their experiences. Existing studies (Brennecke, Armadio, & Serrão, 2005; Signoreti & Parolina, 2009) have revealed evidence of wear-and-tear impact of capoeira actions on the body, while others (Carneiro & Garcia Junior, 2009; Matos & Meneses, 2012) have examined the restorative potential of practicing capoeira. By examining gaps between injury and restoration, material for a preventative bridge emerges for the promotion of longevity within the sport. Significance continues beyond this study for other sports,

dance, and/or game scenarios where customs are passed on and where youth is fleeting. Promoting the potential for longevity provides the opportunity for practitioners to continue their pursuits and for traditions to continue forward.

Theoretical practices for impact include learning and teaching styles of capoeira, providing a base from which to imagine educational processes for learner engagement and retention. With current trends supporting inclusion of diverse demographics as valid participants (Bertazzoli, Alves, & Armalar, 2008; Burt & Butler, 2011; dos Santos, 2010; Freire, 2001; Joseph, 2005; Leitão, 2004; Lussac, 2009; Matos & Meneses, 2012), considerations for continued growth and adaptation of training become important and can provide room for reflection and creative thinking in regard to how, to what, and to whom capoeira is taught.

While previous studies have focused on injuries sustained during or as a result of capoeira play or on the benefits of training, this study will investigate the potential for incorporating proactive pedagogical strategies to consider a preventative structure for avoiding chronic and acute injuries. Through an examination of the methods teachers used: (a) to create memory and patterns for the mind and body and (b) to construct the learning environment, this research posed questions to provide insight with respect to the attendance of physical space, classroom climate, student learning styles, and the capoeira culture. Whether metaphorically or physically, teachers' ideas are translated into practice and given meaning; thus this study drew upon the teachers' experiences as a means to

evaluate the functionality of the training with regard to promoting student longevity within the art.

CHAPTER II

LITERATURE REVIEW

Passing on the art of capoeira continues to evolve over time. Creating a physically and metaphorically safe place for learning while casting a vision for the future impacts the learning process and therefore longevity. Injury and disinterest provide two obstacles for the future of any movement-based activity. The purpose of this study was to investigate the promotion of longevity for capoeira by examining pedagogical and injury prevention practices used by capoeira *professores*. These *professores* function as the link to the past, bring life to the present, and pass on hope for the future.

In surveying the literature, research and narratives emerge about the disputed origins and nature of capoeira. The transference of knowledge from generation to generation has taken diverse routes over time, and the practitioners of the sport have increased in number and broadened in demographics. The physicality of the craft provides benefits along with risk factors for consideration by the practitioners and teachers.

Classifying Capoeira

Capoeira proves challenging to define concisely. Essein (2008) described the effort of composing one clear definition as “a futile goal” and continued with the following description:

Capoeira is a dance, but much more than a dance. Capoeira is a martial art, but much more than a martial art. Capoeira is a tradition of African slaves, but much more than a static tradition. Capoeira is all those things, constantly morphing to emphasize one more than the others, but always containing all the elements, and a few more, to become this intoxicating rhythmic motion of tricks, shows of strength and flexibility, displays of balance and grace, ancestral traditions, and lethal attacks. (p. xv)

In considering the ongoing debate of how to precisely define capoeira, three terms (or some combination thereof) frequently surface: dance, fight, and game. MacLennan (2011) used all three, describing the dance-fight-game as a “dialogue-in-motion” and continued:

If it is to be considered a martial art, then it is unique among these arts because of its blend of music, rhythm, and acrobatics as a way of self-defense, creating a fluid fusion of movement that is as artistic as it is agonistic [*sic*]. Because of its fluid nature, a practitioner is able to make it what is desired: A fighter will perceive the defensive aspects, a dancer will perceive the rhythm, an acrobat will perceive the artistry. (p. 147)

A Dance

Calvo-Marino, Jola, Glaser, and Haggard (2008) labeled capoeira as a dance, presenting it alongside classical ballet looking at various skills from ballet and capoeira movement vocabulary for aesthetic evaluation. Gittens (2012) looked at Black dance in America between 1960-2010, highlighting the voice that was given through the medium of art. Gittens (2012) discussed the dances that were brought into, born in, and transformed within American society, listing the Brazilian dances of samba and capoeira, among others, as influencing factors. D'Agostini (2004) touched on the creative process involved in capoeira, indicative of “the greatness of humanity to create and recreate social, pedagogical, artistic, and cultural practices” (p. v, own translation).

A Fight

Stotz and Falcão (2012) compared capoeira as a fight with other styles of *Laamb*, *Ladja*, *Mrengé*, *Morengy*, and *Moringue* in an investigation of fighting forms that combine fighting, dance, and music. Combating assertions that capoeira is the sole fight to utilize music, Stotz revealed similar features emerging upon comparison of the forms including their use of song, call and response, dance, instruments, circular formation, movements, uniforms, nicknames, and police suppression. Roxborough (2011) presented capoeira as “a ritualistic martial art with roots as a war dance and survival philosophy” (p. 57). The assertion of concealing the fight as a dance again arises as the declaration that dance- particularly break dance- borrows from capoeira movement vocabulary. “Like its Far Eastern counterparts, capoeira is the sum of many parts, encompassing

combat, fitness, health, and thought blended into a higher form of combined artistry that unifies the body, mind, and spirit” (p. 61).

A Game

Samuels (2001), upon interviewing capoeira *mestre* and director of DanceBrazil Jelon Vieira, presented capoeira as a game, albeit a lethal one. Vieira describes the art as follows: “Capoeira is a language. It’s a dialogue. It’s about camaraderie and bringing people together. It teaches self-respect, self-control, discipline, and respect for life” (p. 121). Again, allusions arise to dance forms borrowing and using movements from the “rhythmic and lively dance-martial art form” (p. 67). Vassallo (2006) highlighted the symbolic fight for freedom and asserts “at the present moment, capoeira is, unquestionably, a friendly activity, a dance, a game between friends” (p. 73, own translation) and also suggests that the component of violence played a greater role in the past where today the focus has shifted to the game and the play of capoeira. D’Agostini (2004) pointed out linguistic factors present in referencing capoeira as a game; not only does one “play” capoeira rather than “fight,” one also plays “with” rather than “against” the other person (p. 14, own translation).

The Jogo

A capoeira *jogo* (game) is typically played by two *capoeiristas* in the center of a *roda* (a circle encasing the game with *capoeiristas* clapping, singing, and playing instruments). The *capoeiristas* exchange kicks and dodges with a dancelike quality, demonstrating finesse and spatial awareness as they battle one another (Essien, 2008;

Lewis, 1992). The language used to describe the concepts and actions within capoeira has literally molded the actions and metaphorically impacted the thoughts of *capoeiristas*. When one enters a *jogo*, the term *comprar a luta* (literally “to buy the fight”) is used to describe the action of the individual entering into the arena as the person indicates intention to fight in the place of the other.

Various styles of different speeds and musical rhythms exist within the game. The two most common are Capoeira Angola and Capoeira Regional, conventionally respectively described to represent the roots of the game and the evolution of its athleticism. Within each, a sense of *malícia* (or cunning) emerges as a way to outmatch the opponent. Fuggle (2008) described *malícia* employed within the game as follows:

The aim is to trick one’s opponent, to seduce them into leaving themselves open to an easy attack or to confuse them so they fall with no contact being made. The logic behind this is two-fold. First of all, the ability to outwit someone bigger, stronger or more powerful than oneself subverts the power relations in place before the game. Yet to achieve this in a way that is playful and witty and which forces one’s opponent to laugh at themselves for being tricked not only reverses the power play but ensures that this reversal is accepted willingly by those who have been upstaged. Those who fail to accept gracefully and with good humour [*sic*] that they have been outwitted simply appear ridiculous to everyone present, a definitive sign that they neither possess genuine power nor appreciate the workings of power either within the *roda* or the world beyond it. (p. 213)

Movement Perceptions

The performance of capoeira provides an experience not only for the mover but also creates captivating experiences for the viewers. Calvo-Marino et al. (2008) examined capoeira through the field of neuroaesthetics to examine “the brain processes underlying aesthetic judgement [*sic*], evaluation and interpretation” (p. 912), based on objective or subjective theories. The research evaluated brain activity in viewers untrained in dance as they observed a series of 3-s video clips of capoeira and ballet movements, without being cued to consider aesthetic quality. Later the participants rated the videos with a Likert scale about the preferences. Results indicated that movements using the entire body and those that moved through space ranked higher, implying that “choreographers could use this information to ‘neurotarget’ their choreography” (p. 918) to provoke a response. Taking this into mind, a capoeirista could consciously evoke reactions from their counterpart.

Rosa (2012) looked specifically at the “polycentric” and “polyrhythmic” (p. 147) movement of the *ginga* and the role that this rocking, swinging, and transitional step plays within capoeira. Providing momentum and power for subsequent moves, it also provides a level of “elegance” (Rosa, 2012, p. 158) that serves as distraction and contributes to *malícia* and the conversational feel of the game. De Souza and Dias (2010) evaluated movement and gesture interpretations in relation to the following categories where the body provides the viewer a sense of narrative: the style of game, identification and relation between comrades, space, techniques and dynamics of the movement of the

body, and sound/music. One particularly interesting assertion arises in comparing the body's occupation of higher elevation in physical space in Capoeira Regional to the "new social and symbolic space" (de Souza & Dias, 2010, p. 626, own translation) achieved in life by the *capoeiristas* who as a category were once enslaved.

Subversive Discourse

Capoeira (2002) described capoeira as an "urban phenomenon" (p. xxii). Within this context, subversive identities and rebellious attitudes continue to be supported in capoeira. The subversion may surface overtly or subtly with the value placed on *malícia* and *mandinga*. Fuggle (2008) provided a comparative analysis of capoeira and parkour, citing their appeal to urban audience as "discourses of subversion" (p. 205). These corporeal discussions produce a conversation with the context around them:

The objective of such a negotiation is to find a way out – a way to escape the limits and rules imposed by society and its conventions. But this escape is not definitive or transcendental since there is no 'outside' to escape to. Rather, it occurs by playing with limits in order to transform them into something different. Thus perceived, parkour and capoeira can be seen to engage in what Michel Foucault has referred to as 'resistances' in contradistinction to Resistance. Both disciplines appear to acknowledge (albeit unconsciously) a Foucauldian understanding of how power operates within society. Power is not a fixed, singular entity used by one group against another. Power exists only as a series of relations. As such it cannot be possessed or resisted outright. It is always in flux

and is always transforming itself into new relations, new operations and discourses. (Fuggle, 2008, p. 205)

MacLennan (2011) discussed capoeira as contradiction and as a dialogue full of “embodied conflict” (p. 148). The culture of capoeira appreciates and accepts conflicting dyads like opening-closing, equality-hierarchy, inclusion-exclusion, present-past, and intersubjectivity-subjugation, and “the result is that capoeira is a manifestation of dialogue that, indeed, values collaboration, partnership, and inclusion at the same time as it embraces conflict and difference” (p. 148). The popularity found in capoeira can then relate to people’s “abiding desire for dialogue” (p. 159), providing a voice and mode of communication to speak where words could not.

Invitation to the Dance

Over time, capoeira has spread through word of mouth and personal encounters with the art form. Lussac (2010) described this in his study where the “interesting data was that not one interviewee responded to have known [about capoeira] through specific advertising, like posters, folders, sheets, among others, strengthening the character of spreading the practice” (para. 12, own translation). Hedegard (2013) described the welcome practitioners extend to newcomers in the sport, and Essien (2008) articulated the community developed as an “enduring legacy” of capoeira (p. xvii). Essien (2008) also told of his own experiences with capoeira and the modeling experience he

encountered with his *mestre*. As he transitioned into the role of teacher, he recognized the importance of investment in his students:

When I first started teaching I knew that I had to be there for the long haul to have a genuine effect. All too often you have poverty pimps that arrive from wherever, and they'll do a mural, or run a short-term program, then they'll leave and feel that they 'invested' in the community. . . . if we wanted to have a real impact in their lives we needed to create an alternate reality for these youth to live in.

(Essein, 2008, p. 92)

Capoeiristas

Fuggle (2008) marketed that “one’s identity as a *capoeirista* is not fixed and immutable but constantly changing” (p. 220). With the multi-faceted approach to the capoeira game, many entry points accessibility prove accessible for people from a multitude of demographics, expanding the game beyond its root population as capoeira crosses borders of nationality, race, socioeconomic background, gender, and age. Studies involving children, the effects of aging, people with various disabilities or impairments, gender roles, racial identity, and personal identification as a *capoeirista* have demonstrated capoeira as an inclusive and beneficial environment.

If you are an athlete, capoeira has a place for you. If you are a fighter, same thing. If you groove on the body’s expression or the music scene, there is also a place for you. Same thing if you are a worker or bohemian and go to the academy only once or twice a week to play a bit in the roda.

There is a place for everybody. And I don't think it's up to me or anybody else to discriminate between those who can or can't play the game. Capoeira is a generous mother. (Capoeira, 2006, p. 163)

Personal Identity

Stephens and Delmont (2006b) argued that the *capoeiristas*' bodies are sculpted, disciplined, and made with purpose. The authors contrast the body of the *aluno* and of the *mestre* as the *aluno* begins to physically imitate and learn the finesse of the control and skill of the *mestre*. In comparing the two, the instructors acquire a confidence as they "display themselves 'at home' in the body; all convey easy grace when resting, sensuality when dancing, amazing agility, and considerable strength when teaching and performing for the public" (p. 113). Delamont (2006) depicted venues of authority demonstrated by *mestres* and the means they use to establish their identity in their work.

Anderson (2001) did a comparative analysis of the approaches and results of children's exercise classes in two settings: a privately owned capoeira school and a voluntarily run gymnastics organization. Capoeira used age-integrated classes, in contrast to the age segregated classes in gymnastics, and appeared to produce more invested students. Capoeira participants came early and stayed late, in contrast to the gymnastics participants, and proved more focused and engaged with the whole scene. Also, the capoeira students identified themselves as *capoeiristas*, taking on the nominative personal identifier rather than simply indicating that they *play* capoeira and limiting the relationship to capoeira to a verbal, participatory form.

Freire (2001) examined the role of culture in social development in Recife. Informal education and community learning, as occurs within capoeira, provide a means for social change. Freire (2001) studied a government school initiative for elementary school students, a community initiative for elementary through high school students, and a capoeira organization-ASSOCAPE- for the community at large. One common result of the qualitative inquiry of the three capoeira groups' members arose in "empowerment," while individual sites showed results in a range of identity items including "overall improvement in psychological well being," "pride in abilities," "positive identification as Afro-Brazilians," and "qualitative life changes of individuals" (Freire, 2001, p. 75).

Capoeira play provides opportunities to invest in communication and social skills, which can also benefit from the participation and community developed within the capoeira *roda*. "Good social health entails meaningful interrelationships and confident social interaction" (Biagioli, 2007, p. 207). Learning to make these exchanges, *capoeiristas* create movement experiences that allow participants to evaluate and expand on their intrapersonal and interpersonal relationships. MacLennan (2011) described capoeira as a "dialogue, one that is beautiful to behold" (p. 147).

For every request there is a response, for every opening there is a moving in and a filling up, for every stumble there is a rising up, and for every uncertainty there is a certainty; it is an exchange characterized by respect and mutuality.

(MacLennan, 2011, p. 147)

Terceira Idade (The Third Age)

Lussac (2009) talked about the need to care for the aging generation, particularly the *mestres* who themselves are beginning to age. The elders of capoeira still have much to offer and continue to play according to their limitations (or, rather, their “possibilities,” p. 58), contributing to the teaching, music, and oral tradition. Lussac (2009) called for better demographics and statistics to be kept in Brazil to aid in future developments for engagement in leisure and play, which will prove important also for the younger, more sedentary generations.

Youth

Burt and Butler (2011) concentrated on issues of youth aggression, promoting capoeira with potential to be a “culturally sensitive treatment to work with aggressive adolescents who are marginalized and/or disenfranchised” (p. 50). Moura, Barboza, and Antunes (2012) executed a study in 5 schools in Rocinha, examining what would challenge and facilitate the insertion of capoeira into the physical education curriculum. Positive components included the freedom from required sporting equipment and the inclusive potential for participants, and the lack of teacher training and preparedness surfaced as concerns.

Bertazzoli, Alves, and Armalar (2008) presented a study of adolescents in a private school engaged in capoeira, applying critical theory and empowering the students to share their learning. In addition to the study of history and contextualization, the students engaged in movement-based, problem-solving activities to provide physical

investigations with socialization opportunities, all gearing towards a climax in the *roda*. The researchers concluded that creating, reflecting, and socializing gave the students a sense of autonomy within the sport.

Inclusion

Dos Santos (2010) undertook a study for children with various special needs between the ages of 7 and 12 years with weekly capoeira classes for six months. The children by the end of the study grew not only in physical skill but also demonstrated positive social interactions among the group as well as a level of acquisition in the theory and history of capoeira taught in conjunction with the movements. Dos Santos (2010) affirmed contributing factors of adult support, adaptations for the movers, and inclusive education scenarios. “The children presented potential for interaction and social development, evidenced mainly in cooperation between these children, which suggests the importance of offering people with special educational necessities real chances of education, work, and social conviviality” (p. 89, own translation).

Gender

With the inclusion of women into a traditionally male activity, the process has met both resistance and acceptance, as well as encounters with machismo. Joseph (2005) elaborated on the subversive actions of women *capoeiristas*: “When women play capoeira, they defy patriarchy, racial oppression, gender constraints of their social lives, and prescriptions on their physicality of which they have grown accustomed” (p. 32). Joseph talks about the diaspora of *capoeiristas* to other nations in search of a better job

market and pay for their skills. “Many black women who face a lack of opportunity at home and have few resources at their disposal see capoeira as ‘a way out’” (p. 32).

Leitão (2004) analyzed the perspectives, perceptions, discrimination, and interest in social causes of women in capoeira based on the writings of the publication *Praticando Capoeira*. Evaluating the content included (and therefore excluded) during its first two years of publication, Leitão gives special attention to what was published in the ongoing segment *Na Roda com a Mulher (In the Roda with a Woman)* and to the relationships of women to their *mestres*, to their students, and to the others within the *roda*. Leitão (2004) found it interesting the manner with which women spoke of their *mestres*, “never attributing to them any manifestation of machismo or less proper behavior, opposing our bibliographical research, where we can evidence, in many cases, exactly the opposite” (p. 44). This also brought into question the selection and publication process of the women’s stories. Stephens and Delamont (2006a), however, marketed that in capoeira “gender is not relevant—age, physical skill, and musical talent are” (p. 319). Their studies took place in a European context, which could explain some of the variance in perspective.

Racial Identity

Alleoni (2010) described the African influence on dance, music, and movement in the Americas, discussing the depth that composes capoeira as an art form now shared beyond Brazil to other countries. Sinval (2011) looked at the inclusion of capoeira in physical education to help create a multicultural curriculum, creating a more full

perspective of the present (and past) cultures represented in Brazil and providing a “concrete opportunity for contact with the black culture” (p. 101, own translation). Sinval (2011) promoted reflective activities in conjunction with the movement, not only connecting to historical repression but also to “the present time, trying to surpass the living wounds of discrimination, present also in the reality of the boys and girls of the park” (p. 103, own translation).

Pedagogy and Practices

In *Pedagogy of the Oppressed*, Brazilian author Paulo Freire (2000) described how a system of liberating educational possibilities opens doors for students to take hold of the material they learn to make transformational steps beyond the class into their life scenarios. Rather than a banking system of deposits made by teachers for acceptance by the empty vessels of the students, Freire (2000) promoted a liberation of knowledge where students take ownership of the material. Capoeira demonstrates these ideals as *professores* open doors for the students to step into the world as action makers.

The fight itself takes an improvisational form, compelling the *alunos* to think for themselves, and breaks the imposition of form or pattern. Often referenced as a series of questions and answers, the fight itself proves metaphorical of the pursuit of capoeira with its call and response requiring listening and action. Wesolowski (2012) spoke to some of the challenges facing capoeira as it continues to expand and, therefore, transform. The current culture of the game appears to be taking steps toward transformation into a sport, for which regulations are heavily debated. Some resist this change loudly while others do

so more subversively- much like the game is played- with cunning and wit against the opponent rather than outright force. Capoeira over its history has had many image changes and likely will continue to do so. “Capoeira practitioners are quick to point out that the art survived in spite of social stigma and periodic repression- in part because of its pedagogical flexibility and resourcefulness” (Downey, 2008, p. 206).

Learning Contexts

Nestor Capoeira (2002) described the initial training practices before the academy where teachers would “create the conditions” (p. 75) rather than having a structured class seen in typical contemporary exercise and dance classes (see also Abib, 2006). Students learned “intuitively and by observation” (Capoeira, p. 218). Mestre Bimba made a shift in the 1930s as he moved his practice into the academies and began to codify sequences and movement patterns, creating Capoeira Regional. With the resurgence in the practice of Capoeira Angola in the 1980s, a new approach emerged with the use of a warm-up followed by particular movement series to train for accuracy. One group of teenagers called Senzala began “training by themselves without a teacher” (Capoeira, 2002, p. 211).

They tried to follow Bimba’s teaching method but also introduced the repetition of a single blow having the outstretched hand of a partner as a target, and systematic attack-and-counterattack training done by two players. They also adapted training methods that they had seen in Eastern martial arts academies.

They started to do a hard gymnastic routine at the beginning of each lesson. And as they were future university students, they unconsciously based themselves on a

model reproducing the Western teaching model as it is found in Brazilian universities...

Because they did not have a teacher and did not have any roots, the young Senzala innovated freely, and many times had good results with respect to their methodic and codified teaching system. (Capoeira, 2002, p. 211-212)

Since then, capoeira has continued to grow and transform its practices while being transported to locations all over the world. Now taught in gyms, private facilities, and schools, capoeira continues to expand its reach. Formal and informal training scenarios exist, and some schools have even included it in their curriculum. Freire (2001) presented research from capoeira taught in the public school setting for students starting as young as the age of five and community classes for youth and adults. Moura, Barboza, and Antunes (2012) did their research in schools where capoeira was not part of the curriculum, although some of the physical education teachers at these schools used elements of capoeira within their lessons, and it was also offered as an extracurricular activity.

Teaching Practices

An ethnographic study by Stephens and Delamont (2006a) investigated the different teaching styles presented by capoeira *professores*. Teaching without explicit explanation, providing strategies (see also Abib, 2006), demonstrating superiority through demonstrations, building loyalty, asserting authority, and creating *axé* all emerge as reinforced teaching practices in the experiences of the ethnographers where “good

capoeira classes are characterized by both clear instructions in the moves and *axé*” (Stephens & Delamont, 2006a, p. 332).

Essein (2008) revealed “the secret of capoeira is this: train capoeira!” (p. xvi). While this is on one hand a simple approach with direct focus for training, pedagogical approaches applied by instructors deepen this thought and range from imitation to observation to innovation. Methods common to the capoeira instructional system include more basic tools like repetition, physical manipulation, and observation and extend to more complex systems of creating learning scenarios for student response, movement scaffolding, and creating autonomy for the learner.

Common to other martial art forms, sparring and replication of movement sequences can be found practiced in capoeira. The fluidity found in capoeira and the martial art Aikido bears a likeness to dance, and Schmidt, Fitzpatrick, Caron, and Mergechea (2011) described the use of synchronization of practitioners’ motions and actions to assist in the building of movement patterns in Aikido.

Focused activity training and conceptual work exist for both dance and capoeira. Dance pedagogy and training, according to Franklin (2004), can be maximized and made effective through specialization, progressive overload, and periodization. Franklin (2004) provided an overview of forms used for dance training including activities specifically concentrated on imagery, balance, flexibility, alignment practices, thera-band work, and strengthening of the upper and lower body and the core. Gilbert (1992) takes a conceptual approach to guide students through the dance, providing teaching scenarios

for movement creation and exploration using elements like space, time, and energy for investigation. Within dance and capoeira, an aesthetic element also exists as the bodies are trained to communicate both to speak through the movement and to listen to what is being said around them. “Teaching dance analysis here extends to teaching about bodies and social meanings, and the emotional reactions conditioned by these meanings; in short, the discourses of physicality” (Kuppers, 2000, p. 128).

More than training students how to do flashy tricks or swift takedowns, capoeira teachers transfer a knowledge of culture and community to their students. The teachers must prove adept not only in the instruction of the movement skills but also in the styles of play, musical instruments, songs, customs, etiquette, and even the history and folklore surrounding capoeira. The following studies of capoeira instruction have reviewed teaching styles past and present to describe the methods of curriculum delivery.

Learning scenarios and physical manipulation. The study by Abib (2006) explored teaching practices of capoeira *mestres* and how they pass their wisdom and experience to the next generation. Before the academy when experience and observation were the teaching tools, they created conditions for the students within which to learn. *Mestres* would “take the hands of the student to ‘take a turn with him’, to give the first steps” (p. 89, own translation), which Abib relates to a more African style of pedagogy. *Mestres*, next likened to Greek poets of old, pass on the traditions of the past to give breath and therefore life to the movements and practices of the *capoeiristas*. They become responsible for creating and maintaining the sense of group identity and for the

“transmission of the collective memory of the group” (p. 94, own translation). One capoeira song highlights the importance of experience acquired by *mestres*:

só o tempo te faz mestre, only time can make you a master
não o diploma que comprou not a diploma that you bought

(p. 95, own translation)

Scaffolding. Downey (2008) demonstrated the effectiveness when using scaffolding theory to help the learner build knowledge. By creating opportunities for observation, imitation, and the next steps, teachers provide access to the material. He indicated that teachers must assess what the students need and respond with appropriate pedagogy, which Downey (2008) would also argue is often lacking in enactment. Three further categories Downey (2008) explored included helping control or eliminate error possibilities, spatially reorienting the movement, and breaking down more complicated pieces into smaller action items. Downey (2008) cited Vygotsky’s ideas of “more capable peers” and “zone of proximal development” (p. 206-207; see also Bertazzoli, Alves, & Armaral, 2008) and referenced the observational strategy of legitimate peripheral participation further explored below.

Observation and legitimate peripheral participation. Stephens and Delamont (2010) described the implications of observation within capoeira learning practices. Legitimate peripheral participation (LPP) gives practitioners exposure to rhythms and songs, as the *capoeiristas* clap and sing along as a part of the *roda*. The etiquette of the game is observed and acquired, as well as how to include and use humor, *malícia*, and

axé. In this way, participants learn what is acceptable, unacceptable, and entertaining within the game. LPP draws new participants into the community, allowing for the passage of knowledge- and eventually the command- to transfer to newer *capoeiristas*.

Imitation. Downey (2010) promoted that a majority of learning in capoeira occurs from imitation. “Teaching is primarily mimetic rather than analytic or explicit” (p. S22). Downey (2010) wrote about one student who not only acquired the movements but also the qualities displayed by his instructor, where “all the idiosyncratic traits made James’s discipleship instantly legible” (p. S25). The genealogy line was clear. What teachers produce, the student will imitate.

The through-line of Downey’s article arose in the citations of Pierre Bordeau’s thoughts on habitus and connections made to capoeira. Creating habits and actions by imitation, often occurring unconsciously, provides debate over what level of brainpower is engaged. *Malícia* provides one such example for capoeira of unconscious learning, which may or may not translate into the practitioners’ lives beyond the *roda*. Embodied knowledge and the acquisition of skills comes in the form of “the patient transformation of the novice, the change of his or her muscles, attention patterns, motor control, neurological systems, emotional reactions, interaction patterns, and top-down self-management techniques” (Downey, 2010, p. S36).

Autonomy. Developing improvisational skills and an independent style comes as learners begin to take ownership of their game. Innovation comes through play and experimentation as capoeiristas make choices and begin to understand the consequences

and potential held by these actions. Fuggle (2008) challenged teachers to train autonomous learners by taking the next step beyond simple imitation:

Despite the strong patriarchal tradition found in capoeira, especially in the figure of the mestre, those who teach capoeira should not (although in many academies this tends to be the case) expect their students to simply copy the movements in a robotic fashion. Rather, in learning these movements, students should be encouraged to question their purpose and efficacy in the roda in order to understand their value while at the same time asking themselves how such movements might be developed or adapted in order to trick and ensnare one's opponent more effectively. (p. 220)

Music. Many lessons are also learned quite literally from the music. Barbosa (2005) overviewed the importance and integral nature that the lyrics of capoeira music provide for the game, arguing that the music sets the tone for the energy and speed of the game. The music provides education about historical figures and sings of the rules of the game both through metaphor and directness. This sharing of oral tradition mimics the question-and-answer play of the game itself, as the singing is often done in call and response.

Physical Impact on Practitioners

Capoeira has been evaluated in terms of bodily impact on the *capoeiristas*. Like other forms of martial art, dance, or exercise, the inherent risks involved and the repetitive actions of capoeira's movement vocabulary open possibilities for both acute

and chronic injuries. Physical benefits and hazards (in addition to the social and psychological benefits mentioned previously) emerge for a variety of demographic groups.

Benefits

As a physical activity, capoeira has potential to promote wellness through exercise and participation, producing personal and interpersonal results. Liguori and Carroll-Cobb (2012) described physical wellness as “critical to a long and healthy life” (p. 63), with benefits of physical activity including “improved mood, reduced stress, and increased energy level” (p. 4).

In terms of emotional wellness, exercise elevates your mood, decreases your stress level, and enhances your sense of well-being. Additionally, increased fitness can lead to greater self-esteem, which in turn can boost interpersonal relationships and social wellness. (Liguori & Carroll-Cobb, 2012, p. 63)

The National Council on Strength & Fitness promoted that “a positive association exists between physical activity and self-esteem in people of all ages” (Biagioli, 2007, p. 212) and that “one important effect of physical activity is the perception of improved physical function in daily activities” (p. 147). Affirming this in contrast, the council also indicated studies on inactivity and mental health showed a “greater incidence of depressive symptoms” (p. 226).

Similarities to dance. Capoeira, with its spurts of movements and inclusive environment, provides similar training scenarios to dance. For many years research has

indicated the benefits available from dance, including Davidson (1986) who compiled various studies as a part of the Olympic Scientific Conference proceedings, revealing the superb cardiorespiratory systems of professional dancers. Franklin (2004) attested to the strength gained by dancers, primarily achieved through anaerobic means. A study by de Villiers et al. (2013) indicated wheelchair-dancing can branch beyond physical benefits for the mover into improvements in self-esteem in adolescents with physical disabilities.

Similarities to martial arts. Martial arts studies revealed benefits from training, including improvements in balance, strength, and flexibility from Taekwondo practice by seniors (Brudnak, Dundero, & Van Hecke, 2002). T'ai Chi has also been proven an effective intervention exercise for balance in older adults (Taylor et al., 2012; Zhang, Mao, Riskowski, & Qipeng, 2011). Similar to Taekwondo with its kicks and sweeps and to T'ai Chi with its grace and fluidity, capoeira promotes strength, flexibility, and balance in its participants.

Matos and Meneses (2012) conducted a study to determine if practicing capoeira aided in the equilibrium of adults with visual impairments compared to those with visual impairments who did not practice. The study used the Berg Balance Scale and the Falls Efficacy Scale International, and while the *capoeiristas* scored better on both assessments, the results were not significant. The authors recommended a more representative sample and different assessments to better confirm the results of future studies. However, a study conducted by Carneiro and Garcia Junior (2009) did show

significant increases in flexibility of 68.1% and balance of 83.5% ($p < .001$) in women over the age of 60 participating in capoeira.

Injuries

Like other forms of martial art, dance, or exercise, possibilities exist for both acute and chronic injuries emerging from capoeira's movement vocabulary, repetitive actions, and the inherent risks involved. Identifying patterns can help illuminate solutions for prevention. Koutedakis, Owolabi, and Apostolos (2008) overviewed existing biomechanical methodologies like motion capture, electromyography, dynamography, and dynamometry that can “improve aspects of dance technique which, in turn, may help dancers and their teachers to prevent disabling injuries, to assess fitness levels and control overtraining (or ‘burnout’), and to plan effective scheduling of practice and exercise sessions” (p. 88).

Capoeira injuries. In his chapter entitled “Learning Capoeira,” Nestor Capoeira (2002) cautioned against knee strain in *negativa* caused by repetition as the knee joint achieves extreme flexion. His chapter also overviewed partner safety when training throws and takedowns to avoid injuring either partner in the process. A study by Signoretti and Parolina (2009) indicated commonly occurring injuries and postural patterns developed by *capoeiristas* practicing at least twice a week. Likelihood of occurrence increased with time invested, as the *capoeiristas* had experienced a range of injuries to the feet, ankles, the face, shoulders, fingers, and knees, as well as developing conditions effecting spinal alignment like kyphosis, lordosis, forward head, and anteriorly

tilted pelvis. Body patterning also caused winging scapula, rounded shoulders, hyperextended knees, and pronation in the forearms and feet.

Brennecke, Armadio, and Serrão (2005) investigated the impact of capoeira movement vocabulary on the body in relationship to ground reaction force using selected capoeira actions to demonstrate the need for developmentally appropriate sequential learning. Even without impact, the forces at work within the body during powerful spin kicks, inversions, and sharp snapping actions can cause injury. Türkoğlu, Serbes, Sanali, Sari, and Sekerci (2008) reported on a chronic subdural hematoma (CSH) caused in a capoeira practitioner. Common in other sports, this case is believed to be the first reported due to capoeira. The impulse load caused by the various actions of capoeira can produce tissue damage within the brain from the forces applied by the *capoeirista* during the jostle of the movement.

Similarities to karate injuries. Destombe et al. (2006) in a 1-year retrospective study revealed injuries common in karate, generally occurring during sparring exercises. Injury prevention strategies proposed for karate include “routine warm-up exercises before each session, careful teaching and close supervision, most notably during free-style sparring to ensure perfect faultless control of each strike, use of protective gear while sparring, and limitation of the time spent training” (Destombe et al., 2006, p. 188). Similarities to capoeira emerged in ankle sprains, bruises, and face and finger injuries. Different from capoeira’s methodology of using dodges rather than blocks, karate had a

higher tendency for the injury to result from strikes by the person in action or the receiver of the blow.

Similarities to dance injuries. The combination of musical and athletic components in capoeira and dance reveal the great deal of overlap in these two forms through the athleticism and artistry of their movements. “Dance requires maximal proprioception and coordination, music extreme precision, and fine motor control, in both these are combined with stamina and perseverance” (Rietveld, 2013, p. 425). With the high level of performance intensity and repetitive training found in codified dance forms and capoeira, proper alignment proves imperative for the prevention of both acute and postural injuries. Hernandez (2013) described the propensity for injuries as follows:

Dance injuries normally fall into two categories: (1) injuries caused by accidents and (2) injuries caused by overuse syndrome. . .

Dancers must build strength, flexibility, coordination, endurance, and specific dance techniques. This makes them prime candidates for overuse injuries.

Preventing dance injuries involves properly warming up the major muscles of the body and proper teaching techniques by knowledgeable teachers. (p. 3)

Hernandez (2013) continued this line of thought, advocating teacher education in dance.

The first line of defense in the prevention of injuries is the training and education of dance educators and instructors on the scientific principles of human movement. Students should also be instructed on the importance of warm-ups

and cool-downs, proper equipment, developmentally appropriate dance levels, and when to move on to the next level. (Hernandez, 2013, p. 4)

Fitt (1996) spoke of the importance of the “conscious awareness of the science of motion” (p. 2) and detailed practices for conditioning that can provide proactive measures to prevent injury. “The ‘big four’ of conditioning are strength, flexibility, muscular endurance, and cardio respiratory endurance. The three additional categories of conditioning for dance are conditioning for alignment, neuromuscular coordination, and relaxation” (Fitt, 1996, p. 388). Toledo et al. (2004) cited faulty technique and turnout as primary causes of injury in dance, listing prevention practices of warming up, aerobic endurance, flexibility, joint stability, balance training, plyometrics, core stability, dance skill work, and self-care. Kimmerle (2010) discussed lateral bias in dance and the development of asymmetry from preferential use of one side of the body. Other health hazards included “structural abnormalities, muscle imbalance, hypermobility, lack of strength or neuromuscular control, incorrect technique, floor surfaces and footwear” (Kimmerle, 2010, p. 63).

Rietveld (2013) listed the ankle as the most common injury site among professional dancers in theatrical dance forms, with the knee following as the second most common. When dancers try to force technique or fail to sequence properly, compensation tends to emerge in injuries of the feet, knees, and lower back. Pre-injury investment in flexibility and core work combined with post-injury application of

modification and visualization were presented for use. Again, teachers must be ready and aware of habits developing:

Injuries are caused by bad luck, fatigue, and stress, but, most of all, by faulty technique, the improper execution of classical ballet-technique, the basis of almost every dance training. Faulty technique in dance often is due to an ignorant compensation for physical limitations, which form a structural predisposition for dance injuries. The dance teacher is the first line of defence [*sic*] in the prevention of dancers' injuries. (Rietveld, 2013, p. 426)

Research Implications

Learning occurs within a context influenced by those present (including the teacher). In considering the diversity of audiences within capoeira and the voice given by learning the art, capoeira *professores* play an integral role as they pass the torch to the next generation. While research exists evaluating the physicality of the sport and describing the identities of historical and present *capoeiristas*, an interesting area of investigation emerges in pedagogical practices and the passing the role of *professor* to the next generation of teachers. Lingering questions emerge: “How and what are the *professores* teaching to continue passing knowledge from one generation to the next?” and “What steps are being taken to prevent injuries and promote healthy movement patterns?” The intent of this study with regard to the *professores* was to look at how *professores* bridge the gap to take what they have received from one generation of *capoeiristas* and pass it to the next in a sustainable way. Specifically, this study made a

qualitative investigation into the current teaching culture of capoeira instructors and their injury prevention practices.

CHAPTER III

METHOD

Participants

Using purposive sampling (Patton, 2002), this study utilized capoeira *professores* and investigated the promotion of longevity in capoeira by examining pedagogical and injury prevention practices used by these *professores*. Participants were recruited initially through a formal email request and/or conversation with the investigator or other interested parties, using email addresses of current contacts in the capoeira community and providing the recruitment letter for *professores* to share with other teachers. The investigator began asking for participation amongst known *professores* and invited them to further share the information with other teachers interested in participating in the questionnaire. For this study, participants were recruited from capoeira teachers within the community of Itu, São Paulo, and the surrounding areas, although Brazilian citizenship was not imperative.

Participants could either be current or past capoeira instructors with classroom and/or private lesson teaching experience as a part of school's physical education programs and/or *academia* (gymnasium-type) settings. Inclusion criteria for these selected instructors include achieving the status of *graduado* ("graduate" who has proven a level of mastery through cord advancement) and/or serving as a student-teacher with at least 1-year teaching experience. Minors younger than 18 years of age were excluded

from this study. The investigator acquired signed informed consent forms for all *professores* and approval from the Institutional Review Board at Texas Woman's University (TWU) for this study.

Instruments

Questionnaire

Questionnaires were emailed to participants on confirmation of their interest (or given in paper form upon request), collecting demographic information and asking the following questions:

1. Describe how you teach capoeira.
2. Do you still train capoeira? If yes, how and with whom? If no, why have you stopped?
3. What injuries have you incurred during your capoeira career?
4. What injury prevention strategies do you use in your own training? Do you use any of these strategies in the classes you teach? What other injury prevention strategies do you use when teaching?
5. What common injuries do you see in capoeira? What methods do you use to combat any/all of these?
6. Describe teaching practices your capoeira teacher used. Do you use any of these methods? If so, which and/or to what extent?
7. How are you developing future teachers? How are you passing the art to the next generation?

Interviews

From those that completed the questionnaire, six interested participants agreed to participate in one-on-one interviews on a volunteer basis subject to participant availability. Interview questions were presented in a one-on-one oral interview format using the following questions:

1. Describe how you first encountered and began practicing capoeira. What captured your attention?
2. Research has indicated common injuries include ankles, the face, shoulders, fingers, knees, kyphosis, lordosis, forward head, rounded shoulders¹, winging scapula, pronated forearms and feet, anteriorly tilted pelvis, and hyperextended knees (Signoreti & Parolina, 2009). What methods do you use to combat any/all of these?
3. Do you use teacher-initiated or student-initiated teaching styles? Provide examples.
4. How do you think about the learning styles of the students that you teach? How do you engage the students in the ways they learn best?

Following the interview, participants were allowed to review their responses for confirmation or further discussion.

¹ Please note that rounded shoulders were entered as “shoulder subluxation” yielding good discussion material but not originally stemming from Signoreti & Parolina (2009).

Focus Group

Following the interviews, four voluntary participants willing to continue in the process met in a neutral, agreed-upon location. The intention of the focus group was to enhance trustworthiness of the results through member checking and to expand on ideas and themes emerging from the questionnaires and interviews.

Procedures and Measurements

Questionnaires were returned by email or completed by hand, and data collected through interviews and focus groups was audio and video recorded. A native speaker (having completed the TWU confidentiality agreement) transcribed these sessions to ensure accuracy, and then the investigator organized and coded the data. The researcher is proficient in the Portuguese language and had access to translation services for any questions arising during the conclusion process.

Research Design and Data Analysis

Results were compared and contrasted for emerging themes and analyzed using open coding. Strauss (1987) described open coding as “unrestricted coding” where the researcher codes “by scrutinizing the fieldnote, interview, or other document very closely: line by line, or even word by word” (p. 28). Strauss (1987) continued:

This aim is to produce concepts that seem to fit the data. These concepts and their dimensions are as yet entirely provisional; but thinking about these results in a host of questions and equally provisional answers, which immediately leads to

further issues pertaining to conditions, strategies, interactions, and consequences.

(p. 28)

Questionnaire and interview information was organized through open coding and NVivo analysis software available in the TWU Center for Qualitative Inquiry Research Lab. The investigator collated participants' responses with attention to emerging themes and common pedagogical practices.

CHAPTER IV

RESULTS

The following is a synthesis of research conducted by the author and the cumulative results from the group of participants. Information from questionnaires, interviews, and the focus group has been organized by content with regard to longevity, teaching theories, and injury prevention. All direct quotes from participants' questionnaires, interviews, and the focus group within Chapter IV are the author's own translations from Portuguese into English. Participants, all Brazilian males between the ages of 18-56 from the Itu area, were given pseudonyms (see Table 1).

Table 1

Participant Overview

Pseudonym	Years of Practice	Years of Teaching	Paid for Teaching?	Questionnaire	Interview	Focus Group
Pedro	26	15	Yes	X	X	
Antenor	23	16	Yes	X	X	X
Bruno	20	13	Yes	X	X	X
Marcos	20	-	No	X	X	
Davi	15	4	Was	X	X	X
Leo	8	1	No	X	X	X
Matheus	8	6 mo	No	X		

Participants completed questionnaires describing their experiences with capoeira education practices and their encounters with injuries as a participant and observer. Those continuing in the interview process described their first impressions of capoeira, injury prevention practices, and approaches to teaching and learning styles. The focus group participants further expanded on these areas and offered additional information to supplement the discussion. Table 2 represents the overarching themes emerging from the research in regard to longevity, teaching theories, and injury prevention practices within participants' current practices.

Table 2

Emerging Themes
Continued Growth of Capoeira
- Longevity and Safety
- Advancement of Technique and the Craft
- Inclusion
Teaching Practices and Teacher Role in Learning
- Teaching and Learning Styles
- Progressive Skill Development
- Balanced Training
Injury Prevention Measures
- Warm-up, Stretch, Skill Building, Practice
- Posture and Alignment
- Respect for Student Limits

Invitation to Longevity

When asked what initially caught their attention, participants listed various aspects of capoeira including the fight ($n = 3$), the presentations/*rodas* ($n = 3$), the acrobatic jumps ($n = 2$), the culture, the game, its status as a martial art, the competition,

its “contagious” music (Marcos, from interview), the play, and an invitation from a friend. As they saw capoeira on display in the squares, *rodas*, and gyms, they had similar reactions to Pedro who said, “I want to do what this person is doing!” (from interview). Antenor saw a presentation on Friday and went to find a teacher to start training on Monday (from interview). With continued exposure and engagement, the fascination grew, and Leo describes the feeling of someone experiencing capoeira and knowing “I was born for this” (from interview).

The *professores* participating in this research still regularly train capoeira with peers, students, and under more learned teachers with frequencies ranging from once a week to every day. Their responses quickly revealed that they love what they do, with one participant even training at home on his own time on the weekends (Leo, from questionnaire). Periodically bursting into song with lyrics pertaining to the discussion, the focus group of capoeira instructors shared stories from their own teaching and training experiences with occasional bouts of laughter erupting.

Passing Information

Every questionnaire respondent indicated overlap in the methods used in their own personal injury prevention training regimen with the teaching methods they utilize, and often teachers share from the same material they are training with a lesser load for their students. While some methods presented by their respective instructors are still incorporated in these teachers’ practices, participants recognize a shift in teaching having

occurred over time as adjustments in instruction and form to now incorporate more warm-up and stretching formerly missing from past training formats.

The focus group cited the *negativa* as an example of movement that has shifted in postural training because of the prevalence of injury. By bringing the weight forward in the stance of the *negativa*, the knee became less vulnerable. Mestre Camisa, credited for changes like this one, helped the sport evolve. Described as ahead of his time, he began to modify practices for the better and avoid perilous positions. Because of the injury prone nature of the practices Marcos learned as a student, he no longer uses the same practices, which lacked the stretching and warm-up aspects now greatly emphasized (from questionnaire). Points of view differ at times as well between the old and new teachers. For example, where Pedro would call Capoeira Angola a low game, his instructor would describe it as a high game (from questionnaire).

Time and training have also opened doors for the potential for increased difficulty of movements and skills, allowing the development of the sport to grow. Developing technically and functionally, practitioners continue to build on the basic skills and work toward increased challenges. With adaptations from the past and current practices, the teachers make an investment in their students as they create the learning environment.

Future Teachers

When asked about how capoeira is shared and passed on to the next generation, participants described how they work to open capoeira to all people, recognizing that

people have limits and yet all people have things they can do. “I teach what I know because I believe that knowledge needs to be shared” (Pedro, from questionnaire).

Passing down what they have received, teachers invite the students with more training to accompany them to classes to observe educational theories in practice, with the next step of beginning to give their own classes and develop a personal teaching style. Expectations for *professores* include developing proficiency in the “fundamentals of how to play, sing, play the instruments, and teach” (Davi, from questionnaire), involvement in social actions to engage the larger world, and creating an expectation for inclusion. Seeking to honor the culture, teachers help the students engage this “‘fight’ of freedom” (Marcos, from questionnaire), providing them with context and history as the students grow in confidence and knowledge. Ideals and movement principles carry forward in addition to technique and skills, constructing links to the history of capoeira to provide a context and a connection to the future.

Inclusion

In addition to its athletic and sport characteristics, capoeira provides rehabilitation, socialization, therapy, and social inclusion. Focus group participants referenced a common friend who continued practicing after multiple knee surgeries, as capoeira provided him a fabulous rehabilitation to bring him back into an inclusive atmosphere where he could work at his own pace. Leo gave the example of the challenges met with returning to soccer after an injury where the play is never quite the

same, as opposed to returning to capoeira where options continue to exist (from focus group).

Perceived and physical boundaries prevent entry into some sports and activities, but with capoeira, every human being is invited to “come and do” (Antenor, from focus group). Capoeira does not exclude based on sex, religion, illness, ability, belief, social level, or sexual orientation. Focus group participants described the incredible progress and play of people with multiple sclerosis, missing limbs, who walk with a limp, cerebral palsy, schizophrenia, and visual deficiencies. Classes can be integrated or focused for particular groups. “Capoeira takes everyone” (Antenor, from focus group). Within the inclusivity, practitioners need to recognize their role by attending to graduation hierarchy, skills mastered during presentations, safety within the *roda*, their proficiency of instruments, etc.

Injured Students

Depending on the degree of injury and the level of mastery within the sport, injured students have options for continued participation and growth during their recovery time. Back and lower limb injuries make training difficult, but a hurt finger leaves options open for continued practice with the *ginga* and kicks while avoiding taking weight on the hands. Incorporating beginners who are still learning what their bodies can do proves a bit more challenging than *graudados* who better know their limits and the alternatives available. Injured capoeiristas can also practice the instruments during their recovery and help keep the energy up in the *rodas*. Davi described his experience of

playing music in the *roda* braced on a crutch after his knee surgery. Soon he discarded the crutch to enter the *roda* and did only *queda de rim* while everyone kept up energy in the *roda* (from focus group). Antenor discussed a capoeirista who conducted physical therapy using the principles of capoeira for his recovery (from focus group). “Capoeira helps a lot. Not just from the exercise, but capoeira has musicality also... it treats the body and the mind” (Davi, from focus group).

Aging Bodies

The continued evolution of the sport permits older practitioners to actively continue with their training, whether they began as in their youth or adulthood. Antenor described a man who started his capoeira career at 58 years old and now at 79 is still fighting (from focus group). The focus group spoke of older capoeiristas with awe and animation, especially in the backside strength coming from spending so much time in the *cadeira*, and described them as having thin, muscular bodies with a strong backside and a long, straight back. Standing tall on strong legs, older practitioners still play capoeira well with few practitioners with injuries, although older capoeiristas do tend to shy away from the more athletic maneuvers. Their movements and patterns may alter over time as they may play instruments more often, use fewer jumps, and choose safer variations of certain moves. Seeing these older examples, younger players set out with confidence to age well, knowing they “will arrive at a good old age” (Bruno, from focus group).

Injury Prevention Practices

In caring for the bodies of capoeiristas, practices exist to help promote safety for the short and long term. *Professores* can help avoid harmful scenarios by attending to environmental factors of the space, establishing behavioral expectations, paying attention to student needs, properly developing skills, and patterning the physicality of the body.

Preparation for Training

Preparing the physical environment happens in regard to the flooring. Typically, harder surfaces are utilized during training rather than a tatami mat like in karate or jujitsu to prevent forcing torque on the knees and ankles during spin moves and other movements where the weight shifts. Wet, slippery floors should be avoided, as should sharp objects because capoeiristas generally train barefoot.

To help prepare the mental state, teachers set up the environment with their expectations. Antenor articulated that the game is played not “against” but “with” each other (from focus group), although Bruno cautioned that students must not forget it is a fight and therefore must learn how to dodge (from focus group). Students may want to react with ill will and try to hurt each other, but reminders are given that contact may happen and that students need each other to train. “Don’t rough up your colleague with whom you train because you will need him to train” (Davi, from focus group). Leadership from the front of the class helps set the tone, and teachers may sit students out if their behavior becomes a problem.

Pedagogical Theories

In looking at the big picture, “the focus of it all is the *roda*” (Antenor, from focus group). Leo described the importance of training the physicality of the body and the correct timing of the execution of the movements (from interview). Capoeiristas must train to know the right time to act and react within the *roda* and must prepare themselves by maintaining discipline for the development of strength and movement efficacy.

Class set-up. A general consensus of warming up, stretching, working specific skills, and practicing playing emerged for the classes. Warm-ups may be done with generic exercises such as jogging or with capoeira-specific activities like the full-body movement of the *ginga*. Stretching is done in a similar vein both in general terms such as forward flexion of the hips for the hamstrings or pulling the leg behind to stretch the quadriceps and also in capoeira-specific stretches using the *cadeira*, *benção*, or *rasteira* to open the body. For strengthening, the *professores* use exercises specifically designed to reinforce capoeira movements such as repetitive lower and lift patterns using the *esquivas* or a series of *golpes* to work on kick power.

Standard in teaching, the instructors begin with the basic movements and develop into more complex moves, always taking posture into account. Starting with the fundamentals of the *ginga*, the *esquivas*, and the basic *golpes*, students learn how to link strikes and dodges. Upon the students’ development of mastery of the skill, the teachers begin to introduce new levels of the material adding increased difficulty through jumps, turns, and the flashy *floreios*. Teachers create hooks for learning through the use of

rhythms, repetition, skill break down, and technique cleaning. When designing classes, especially with children, Matheus works to utilize practices that join the “useful and enjoyable” to help maintain student interest and engagement (from questionnaire).

Teaching styles. While teachers have varying levels of openness to student suggestions, the teachers continually receive ideas, look for new things to incorporate, and work to keep the classes applicable to the attendees. Bruno’s experience yields more questions from the students about the *how* and the *why* of the material than suggestions (from interview). Generally, the teacher maintains control over the material included in class with capoeira’s standardized movements and sequences passed on from the *mestres*. Teachers present scenarios that will happen in the *roda* and give the students the opportunity to practice options to use in the moment. For example, students can train delivery of the *martelo* from a variety of starting points like the *cadeira*, the base, and the *negativa* (Davi, from focus group).

The classes have a certain pattern to them, but teachers should remain alert and aware of deficiencies in the students’ skills and work to maintain a balance in areas where they are lacking. Antenor describes the importance of coordinating training in regard not only to student needs but also to the season of training as well. Upon returning from holidays, classes will need to attend to conditioning, strengthening, and stretching (from focus group), whereas preparing for upcoming games might result in training more kicks. Throughout the year, Antenor’s classes will rotate through working *golpes*, stretching, and playing to help keep balanced (from interview). One participant’s teacher

modeled flexibility within instruction which he now employs in his classes, recognizing that a student with less training may still have a good idea for strengthening and training: “Share with me, and I’ll pass it on to the rest of the group” (Leo, from interview).

Learning styles. Within capoeira, everyone has a unique style of play. Equally unique is how students learn, and learning is an ongoing process. Pedro recommended getting to know the individual student to discover his history and the way the he learns best and to respect his limits “to know... what are his problems... what he can do and what he cannot do” (from questionnaire). *Floreios* particularly take on the flare of the capoeirista, giving the role of aiding with technique to the teacher and leaving the creativity to the student (Davi, from interview).

While the principles are the same, the focus of the lesson changes depending on the level of the students’ training as *graduados* receive a more advanced training than the beginners. Once a student arrives at a certain level of mastery, more intensity develops and incorporates new movements or versions of movements. Classes are typically divided by age with adults all training together, where the older practitioner “will just breathe a little more” than some of the younger students (Davi, from focus group).

Specific work is given based on the needs of the students. When delivering material, teachers activate a variety of strategies to connect with the various learning styles present (see Table 3). Examples include verbalizing instructions for auditory learners, demonstrating movements for visual learners, and hands-on moving of the body for the kinesthetic learners. Teachers may demonstrate both the correct and incorrect

execution of a movement to clarify the difference between the two forms. Identifying important aspects, calling on a student to show the example, and incorporating the individual's style into the learning can lead to the growth of the individual and the group. As students watch each other as their different strengths emerge, they may choose to adopt what they see in each other and integrate it into their own style. Davi described some students who will learn on their own and who just have “the gift” for learning (from interview).

Table 3

Interview Responses on Making Connections to Students

Individual Attention <ul style="list-style-type: none"> • Create confidence in the training • Help students develop own style • Respect the individual • Examine the needs of each student • Discover the individual's best manner of learning 	Recognizing Learning Styles <ul style="list-style-type: none"> • Demonstrate and describe (n=2) • Show correct and incorrect samples • Use video • Call on students to demonstrate movement (for students to see and hear the demonstration) • Some students learn on their own
For Class Set-Up <ul style="list-style-type: none"> • Design depending on the level of training of the students • Conform plan to those present • Craft a balanced class of students' strengths and deficiencies (individually and as a whole) 	For Lesson Plans <ul style="list-style-type: none"> • Train the fundamentals of capoeira • Seek and teach new things • Teach step by step (develop skill to proficiency then challenge further) • Connect to the history

Scaffolding. Scaffolding emerges in warm-up and skill progression. The same basic moves can provide building blocks to increase difficulty and develop consistent, efficient movement patterns. Headstands can develop by propping knees on the elbows until strength is developed to lift the legs overhead. The *martelo* has seemingly infinite

varieties of execution and varying degrees of difficulty as a solitary kick or in combination with other movements. Bruno presented the analogy of riding a bicycle with the example of the *martelo*. When a person starts riding, the rider begins with training wheels and then learns to ride without them. Then the person rides faster and still faster and then can try without a hand. “Did the bicycle change?” he asks. “It’s the same bicycle” (Bruno, from focus group).

Imagery. Imagery is used both metaphorically and literally to help the students learn new material and about how their bodies operate. The *professores* referenced animal-like movements for warm-up material and other specified movement actions such as creeping like a crocodile, galloping like a horse, and crawling like a bear. One of the play styles even has a song specific to animals and their movements.

Videos and first hand observation also help the students see what is happening in the body by watching both each other and the masters. Davi describes the importance of standing as part of the *roda* and clapping hands for three hours to see and learn from the experience, especially early in the learning process (from focus group). Through the active participation as part of the *roda* surrounding the play, students can stop to analyze the game and learn about tendencies that emerge in play. By watching capoeiristas’ styles and characteristics, they see the performance of well-executed movements and inspiring actions that challenge the student to continue learning. The participants cited specific capoeiristas whose examples of fighting taught them a lot in their experiences. At times, mirrors can also become a useful source of imagery to see and adjust one’s own

posture, although challenges arise because the student may acclimate to a different reference beginning to look in the mirror rather than at the other player.

Creating autonomy. “Capoeira can be what you want her to be” (Antenor, from focus group) as a fight, a competitive sport, a game, play, a philosophy of life, just fun, or many other points of view. How the student views capoeira will affect the student’s approach to training and the exercises explored. Training depends on the person’s goal, and intensity levels change according to the purpose of the training. “Everyone can choose the route they desire, and injuries can happen” (Davi, from interview). The higher the level of training, the higher chance of injury due to increased exposure with the expanded time spent in action. “Many people think that capoeira is not a fight, but it is” (Davi, from interview).

Feeling comfortable to enter the *roda* is relative to the student. Some want to jump right in while others hang back for a while. Practicing alone proves important for patterning and confidence, and fighting two by two gives experience incorporating the lessons learned in class into a *roda*-like situation to work to execute the kicks and dodges and learn by experience. Antenor gave the example in the focus group of a partnering scenario where one partner chooses any three kicks while the other tries to enter with an *entrada*. The teachers create learning scenarios and sequences for training for the students to choose their responses, although the *roda* will not be limited to these situations and sequences. This practice also helps with quick reasoning and decision making. As mentors, the teachers coach the students on what to do in the *rodas* and

practice because they already see the next step, and through the use of specified training, students build habits and anticipation for how to respond in similar circumstances.

Capoeira play often “appears to be choreographed and in reality is not” (Antenor, from interview), although these muscle memories created do emerge in the *roda*, generating almost automatic responses and revealing the players’ intuition.

When training students to self-regulate in order to help prevent injuries through proper patterning and safe reactions, teachers must show precise, accurate demonstrations for the students to know how to recognize form in their own bodies and should correct the students as needed. Pedro spoke to the importance of not only correcting form in the moment but also looking to prevent future errors when giving instructions (from questionnaire). “How you train is how you respond” (Antenor, from interview), making it important to employ correct training with acute awareness. Removing bad habits can be a challenge to develop new muscle memory so proper training from the beginning becomes imperative.

Eager students often ask how they can improve, seek ways to get better, and practice outside of the class. To maximize efforts during class time, teachers encourage students to train outside of class on their own. “If your result is good, it’s because you’re style is good,” Marcos said in his interview, revealing the cycle that good results produce confidence in the training which motivates the students to come and work hard.

Body Conditioning

General recommendations of stretching, strengthening, building endurance, and proper posture arose from participants (see Table 4 regarding frequency). To ward off acute and degenerative injuries, participants recommended setting the body up for success through training. Many of the preventative exercises have overlapping benefits and multi-reaching effects, much as injuries inversely can aggravate other complications.

Table 4

Warm-up, Stretching, Strengthening, and Correct Body Frequency

Source	Prompt	Warm-up	Stretching	Strengthening	Correct Body
Questionnaire (n=7)	• How you teach capoeira (Q1)	2	2	-	3
	• What injury prevention strategies used (Q4)	5	5	2	3
	• How to combat common injuries (Q5)	3	5	6	4
Interview (n=6)	• Ankles	2	2	1	4
	• Anteriorly tilted pelvis	1	2	3	3
	• Face	-	-	-	3
	• Fingers	1	1	-	6
	• Knees + Hyperextended knees ^a	2	5	6	2
	• Forward head	1	2	2	4
	• Kyphosis	-	1	-	6
	• Lordosis	1	1	3	5
	• Pronated feet	2	2	2	2
	• Pronated forearms	-	4	2	1
	• Shoulders + Shoulder subluxation ^a	2	3	6	2
	• Winged Scapula	-	1	1	2

Note. Responses were offered as answers to open-ended prompts; exclusion does not indicate lack of existence within the participants' practices. "Strengthening" includes variations for both strengthening and weight training, and "Correct Body" relates to form, posture, and the correct execution of movements. ^a Knees + hyperextended knees and shoulders + shoulder subluxation have been combined as various participants referenced their previous answers from the generic injury as part of the more specific injury.

Outside of class work at the gym is encouraged, realizing that some people enjoy training capoeira because they do not like weight training and would prefer to strengthen in other manners. Cardio strengthening activities like biking, running, and swimming provide cross training endurance and muscle building. Matheus also mentioned the important aspect of caring for the body by staying hydrated (from questionnaire).

Strength training. Strengthening can augment a practitioner's level of operation and take the play to the next level. "Stronger muscles, stronger you" (Davi, from focus group). By strengthening everything, capoeiristas prepare for anything, but they do not just weight train for the sake of appearance (although when this subject arose in the focus group, the entire group started flexing and showing off their muscles). Strength training provides the power and force for the movements but should be done with the focus of capoeira in the forefront to develop the appropriate muscles needed. The necessity to incorporate stretching also remains essential because without the flexibility component, the muscles stay hard and restrict movement potential.

Strengthening happens within class through the repeated exercises, like raising up and down from *descida basica*. Movements like the *cadeira*, *ginga*, *martelo*, and *benção* also provide leg strengthening and help protect the joints by having strong muscles surrounding them. As body weight exercises become easier, more resistance can be added through training with bands or adding ankle weights to kicks. Davi advocated that people may arrive at a level where they need more to challenge the body and proposed that "if you want to get better, you do weight training" (Davi, from focus group). "There

is no substitute for weight training,” Davi said in his interview and later described it as “indispensable” (from interview), although some dispute existed in the focus group about whether balanced training could be contained to capoeira and provide sufficient results.

Postural training. An emphasis on correct postural training arose for both the big picture and the individual movements of capoeira. In injury prevention, posture is “fundamental” (Antenor, from focus group) and “essential” (Leo, from focus group) for the short-term and long-term health of the capoeirista. Postural cues, also important for everyday life, arise for capoeiristas in concepts like squatting with the knees rather than bending with the back and sitting at work with an elongated spine rather than hunched forward. The teachers advocated posture and alignment in order to create a base for safe movement, especially in response to the interview question based on the study by Signoreti and Parolina (2009). Other overarching themes from participants’ responses included stretching, utilizing a proper warm-up, developing proper form, and working to strengthen the body through weight training and other exercises (see Table 4).

Where other sports may prioritize strength and speed, capoeira pursues proper technique and placement along with stretching to keep the body limber and agile. Capoeiristas build up speed and do use fast kicks, but “well-placed” ones (Bruno, from focus group) rather than a flurry of hopeful legs flapping around. The *ginga* functions as the base for movement and the basis for developing proper alignment and a foundation from which to move. Cues for the *ginga* include maintaining the back upright, keeping the eyes and focus forward, positioning the arm in front for defense, moving the legs

through parallel, aligning the front knee over the heel, and placing weight on the whole foot on the front leg and on the ball of the foot on the back leg. This upright spine carries over into the *cadeira* and *pontapés* to help prevent back pain. Attending to technical placement also surfaces in turning the base heel in *martelo* to prevent torque on the knee and bringing the hips forward in kicks.

Postural care. Training with bad form opens the body for poor postural patterning and can harm the body and spine not to correct (Leo, from interview). Training should be “always respecting the limit of the student” (Davi, from interview), and Leo encourages a proactive approach by setting the body’s limits, stopping before passing limits, and avoiding excess training (from interview).

For winging scapula, correcting posture and spine can help through training the back and working to open the chest. Prevention practices include leaving the floor, animal movements like the *jacaré* alligator crawl for the back and triceps, dips on the floor, and stretching by pressing up into the bridge.

With regard to forward head, proper capoeira patterning indicates an upright neck with focus always looking to the front. To avoid strain, neck muscles should be loosened and not forced, and headstands should be trained progressively. Antenor may recommend physical therapy if a problem is persistent (from interview). Stretching to help maintain good neck alignment includes inclining the ear toward the shoulder, releasing the weight of the head forward drawing the chin to the chest, and pushing the chin with the hand upwards and to each side.

Battling kyphosis, capoeiristas work to keep the spine in an upright position with the chest lifted and the arms at the right height to allow the shoulders to maintain a relaxed posture. Rounding forward becomes particularly problematic in *benguêla* with the tendency to lean forward in an attempt to stay low to the ground. Even in *floreios*, practitioners should not lower from the chest but rather by bending the knees. Through practicing capoeira, the body trains the breathing and combats kyphosis by opening the chest for breath to help maintain the posture.

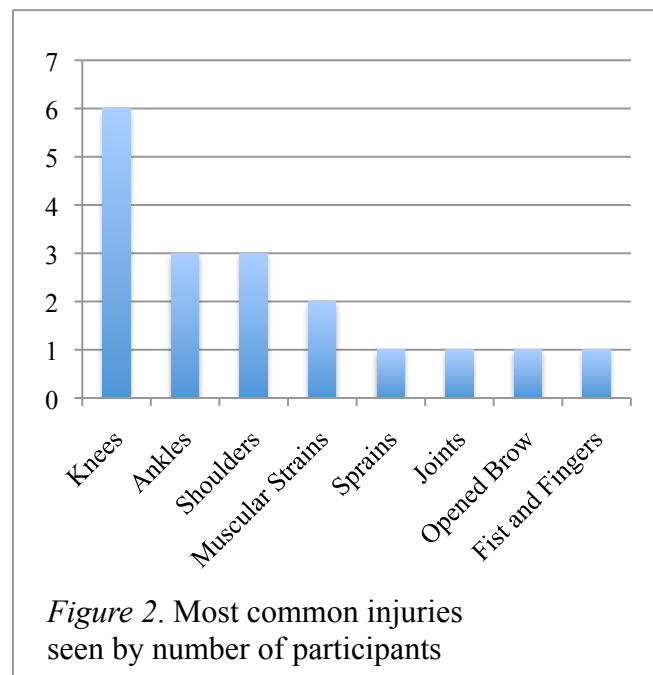
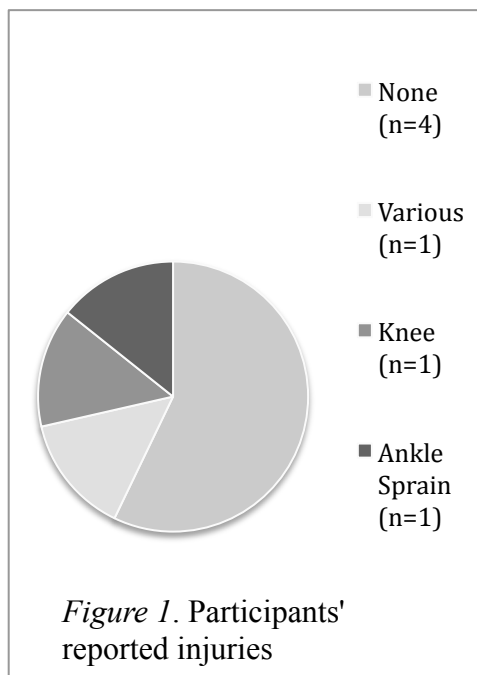
Preventing lordosis requires a good deal of attention to the mode of sitting and to strengthening the back to help maintain an elongated spine. Without the proper back strength, the *cadeira* will not support the spine and will cause pressure on the lumbar region, as can improper *ginga* form. “A strong back helps all moves” (Davi, from interview). Superman back lifts can help strengthen; one participant even uses the abdominal incline with a weight to lower and lift the back (Marcos, from interview).

An anteriorly tilted pelvis could be either exacerbated or rehabilitated in capoeira depending on form and posture as the patterning consistently practiced forms and shapes the body. With the amount of time spent in the *cadeira*, the base, and the *ginga* transferring between these two, a lack of core strength and/or poor posture can give room for the repetitive action to draw the hips forward. Correct form in the *cadeira* can help strengthen the legs to provide support around the hips, as can kicks to workout the backside. The *cadeira* and the *benção* fake can help warm through the hips as well. Stretches counterbalance the time spent in the repetitive movements. Examples given

include the butterfly, standing flexion of the hips with parallel or crossed legs, and a single leg hip flexion with a flexed front foot.

Injury Prevention Strategies

With few reported injuries from their own experiences (see Figure 1), the most common injury site referenced by questionnaire participants surfaced as the knees, followed by the ankles and shoulders (see Figure 2). Attending to the elements of posture, strengthening, stretching, and playing with a warm body emerged consistently for the different potential injuries. Again, importance arises in knowing the students to discern what they can do and what their problems may be (Pedro, from interview). Strategies and training techniques used by the *professores* are listed below by injury sites in order of prevalence as seen by the participants.



Knees. To avoid injury and impact, capoeiristas need to know the movements of capoeira to prepare the brain and impulses for what is coming and duck or move out of the way. Bruno declared that “we are all vulnerable” in regard to knee injuries in capoeira (Bruno, from focus group). The tendency for some capoeiristas when they arrive to a *roda* that has already started is try to jump in without warming up or stretching, and “these capoeiristas have a short life” (Antenor, from interview).

Postural training proves imperative in regard to the knees, paying special attention to keeping the knee behind the toes to maintain a 90° angle. Preventing inward and outward rotation and attending to the alignment of the knees arises in the *cadeira*, *ginga*, and *golpes*. Knees should maintain a slight flexion and not straighten fully even in the kicks, which will also help the capoeirista better resist a takedown. Flips and jumps can torque the knee, requiring proper impact absorption when landing (see Table 5 for a summary of responses).

Table 5

<i>Knees</i>		
Questionnaire (n=6)	Interview	Focus Group
<ul style="list-style-type: none"> • Correct Posture Execution (n=4) • Stretch (n=4) • Strengthening (n=4) • Repetitive Training • Weight Training • Warm-up 	<ul style="list-style-type: none"> • Correct Posture Execution (n=2) • Stretch (n=4) • Strengthening (n=5) • Train Kicks (n=2) • Weight Training (n=3) • Warm-up/Not Playing Cold (n=2) • Always a Slight Bend in the Knees (n=2) • Not Forcing the Knee • Proper Impact Absorption • Stretch • Begin Slowly • Dodge 	<ul style="list-style-type: none"> • Prevent Knees Passing Forward over the Toes • Prevent Inward Rotation • Strengthen with <i>Cadeira</i>, <i>Ginga</i>, <i>Martelo</i>, <i>Benção</i> • Weight Training • Modification of <i>Negativa</i> for Safety • Always a Slight Bend in the Knees • Pivot Heel and Avoid Tatami in <i>Martelo</i> to Prevent Torque on Knee • Vulnerable Area • Lower by Bending at the Knees

The addition of ankle weights can supplement functional training with capoeira kicks and help bring muscular power to the calves and the whole leg. Lowering and lifting in the *descida basica* can also add weight. Stretching to loosen the legs can be done from the *au* feint by grabbing the foot across the backside and from the *benção* prep by holding the knee to the chest. Learners should start slowly to build up adequate strength and provide a good structure for movements like the *martelo*, *cocorinha*, *esquivas*, and turning movements. In working to avoid hyperextension as a pattern or as an acute injury, exercises like deep squats and rocking forward to stand from the *negativa* can help strengthen the legs. The *professores* encourage avoiding impact and discourage bad sportsmanship as a swift kick like a *pisão* to the knee could cause serious trauma.

Ankles and feet. Movements specific to capoeira help to strengthen the calf and ankle as seen in the examples of adding ankle circles to the *meia lua* feint and doing single legged *benção* calf-raises for strength and balance (see Table 6). Taking the ankles through their full range of motion in ankle circles and sweeping the foot back and forth from inversion to eversion can help warm and loosen the ankles to prepare the feet to respond. Pedro showed an example of a stretch for the feet and ankles in which the person supinates the foot and places it on the upper thigh (from interview).

Table 6

<i>Ankles and Feet</i>		
Questionnaire (n=3)	Interview	Focus Group
<ul style="list-style-type: none"> • Correct Posture Execution (n=3) • Stretch (n=2) • Warm-up • Repetitive Training • Weight Training • Strengthening (n=2) 	<ul style="list-style-type: none"> • Correct Posture and Set Up for Moves, i.e. Base/Ginga (n=3) • Stretch (n=2) • Warm-Up (n=2) • Repetition • Weight Training • Strengthen with Calf Exercises, Aerobic Exercise, Walking, Running, Capoeira Movements • Analyze the Step (n=2) • Whole Foot on the Floor (n=2) • Start Slowly to Find the Rhythm • Work on Balance 	<ul style="list-style-type: none"> • Avoid <i>Martelo</i> on Tatami to Prevent Injuring the Ankle • Care for the Foot with Ointment and Tape if Foot Opens

Always tending to good technique, steps should be analyzed to ensure proper absorption of falls and impact sequencing through the feet. Activities like the *ginga*, walking, running, and aerobic exercises can help strengthen the feet as the repeated action with correct placement occurs. Starting the *ginga* slowly helps find the proper

rhythm and base of support for the feet, ensuring the whole front foot on the floor and the back foot placed on the ball of the foot to provide the impulse for the next move. Marcos has supination in his feet which caused wear and tear to his meniscus, and he spoke to the importance of correcting the walking patterning before it had a chance to cause problems in other areas as had occurred with him (from interview).

Feet generally develop calluses over time to protect the skin, but opening the foot can be a common occurrence especially with a heightened amount of training. Follow up typically includes cutting off the ripped skin, applying a little medicine to the area, and taping the foot.

Shoulder health and falling. Considering shoulder health and dislocations, participants recommended keeping the shoulder strong to help keep it from moving out of place while at the same time “respecting the flexibility of the individual” (Marcos, from interview). Past training styles had more shoulder problems than today as they did not work as much with stretching and warm-ups. Stretches now incorporated include crossing the arm across body for the posterior shoulder muscles, the overhead triceps stretch, and the equivalence of a table pose from yoga. Warm-ups such as range of motion exercises or air boxing through various planes of movement should precede activity to avoid playing with a cold body.

Training on the ground and using the low, slow *benguela* style both provide practice for weight bearing and weight transfers. Specific movements used to build shoulder strength while working capoeira technique include the *aiú*, *ponte* with one or

both arms, *jacaré*, handstands, and handstand pushups (see Table 7). Recommended movements for the gym include lat pull downs and working the rotators with inside and outside rotation.

Table 7

Shoulders and Falling

Questionnaire (n=3)	Interview	Focus Group
<ul style="list-style-type: none"> • Correct Posture Execution (n=3) • Stretch (n=2) • Strengthening (n=2) • Warm-up • Weight Training • Repetitive Training 	<ul style="list-style-type: none"> • Maintain Posture • Respect Limits • Stretch (n=4) • Strengthen (n=3), at the gym • Warm-up Range of Motion (n=2) • Weight Training (n=4) • Rotator Exercises • Learn to Give/Receive Take-Downs • Know Timing for Movements • Handstands (n=2), Handstand Pushups, Bridges, Cartwheels, <i>Jacaré</i>, <i>Aú</i>, with <i>Benguela</i> 	<ul style="list-style-type: none"> • Bend the Knees into the Fall • Start Learning Slowly and Low to the Ground • Fall without Hands • Learn to Give and Receive Take-Downs

Takedowns and other perilous movements like a back flip are at times trained on a tatami mat, especially for newer students, but then moved back onto normal surfaces for the execution. Understanding the consequences of each side of the action, students must learn how to give and receive takedowns in safe manners and are trained to counter the natural reaction to fall bracing with the hands. Catching the body with the hand during a fall opens trouble for the shoulders, arms, and fingers. Stated quite simply in regards to what students needed to do to learn to fall, Davi said they needed to fall (from focus group). Starting by lowering the center of gravity and practicing at a lower level allows the students to learn slowly and closer to the ground, giving consciousness to body

placement and practice avoiding hitting the head or reaching with the arm. “Bend the knees, and take the body to the floor, but don’t try to absorb the falls with the hand” (Bruno, from focus group).

Face and fingers. Protecting the face typically comes quite simply in the form of dodging and keeping focused with the arm lifted in front of the face and the elbow restricting side access to avoid the entrance of a kick to the face or a finger to the eye. Fingers should return to the same shell shape every time with fingers kept tightly together in a slightly bent position (see Table 8).

Table 8

Face and Fingers

Questionnaire (n=2)	Interview	Focus Group
<ul style="list-style-type: none"> • Stretch (n=2) • Warm-up • Correct Posture Execution • Repetitive Training 	<p>Face:</p> <ul style="list-style-type: none"> • Dodge (n=3) • Defense • Protect with Hands (n=2), Arms (n=2), and Elbow <p>Fingers:</p> <ul style="list-style-type: none"> • Whole Hand on the Floor (n=3) • Shape of a Shell • Fingers Together • Always a Slight Bend • Always Return to Same Shape • Stretch/Strengthen 	<ul style="list-style-type: none"> • Dodge • Avoid Contact • Learn to Fall Without Hands

Warmed up fingers react more agilely, and putting the whole hand on the ground rather than just the fingertips disperses the weight across the palm and fingers. Stretches for the fingers include opening and closing the fist and moving fingers through a full range of motion with wrist circles. Similar stretches exist for the forearms by pulling the

fingers forward and backward, drawing the thumb back, and interlacing the fingers behind the back and flexing forward at the hips. Strengthening exercises include finger flicks of quick hand opening and hanging from a bar with hands in various positions, which could be used for the shoulders as well. Leo warned against weight bearing on the hands with a lack of preparation to develop sufficient strength to support one's own weight (from interview).

Other injuries. The joints, muscles, and bones of a capoeirista's body encounter moments of vulnerability with potential for exposure to the trauma of sprains, strains, and breaks during capoeira play. "Everything can be injured," Davi stated during the focus group. Focus group participants rattled off a list of additional locations one might take a beating including the ribs, forearms, arms, tibia, toenails, nose, and eye (see Table 9).

Table 9

<i>Other Injuries Mentioned</i>	
Questionnaire	Focus Group
<ul style="list-style-type: none"> • Muscular Strains (n=2) • Sprains • Joints 	<ul style="list-style-type: none"> • Head Injury • Broken Arm • Ribs, Tibia, Nose • Forearm, Toenail • Finger in the Eye • Spiritual Injuries

Traumatic *golpes* exist within capoeira that can damage the organs, break bones, and even kill. "If a capoeirista wants to inflict harm, he can" (Davi, from focus group). As a martial art, movements like the *cabeçada* and *ponteira* are very dangerous and powerful, designed to deliver a hefty blow. A *chapa* to the thigh, belly, or head can

cause some serious damage. Focus group participants shared various stories of traumatic injuries where *cabeçadas* sent people flying and even of someone who died in a *roda*.

Bruno also described for the focus group the idea of a spiritual injury rather than a corporal one- perhaps being the spirit that has been bruised- where someone might arrive to the *roda* with a negative presence. Spiritual and emotional states of the capoeiristas make a difference for all present in the class and *roda*, especially in regard to the music and the energy of the *roda*. “This energy of the music is important in capoeira, and what motivates the capoeirista” (Bruno, from focus group). When the instruments and music lose their energy, it effects the *roda* and thereby the capoeiristas who do not perform well, again causing potential for injury.

Dodging. Learning how to dodge also proves imperative, if not somewhat obvious. Instructors dedicate time to training *esquivas* to prepare the body to respond to kicks and *roda*-like scenarios. In addition to the basic dodges, there also exists an emergency escape dodge, the *esquiva emergencia*, a last resort to flee the danger of the moment by jumping out of the way. Outside of dodging, however, “you dodge or you take it” (Bruno, from focus group). Dodging proves different than blocking, as dodging reduces the chance for impact and lessens the potential for injuries. “Don’t defend anything with the body. The body wasn’t made for defending” (Antenor, from focus group). Where other forms like boxing defend and block with the body, the training in capoeira works to avoid the oncoming blow, and the invitation for contact is reduced and as such is the invitation for injury.

Summation

In visiting with Antenor, he offered key summative points that bring the ideas of this research study together. Antenor's interview provided insight into the growth of the sport as a link from the past to the future. What once started in Brazil is now all over the world and uniquely includes such a wide spectrum of people. In preserving its roots, capoeira draws in many aspects of culture like dance, music, and *makulele*. "She brings the other arts together with her" (Antenor, from interview). Antenor summarized quite succinctly the path to longevity and injury prevention as the sport continues to evolve: "To have a long life within capoeira- stretching, warming up, specific training, and *roda*. You'll have capoeira for the rest of your life" (Antenor, from focus group).

With capoeira both looking to the past and at the same time anticipating the future, Antenor went on to describe social action undertaken by capoeiristas who have launched campaigns to highlight social problems. As advocates, the capoeiristas "try to have a solution" to make a difference (Antenor, from interview). They host *rodas* and campaigns to support clean water, blood donation, drug abuse prevention, HIV awareness, countering gun problems, and more. By caring for the earth, the people around them, and their own bodies, capoeiristas promote the existence of a better world for all.

CHAPTER V

CONCLUSION

Capoeira as an ever-evolving art form continues to morph, growing and adapting in accordance with its call and response nature. Those willing to bridge the gap from past to future have entered into this circle of community to help pass capoeira along from one generation to the next. Where injuries and the unknown of the future loom in the distance, *professores* respond with prevention practices and *axé* to help guide the way.

The purpose of this study was to investigate the promotion of longevity for capoeira by examining pedagogical and injury prevention practices used by capoeira *professores*. Results yielded insight into the research questions of (1) the pedagogical techniques that pass on the craft of capoeira and promote the longevity of participation and (2) the injury prevention practices used within capoeira instruction. Answers ranged from simple and obvious to complex and scientific. This research was designed to examine popular, neglected, and/or untapped pedagogies and practices, including teaching philosophies and techniques perhaps unrecognized or unvocalized by the teacher and/or student.

Elaboration of Results with Connections to the Literature

The mystery and intrigue of the capoeira continue to draw people into the sport. Similar to findings by Lussac (2010), friends and presentations called the attention of

these participants rather than fancy fliers or advertisements. Capoeira's community aspects of welcoming, calling, and responding create space for the advancement of the art of capoeira. Antenor's citation of playing "with" rather than "against" parallels material presented by D'Agostini (2004) where the community works together to train and make progress.

Wellness

As people invest their time in the sport and in each other, connections are made. Meaningful interactions build positive relationships while promoting good social health as a component of wellness. "Good social health entails meaningful interrelationships and confident social interaction" (Biagioli, 2007, p. 207). Providing intrapersonal and interpersonal benefits, capoeira as "a fight and personal defense, reinforces one's self-confidence. Its practice makes the body healthier, stronger, and more flexible" (Capoeira, 2002, p. 42).

Paradoxically, with all the social and physical wellness components associated with capoeira, it is still a dangerous fight. "*It is a contradiction: unity in opposition, collaboration through conflict and competition*" (MacLennan, 2011, p. 147). Capoeiristas develop lethal skills that can harm themselves or others. Keen attendance to injury prevention measures in daily practice thus becomes a long-term investment. Simple actions like cleaning the floors for barefoot work, learning to dodge, and protecting the face all help guard the body. Tending to posture, guiding the energy of the room, training reflexes, and developing a proper mindset all take a longer-term, more purposeful

approach to set up capoeiristas for success. Rietveld (2013) and Hernandez (2013) place [dance] teachers on the front line of defense, and the education they provide will need to help students develop awareness about how their bodies move and how they react. In addition to creating autonomy of movement in the *roda*, students will need to develop autonomy in regard to preventing acute and chronic injuries by knowing the movements and techniques of capoeira.

Investment in the Craft

The passion existing in dance and capoeira drives the practitioners to keep developing their craft, sometimes to the hazard of the artist, although Rietveld (2013) said one should “never give a dancer the advice to stop dancing” (p. 427). The drive that keeps capoeiristas learning and growing can also keep them from slowing down. While possibilities exist for modified participation after an injury, honoring the recovery period becomes important to avoid compounding issues and worsening injuries.

As mentioned by the participants, *professores* need to know the history of their students and their limits to help them best engage the art. The habits carried by the *professores* pass on to their students, much like Downey (2010) described in the genealogy line of characteristics passed down the family tree for future generations of capoeiristas. Safety patterns developed today become traditions carried forward to tomorrow. With age and practice come wisdom and, at the same time, the potential for a decline or disruption in physical skills. With the wear and tear on the body and the risk of injury over time, movement patterns developed early on in the learning process make a

difference for the long haul. Setting up the proper trajectory can help ensure students arrive at old age well.

Professores must also create an environment conducive to growth for the specific participants and for the delivery of capoeira movement and knowledge. Downey (2008) described reducing error possibilities by controlling the scenario, matched by the participants' insistency on developing proper form before advancement, and creating role-play situations to help the students respond in the *roda*. Confidence is built up through practice. Through time and energy invested, capoeiristas develop their skills to use in the *roda*. The power of observation and time spent clapping in the *roda* as mentioned in the focus group should not be underestimated, as referenced in the research by Stephens and Delamont (2010) and Downey (2008) discussing legitimate peripheral participation in capoeira.

Teacher and Learner Initiation

Most facets of the instruction and class content are teacher-initiated, described in Mosston's (2008) terms of reproductive teaching styles including command, practice, reciprocal, and inclusion. Teachers typically take an active role in demonstration, using command and practice styles to help learners master the basics through a somewhat martial style of unison and repetition. Reciprocal styles emerge in creating sequences of movements that the students teach to their peers, also inspiring creativity. With the inclusive practice of capoeira, teachers recognize different aspects of the *jogo* will come

easier to some students than others, keeping it important to know the students and give them material based on their experiences.

Mosston's (2008) productive styles appear in classes through guided discovery and divergent discovery to practice individual responses and improvisation as a part of the fighting. Once the basics reach sufficient mastery, student choices and free training emerge to help with spontaneity within the *roda*. Students need to know the basics of capoeira both to prevent injury and create more aesthetically beautiful movement, keeping true to the art form and its fundamentals (Davi, from interview).

Balanced Training

"The ambiguity of capoeira depends on maintaining a constant balance between extremes like attack and defense, competition and cooperation, and achieving this balance is the measure of mastery" (Lewis, 1992, p. 208). Antenor spoke a great deal about creating balanced training, as did other participants, in encouraging an even development of muscle groups and an equilibrium created between strength and flexibility. Training kicks in conjunction with dodges and learning to give and receive takedowns provide important elements for capoeiristas to counterbalance as well.

Another strange juxtaposition developed in the form of autonomy versus authority. Delamont's (2006) overview of the execution of teacher authority and the hierarchy of power existing within the system meets an interesting coexistence with the push for individual style and improvisational skills marketed as important by the participants. Although didactic execution shows a high emphasis on teacher-initiated

learning styles, the teachers still work to train students for intuitive responses and to allow their individual movement characteristics to emerge.

To succeed as a capoeirista, both in the roda and in teaching less experienced players, one must define capoeira for oneself and construct one's own truths about what exactly capoeira means, reflecting such truths in the way in which one trains, the style in which one plays and the traditions one chooses to respect.

(Fuggle, 2008, p. 219)

Examining Theory and Application

Abib (2006) described the sport as a dialogue that gives room for conversation, with its abstract citing that “memory, ancestrally, rituality and temporality are fundamental categories to understand the education relationships present in this universe” (p. 86). All of these components present themselves in capoeira, creating hooks to link history into daily life. These conversations, as well as the dialogues of the *jogos*, demonstrate respect for self and the other. During the focus group conversations, the participants created room for each other to voice their ideas and explain their thoughts. “This is a discussion,” Davi said with a smile as the focus group continued to question each other and explore possibilities for the prompts proposed. Even in moments of disagreement or seeking clarification, the dialogue continued as the *professores* discussed their thoughts. The willingness to hear each other gives hope for the future as they open doors for new students to pass through on the path forward. The thoughts and

discussions shared by these participants now launch future conversations for further exploration.

In the case of the *professores* consulted, it appears by their words and actions that they maintain an interest in longevity. This presents itself as they share capoeira's history and their own personal stories, create inclusive and welcoming communities, and help their students learn how to prevent injuries and operate in mechanically-efficient and safe manners to continue their pursuits within the sport. Participants marketed the best way to prevent injuries is to train capoeira, learning proper form and alignment and growing in skills. With greater awareness, increased progress can occur over time through body development, anticipation of the other player's body movements, and confidence building.

Teaching and learning provide some of life's great experiments, which uncover tried and true theories while testing the outcomes of other hypotheses. In his interview, Leo discussed how learning happens one day at a time. Little by little growth occurs, and little by little postural patterning is impacted, which could have beneficial or detrimental effects for the long-term health of the capoeirista.

This long-term postural patterning did not appear quite on the same radar as acute injuries for this set of participants. While fairly unfamiliar with terminology like winging scapula, kyphosis, and anteriorly tilted pelvis, the participants do have practices that counter posture malformation with a variety of manners. The awareness and connection

to the concepts they combat may be unintentional or a side benefit of other work they are doing.

Future Areas of Interest

Future areas of interest for teacher education may include a deeper look into postural care and interventionist measures for those with existing or a predisposition for postural malformations. Just like knowing a *golpe* can help the capoeirista prepare the proper dodge, knowing the patterns that can alter the structure of the body or place additional stress on the system can help teachers help their students avoid or correct them. Understanding both cause and effect provides valuable information for safety and continued movement adventures.

With disputed opinions about the extent of the use of weight training for capoeiristas, an interesting study could emerge in an examination of weight lifting or other cross-training programs to supplement the work occurring within capoeira training. Perhaps a comparative analysis of an experiment in strengthening practices contained in capoeira versus building the same muscles by using weight training, bands, and/or ankle weights could be designed to indicate effective movement strengthening for particular capoeira movement vocabulary.

Further exploration of the application of purposeful content in regard to teaching and learning styles could yield noteworthy results for duplication and experimentation. With the desire for continued learning expressed on the part of the participants, sharing

stories of student successes and the practices that helped them arrive could shine some light on impactful pedagogies worth duplication.

Conclusion

These trends in capoeira pedagogy, full of paradox and practicality, both call to the future and respond to the past. The participating *professores* represent the passion and enjoyment of capoeiristas in their craft. By examining current injury prevention and pedagogical practices, this study not only creates space for questions and dialogue about existing techniques but also provides a marker for comparison for future generations.

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APPENDIX A
Questionnaire

Demographic Questions

Age: _____ Sex: _____

Nationality? _____

Where do you live? _____

Number of Languages (which): _____

Level of Education: _____

Years Practicing Capoeira: _____

Years Teaching Capoeira: _____

Are you paid for teaching capoeira classes?

No ☐

Yes ☐

Do you have other work besides capoeira?

No ☐

Yes ☐ - What is your other work? _____

Please complete the following questions according to your experiences:

1. Describe how you teach capoeira.
2. Do you still train capoeira? If yes, how and with whom? If no, why have you stopped?
3. What injuries have you incurred during your capoeira career?
4. What injury prevention strategies do you use in your own training? Do you use any of these strategies in the classes you teach? What other injury prevention strategies do you use when teaching?
5. What common injuries do you see in capoeira? What methods do you use to combat any/all of these?
6. Describe teaching practices your capoeira teacher used. Do you use any of these methods? If so, which and/or to what extent?
7. How are you developing future teachers? How are you passing the art to the next generation?

APPENDIX B
Interview Questions

Interview Questions

1. Describe how you first encountered and began practicing capoeira. What captured your attention?
2. Research has indicated common injuries include ankles, the face, shoulders, fingers, knees, kyphosis, lordosis, forward head, rounded shoulders, winging scapula, pronated forearms and feet, anteriorly tilted pelvis, and hyperextended knees (Signoreti & Parolina, 2009). What methods do you use to combat any/all of these?
3. Do you use teacher-initiated or student-initiated teaching styles? Provide examples.
4. How do you think about the learning styles of the students that you teach? How do you engage the students in the ways they learn best?

APPENDIX C
Recruiting Email

My name is Jackie Beth Shilcutt, and as part of my graduate studies in the Kinesiology Department at Texas Woman's University in the United States, I am completing a research project about capoeira.

I will be conducting part of the research through questionnaires that I will send out in the next few weeks, and I would love to hear about your stories and experiences. You may also share this email with other capoeira teachers in Itu and the surrounding areas to invite them to participate and share their experiences as well.

The purpose of this study is to make an inquiry into the promotion of longevity for capoeira by looking into the learning environments created through the teaching and injury prevention practices used by capoeira instructors. You have been asked to participate in this research study because you have identified yourself as a capoeira instructor at least 18 years of age or older. Participation is voluntary, and you may withdraw from the study at any time without penalty.

If you would like more information or would like to confirm your interest in participation, please feel free to contact me directly at the email below.

Jackie Beth Shilcutt
jshilcutt@twu.edu

Remember: There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions. Close out your windows and maintain your antivirus protection.

APPENDIX D

Consent Form

TEXAS WOMAN'S UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Title: Call and Response: Trends in Capoeira Pedagogy

Investigator: Jackie Beth Shilcutt jshilcutt@twu.edu +1 325.668.6071
Advisor: David Nichols, Ph.D., advisor dnichols@twu.edu +1 940.898.2522

Explanation and Purpose of the Research

You are being asked to participate in a research study for Jackie Beth Shilcutt's thesis at Texas Woman's University. The purpose of this study is to make an inquiry into the promotion of longevity for capoeira by looking into the learning environments created through the pedagogical and injury prevention practices used by capoeira instructors. You have been asked to participate in this research study because you have identified yourself as a capoeira instructor at least 18 years of age or older.

Description of Procedures

As a participant in this study you will be asked to volunteer your time in one or more of the following ways: spend approximately one hour of your time completing a questionnaire about your teaching experiences, one hour in a face-to-face interview with the researcher, 1 to 3 hours in a focus group session (sessions are 1 hour each). The researcher will ask you questions about your learning and teaching practices within capoeira. Total time commitment is 1 to 5 hours.

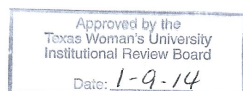
You will be sent a questionnaire via email. There will then be face-to-face interviews, followed by the option to participate in focus group(s). You and the researcher will decide together on a private location where and when the interview and/or focus group(s) will happen. The interview and focus groups will be audio and video recorded and then written down so that the researcher can be accurate when studying what you have said and demonstrated physically.

Potential Risks

Because you may know the researcher and/or other participants, the risk of coercion arises. You are not required to participate. Participation is voluntary, and you may withdraw from the study at any time without penalty.

Another risk in this study is loss of confidentiality. Confidentiality will be protected to the extent that is allowed by law. There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions. Remember to close out your windows and maintain your antivirus protection. The interview and/or focus group(s) will be held at a private location that you and the researcher have agreed upon. If requested, a code name, not your real name, will be used during the interview, and no one but the researcher will know your real name. The tapes and the written interview will be stored in digitized format on a password-protected computer indefinitely for continued research.

Loss of anonymity is also a risk. In a focus group, anonymity amongst participants will be lost by your presence if you chose to participate. The results of the study will be reported in scientific magazines or journals, but your name or any other identifying information will only be included by your consent below. *(Please indicate the request for anonymity on the restrictions below if desired.)*



Initials
Page 1 of 2

Throughout the research process, you may ask questions at any time. The researchers will try to prevent any problem that could happen because of this research. You should let the researchers know at once if there is a problem and they will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

Participation and Benefits

Your involvement in this study is completely voluntary and you may withdraw from the study at any time. While there are no direct benefits from participation in this study, your participation will provide material for the accumulation of knowledge in the field of capoeira pedagogy for the promotion of injury prevention practices and productive learning. Following the completion of the study, if you would like to know the results of this study we will e-mail them to you. *(Please include an email address below if you would like to have the results sent to you.)*

Questions Regarding the Study

You will be given a copy of this signed and dated consent form to keep. If you have any questions about the research study you should ask the researchers; their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at +1 940-898-3378 or via e-mail at IRB@twu.edu.

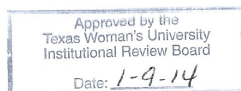
PLEASE INITIAL ONE OF THE FOLLOWING:

_____ I hereby request no restriction upon the information provided.

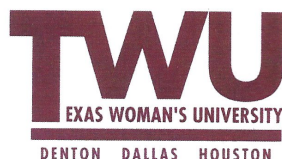
_____ I hereby request the following restriction upon the information provided.
Explanation and nature of the restriction (*anonymity, etc.*):

Signature: _____ Date: _____

* Email address (for study results): _____



APPENDIX E
IRB Correspondence



Institutional Review Board

Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378 FAX 940-898-4416
e-mail: IRB@twu.edu

January 9, 2014

Ms. Jackie Beth Shilcutt

Dear Ms. Shilcutt:

Re: Call and Response: Trends in Capoeira Pedagogy (Protocol #: 17559)

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and appears to meet our requirements for the protection of individuals' rights.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. A copy of the approved consent form with the IRB approval stamp is enclosed. Please use the consent form with the most recent approval date stamp when obtaining consent from your participants. A copy of the signed consent forms must be submitted with the request to close the study file at the completion of the study.

This approval is valid one year from January 9, 2014. Any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any unanticipated incidents. If you have any questions, please contact the TWU IRB.

Sincerely,

Dr. Rhonda Buckley, Chair
Institutional Review Board - Denton

cc. Dr. Charlotte Sanborn, Department of Kinesiology
Dr. David Nichols, Department of Kinesiology
Graduate School



Institutional Review Board

Office of Research and Sponsored Programs

P.O. Box 425619, Denton, TX 76204-5619

940-898-3378

email: IRB@twu.edu

<http://www.twu.edu/irb.html>

DATE: May 13, 2014

TO: Ms. Jackie Beth Shilcutt
Department of Kinesiology

FROM: Institutional Review Board - Denton

Re: File Closed for Call and Response: Trends in Capoeira Pedagogy (Protocol #: 17559)

The TWU Institutional Review Board (IRB) has received the materials necessary to complete the file for the above referenced study. As applicable, agency approval letter(s), the final report, and signatures of the participants have been placed on file. As of this date, the protocol file has been closed.

cc. Dr. Charlotte Sanborn, Department of Kinesiology
Dr. David Nichols, Department of Kinesiology
Graduate School