Gonna Fly Now:
The Positives and Negatives of Combat Sports

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Abstract

Background: Combat Sports like boxing and Mixed Martials Arts have taken the world by storm as a form of entertainment for viewers around the world and a job for those who fight; however, it is a very dangerous job, and these sports can lead to long-lasting physical and mental complications that have led to individuals becoming outraged over the violence and see these sports as mentally poisonous. However, individuals who box or are involved in any other sports do not use it to fight; instead, they use it to stay in shape, which has been shown to have exceptional benefits for a person's physical and mental well-being.

Objective: The goal is to show that while competing in fights can be dangerous, practicing can be such a great way to stay active and to show that it could be a great way to practice discipline and control.

Design and Method: My research method is based on peer-reviewed articles and scholarly literature. The sources I used address the positives and negatives of combat sports and how they can affect a person's body and mind when you are either doing it for a positive change or going into a fight to give people a show. I wish to answer a couple of different questions in my research. Those questions are: *How do combat sports positively affect the human body? How do combat sports negatively affect the human body?*

Results: A study like this is important because there is much skepticism about practicing combat sports and if there is any benefit at all when in reality, there are a ton of benefits, but using it as a job and competing can cause irreversible damage if not careful, and the sooner we realize the dangers, the sooner we can make these sports safer because they are too popular to ban completely, so the best we can do is make it safer, and to the first step is to acknowledge the dangers.

Conclusions: While many different studies prove the benefits of combat sports, it is not enough to stop some individuals from seeing them as poison to individuals, especially the youth, and as for the competitive side, there is enough science and common sense in the world to know that we could do more for these competitions to make them safer for everyone involved.

Keywords: *Combat sports, competitions, practice, positives, negatives, human body.*

Chapter 1: Introduction

For centuries, humans and animals have attempted to settle their differences through hand-to-hand combat. Nevertheless, unfortunately, violence is in our nature, so we have turned our violent tendencies into competitions to push ourselves beyond our limits. Combat sports have allowed individuals to compete in one-to-one enclosed areas to battle it out and earn the respect of each other by showing that they have strength, courage, discipline, and heart. It takes much bravery to get into a ring or octagon to fight someone, so when we see two individuals enter to fight it out, we cannot help but respect that because combat sports are not an easy sport. Many different sports in the world involve combat, like boxing, mixed martial arts, karate, Muay Thai, and many more. Evidence shows that thousands of years ago, early humans would put together contests for individuals to fight, which is like what we do today with the Ultimate Fighting Championship (UFC) and boxing, except in today's landscape, there are many safety regulations. However, how safe are these sports?

This concept is what I was thinking about so that I could begin this assignment. Individuals who compete can sustain significant injuries that can be damaging. If the proper safety regulations are not followed, someone can get injured so severely that it could ruin a person for life or even cut down a person's life on earth. These combatants risk their lives for the sake of other people's entertainment and the sake of their egos. If you are getting into combat sports just to practice and nothing more, there is no risk except minor injuries. However, kids that want to study these sports may not be allowed to because of parents' thoughts that it will promote violence. Knowing some form of hand-to-hand combat is an excellent idea for anyone of all ages.

It is essential to know the effects of combat sports and how these can affect a person. There is a misconception that combat sports can only bring negative results, but my argument is that this is not the case. While there are plenty of negatives to go around, we tend to forget the positives that could significantly improve someone's physical and mental health and quality of life. Many discussions show that combat sports promote violence and can provoke a lot of violent tendencies among individuals, especially children and teenagers. However, using combat sports for workouts and practice purposes only is used for improving physical and mental health and can teach individuals good self-defense skills.

I am looking at different aspects of combat sports and other practices and why they are good or bad, and if they are bad, how we can integrate healthier and safer practices. I am also looking at different statements and myths surrounding combat sports and what has been said about them, and if these statements are factual or not. For example, combat sports get a bad reputation because of the violent competition. Have specific competitions given combat sports a bad reputation? Should individuals practice combat sports to stay in shape? These questions will be examined within this study to show if combat sports present better than bad or worse than good. The review of the literature was conducted to answer the following research questions:

Research Questions

RQ#1: *How do combat sports affect the human body negatively?*

RQ#2: *How do combat sports affect the human body positively?*

Chapter 2: Literature Review

Positive Effects of Combat Sports

Individuals who are actively involved in combat sports, whether it be the competitive or casual side, are very aware of their overall health and stay on a specific regimen of vigorous workouts and a specific healthy diet. Boguszewski et al. (2019) wrote an article about three different groups of men, and they studied their eating habits and behaviors. These groups consisted of men who were physically active and healthy men who were not in as good of shape. The studies found that active men were very aware of their physical health and followed very specific patterns to stay on a healthy path. These types of individuals are the ones that are active in combat sports, whether it is for competing or for training. Individuals who go to the gym just to stay active do not usually follow the same rigorous regimens as those who are very serious about their health and physical form.

Another advantage is that athletes will not get old as fast. In an article from Valdes-Badilla et al. (2021) conducted a study on how individuals who are actively exercising, especially when it comes to combat sports, they will not age as rapidly as those who are not exercising a lot. The study included 212 participants, including males and females, with the participants being around the age of 63. In addition, excellent health-related quality of life was in three different studies, and one study saw an improvement in emotional well-being, which proves that these kinds of exercises are helping individuals who may be struggling physically and mentally.

You will find many young people getting into combat sports; however, you will come to find out that individuals of all ages that want to improve their health and learn how to defend themselves in a crisis will take up classes in self-defense, boxing, or karate.

When individuals compete in combat sports or do any sort of tiring and strenuous workouts, they will need any kind of upper hand with substances that can enhance a person's physical output. That is why some combatants rely heavily on caffeinated beverages to gain an extra boost; more specifically, they will turn to coffee. Coffee has a lot of caffeine, and when someone consumes coffee, the caffeine will give the person a necessary boost to get through the day. A study by Lopez-Gonzalez et al. (2018) mentions the effects of caffeine and coffee on the human body. They used 3 mg, 4mg, and 6mg to see the impact that amount of caffeine would have on a person. It was found that the caffeine in coffee has a positive effect on a person's performance and keeps them going for a more extended period compared to those who did not use coffee or any sort of caffeinated beverage before getting a workout in or before going into a fight. Weight loss is an essential factor when competing in combat sports and can become the main topic of discussion when individuals work out since most individuals get in shape and lose weight. In an article from Pettersson et al. (2013), we learn about weight classes in combat sports and how it creates fairness in competitions. It is without question that if someone is set to face an opponent that is one hundred pounds heavier, they are at a severe disadvantage, which is why we have weight classes to create fair fights. In addition, data and analytics were put together to find the positives of weight regulation, including identity, mental advantages, and self-esteem.

Gallo et al. (2020) discuss COVID-19, which has been part of our lives for almost three years now, and how it has affected our lives and the lives of so many individuals. It resulted in many individuals getting sick, dying, isolating themselves inside for an extended period of time, and many individuals suffered mentally. It was a struggle for many, which is why physical activity is essential for physical and mental health. This observation study on male and female students assessed their physical activity, the mental effects of online learning, and their diet from 2018-2020. The pandemic led to these students being isolated inside and becoming less physically active, eating more, and having a negative effect on mental health. However, working out and staying active keeps us mentally stimulated and in shape. The workouts used in combat sports training are very intense and lead to a lot of activity, which is super beneficial to a person's overall health.

Adverse Effects

One of the many adverse effects of combat sports is the damage it can cause to the human body from blunt force trauma. Wilde et al. (2016) discuss magnetic resonance imaging and diffusion tensor imaging to study the human brain and the effects on ten boxers and nine individuals that are not boxers. Overall, it has been found that enough blunt force trauma to the head can lead to severe brain damage that can affect someone's memory, cognitive skills, and mental state. Many experiments were done to reach these conclusions through diffusion tensor imaging and cognitive testing.

Another way someone can be negatively impacted in competing in combat sports is through rapid weight loss or just losing and gaining weight at a rapid pace. Lagan-Evans et al. (2016), report about making weight in combat sports competitions. Different weight decisions in combat sports create fairness; sometimes, those will try to cheat the system through rapid weight

loss. Rapid weight loss is when an athlete rapidly loses weight to enter a particular weight class to gain an advantage over smaller and weaker opponents. However, the process of rapid weight loss has proven to have certain drawbacks that can damage the combatant's mental health. In the article from Franchising, Brito, and Artioli (2012), we see a category of different combat sports and the effects of rapid weight loss through different samples, prevalence, and magnitude. That is why it is always important to lose weight in a healthy way, including gradually losing weight.

For a long time, combat sports have been under heavy fire for the violence it is putting out there in the world and how they promote violence, and how it affects the youth. However, getting into sports like boxing, karate, or mixed martial arts can be used to help with violent thought and anger issues. An article from LaFuente et al. (2021) examines how some have seen combat sports to be considered aggressive practices. The study follows different systematic reviews, including the Preferred Reporting Items for Systematic Review and Meta-analyses Protocols, which examine how combat sports practices affect the behaviors and mentality of individuals, especially children, and teenagers. As much as individuals like to say that combat sports can be dangerous, combat sports have many benefits for anyone of all ages.

Chapter 3: Methodology

Methodological Approach

For my research problem, my goal is to study and research the effects of combat sports on the human body. For this, I need a good understanding of combat sports and the different practices that are involved in these sports, and once I do that, I need to look at the different effects caused by combat sports, and I must do research to see what these effects can do to a person. Therefore, to solve this research problem of mine, it is important that I gain as much information and data as I can about the physical and mental trauma that can occur and the types of physical and mental benefits that could occur, which includes the use of secondary qualitative data.

Data Collection Methods

I used qualitative methods to collect the data for my research problem. The research that I gathered is from peer-reviewed articles. A lot of the data collected was used through studying individuals and their bodies whenever they performed certain activities, consumed certain supplements, and what physical trauma does to the human body compared to someone that has not been through any sort of physical trauma. There are a lot of different aspects to consider when researching combat sports, like supplement intake, making weight, physical trauma, and researching the mental effects of individuals who are involved in combat sports, whether it is competitively or noncompetitively. I collected my data through trustworthy online articles by those who conducted these experiments themselves.

Analysis Method

For analyzing the data that I have stumbled upon, there are a small number of repeating patterns discovered when reading the articles and collecting the data, which means that the method used was a thematic analysis. The different themes, effects, substances, and ideas used in combat sports helped me come to an understanding of the overall effects that combat sports can have on a person. Therefore, each article's theme must be closely examined to understand the research I have chosen and to link the information from one article to another.

Justification of Methodological Choices

I think that while I am gathering data and analyzing the data that causes certain phenomenons, I feel like there is so much to take in that is knowledgeable and to break down how the human body behaves in response to being exposed to specific trauma, environments, and supplements in the world of combat sports. There was a lot more to look up and study than I thought there would be. These articles consist of controlled group studies that compare and contrast what happens to the human body when exposed to certain combat sports practices compared to those not active in combat sports. We also learn the benefits of training in combat sports and how important it is to stay active.

Chapter 4: Results

The goal of the results chapter is to share my findings throughout my research of learning the positive and negative effects of combat sports and how it has physically and mentally affected those involved, whether they are involved seriously as a means of making a living or if they are involved just to learn how to fight and to stay in shape. I talked a lot about how boxing professionally can be dangerous and could lead to injuries that could have the potential to be irreversible. However, those who go to a gym with an instructor and learn how to fight and practice with safety gear benefit someone's health and safety when out and about.

The results I found on how combat sports positively affected a person's health were very interesting, considering those involved in combat sports were much healthier than active and non-active individuals. Group 1, which is combat sports, received a positive attitude index of 3.5, while group 2, which was those who are active, had an index of 3.37, and group 3, which is nonactive people, had the lowest index of 3.29. Regarding healthy practices, group 1 was significantly higher than groups 2 and 3. A study on middle-aged and older adults was conducted to study the effects of combats ports and found that individuals with health issues like Parkinson's and cancer showed signs of improvement and not being in as much pain as before.

Female Veterans underwent a series of self-defense classes that were experiencing PTSD after being exposed to military sexual trauma. Self-defense is a form of combat and can be used to protect yourself and those around you from danger. Throughout the program, the women experience a sense of being less afraid about the possibility of being a victim of assault and become confident in their abilities. As for the PTSD these women have gone through, there

seemed to be no change; however, there were improvements in other mental issues like depression.

Supplement in combat sports like caffeine has been said to benefit combatants significantly physically, and the reason for it is because of the effects that caffeine has on the central nervous system. Therefore, 109 participants were studied and were given different amounts of caffeine doses in different trials. The results differed between each person, like an improved number of knockdowns compared to when caffeine is not used, improved number of bench press repetitions, improved strength in the hands of combatants when it comes to grip, and improved reflex times. However, in the study, Lopez-Silva seemed to show no differences.

In my literature review, I talked about how combat sports are significant in controlling aggression and anger, and the results of this study included 42 boys involved in different combat sports like judo and taekwondo. The results showed that individuals in certain combat sports showed either positive effects or adverse effects depending on the sport; for example, in judo, the results showed more negative results than in traditional taekwondo, which saw a lot of positive effects. Traditional taekwondo is found to include philosophical and meditative practices compared to other combat sports, which may not include such practices. Modern-day taekwondo seemingly omits the idea of meditation philosophy, which seems to be why individuals in certain combatant sports may display more aggression than others.

Combat sports may have health benefits, but when you take it to the next level and start fighting professionally, you open a whole assortment of problems. The results of fighting have been shown to cause severe trauma. My research shows that a boxer began suffering from Parkinsonism, which is what the great Muhammad Ali began to suffer from towards the end of

his boxing career. Four other boxers complained of bad headaches. We also witness a plethora of cognitive issues in fighters and slurred speech, and slow movement.

Unhealthy practices like rapid weight loss can also cause physical and mental complications. Rapid weight loss can lead to physical and mental issues, so it is important always to reduce weight safely. In order to lose weight, as I learned from the results from my sources, is done through reduced food and fluids but not cutting both out in an extreme fashion. For example, 14 athletes went ahead and gradually changed their eating habits as well as training regimes 2 to 3 weeks before a competition and 4 to 5 days before the day of the weigh-in. As the weigh-in draws closer, athletes will barely eat or drink anything to make weight which may be extreme, even going as far as to take hot baths and going into saunas for weight loss. The key is making sure it is a gradual loss of weight instead of it being rapid.

The point of this chapter is to show the readers my findings and to answer my research questions with facts about the positive and negative implications that arise in combat sports. After examining the health and behaviors of those involved seriously in combat sports or those just practicing, those results include what researchers have found. In the next chapter, I will discuss what these results mean for my research questions and the paper as a whole and the significance of the results.

Chapter 5: Discussion

The goal of this chapter is to go over my findings and results from the last chapter and further elaborate on them and what they mean for my research questions. My research results fit nicely with my hypotheses about combat sports and how they positively and negatively affect the human body and mind. So let us dive deep into these findings and talk about what they mean for individuals who have involved themselves in combat sports one way or another.

The first bit of results I found from my research is that individuals who practice combat sports seem much healthier than those who go to the gym and do regular weight training and cardio. On top of being healthier than others, they also have more of a positive attitude than others. There is no question that individuals who go to the gym and work out will leave with a sense of accomplishment and satisfaction, knowing that they are setting a goal for themselves that they are getting closer to achieving. Getting into shape will not only make you feel great physically, but it will also give you a sense of confidence. I can say from personal experience that when you look into the mirror and see that progress is being made, you will feel good about yourself and have a sense of self-confidence which is excellent for a person's mental health.

The next bit of results that I found from my research is that combat sports practice has benefitted individuals of middle and elderly age that were struggling with physical and mental health issues that ranged from minor to life-threatening that began showing signs of improvement where they were not in as much pain as they were in before. If I am being honest, after seeing the results from these individuals suffering from illnesses like Parkinson's and cancer, I did not think that getting active would have any positive effect. However, to my amazement, these individuals began to improve, which took me back and made me realize that

combat sports practices can be even more beneficial than I thought. I would like to reiterate; there is a difference between practicing combat sports and competing in combat sports. Then I say "practicing," I mean individuals going to their local gym, signing up for classes, being taught the fundamentals, and practicing on a punching bag.

When female veterans took self-defense classes after experiencing military sexual trauma, the goal was to see if learning self-defense would help women overcome their PTSD. Ultimately, they did not, but they did improve with other issues like depression. They became more confident in themselves, believing that if they were put into another scenario that put them at physical risk, they could defend themselves and get away. That is one of the reasons why individuals will practice in combat sports because they know there are a lot of crazy people out there and want to be prepared just in case they are ever put into a position where they have to defend themselves.

Supplements and weight loss are crucial for maximum efficiency in combat sports. Caffeine has been shown to help "most" individuals to work beyond usual limitations and rapid weight loss, which has been shown to have very short-term benefits while the long-term effects can be damaging. These are both important to know about because there are practices that are not frowned upon, and there are practices that are. It is okay to take certain performance-enhancing supplements like caffeine, vitamins, and protein powder, but rapid weight loss and steroids can have crucial long-term physical and mental consequences. It is always important to take care of your body, which is why competing is not a good idea either, since you can suffer from a multitude of mental issues and head trauma. However, individuals make the choice to do it for a living because it is what they love or because they have no other alternative to make a living.

The last bit of results I want to cover is how practicing combat sports can be beneficial for young boys. Practicing certain combat sports can make children more or less violent and angry. Combat sports that cover more discipline than others tend to have a better outcome than those that do not. Me personally, I do not believe that it is the sports that are the problem but the way they are being taught. I feel any combat sport can positively affect a child's violent tendencies as long as the instructor is teaching them right and implementing the right amount of discipline.

In sum, combat sports have shown me that they can result in significant health improvements that can benefit a person with even the worst health conditions, which is a breakthrough for me. Individuals were enabled to feel confident in themselves and confident in defending themselves in danger, which can benefit anger management. However, individuals can end up practicing combat sports for the wrong reasons and practice them the wrong way, which can lead to more violent behaviors and going into the competitive side and getting seriously injured, or taking substances that are either illegal or dangerous to a person's well-being.

Conclusion

So, to wrap this up, my topic was about the positive and negative effects of combat sports on the human body. I found a lot of information that included what happens when we compete and are exposed to severe physical trauma and the outcomes that can occur if we receive too much damage. I also discovered the long-lasting effects of the pandemic and what that meant for those who were not very active compared to boxers and other constantly active fighters. It is obvious that the fighters were a lot healthier in comparison, but that is very obvious; I was just surprised to see how much healthier these fighters were compared to nonfighters that stay active. The secret to a fighter's successful health is their work rate. They train their bodies day in and

day out and stay on a strict workout and eating schedule that helps them stay healthier compared to other individuals. Because of how healthy and active they are, it helps with their physical health, and they have the capacity to live longer than others, that is if they do not sustain a life-threatening injury which is very common for fighters.

Fighters experience so many hits to the head to the point where if they are not careful, they can start developing brain problems that can lead to lifelong problems as well as early death. Competitive fighting can be very dangerous, and while it is a form of entertainment for a lot of individuals around the world, these people put their livelihoods on the line all the time because, for every fight that they enter, it is always possible that it could be their last. Individuals can get incredibly hurt if they are not careful. It is also important that these fighters do not lose sight of their health and do not make things too competitive by turning to bad habits and substances.

In the world of sports, a lot of athletes will be looking for every advantage that they can get, and for some, they will get desperate. They will turn to rapid weight loss and even steroids. Rapid weight loss and steroids create an unfair advantage for those who are looking for a more natural approach for keeping themselves in the best shape possible. While steroids can help with a person's physical appearance, they are not suitable for someone's long-term health as they can cause physical issues down the road and mental issues like aggression, also called "roid rage." Thankfully, there is a much toward banning steroid intake in athletes, which will lead to immediate disqualification. As for rapid weight loss, while it has not been banned, there has been a push for people to call for it to be banned for good since it is also not good for someone's long-term physical and mental health.

To conclude this paper, I just want to say that I love watching boxing and mixed martial arts, but I do understand the dangers that come out of this, and that these fighters can fight for a living, to make ends meet deserve all the praise in the world for having the courage to do what they do since it is not an easy thing to do to step face to face with someone who is going to try to hurt you badly. However, I think there is nothing wrong with using these sports for practice since it is a great way to stay active. Of course, there will always be those who think that individuals should not practice boxing or mixed martial arts since they believe it builds violent behaviors, but the fact of the matter is that it has the opposite effect; I would know this because I practice boxing and I always feel so good and relaxed afterward. So, at the end of the day, combat sports will always have their positives and negatives.

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