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# MIXED MARTIAL ARTS AS A WAY OF LIFE: GOING BEYOND THE BLACK BELT AND ENGAGING IN LIFE-LONG LEARNING SHAYNA MINOSKY & AMANDA ROSE DUMOULIN

## DOI

10.18573/mas.141

## KEYWORDS

Mixed martial arts, sport,  
qualitative, motivation

## CITATION

Minosky, S. & Dumoulin, A. 'Mixed Martial Arts As a Way of Life: Going Beyond The Black Belt And Engaging in Life-Long Learning'. *Martial Arts Studies* 13. 71-83. DOI: 10.18573/mas.141

## ABSTRACT

In this qualitative study, we explored the experiences of 10 adults who trained in mixed martial arts (MMA) to understand the meaning they ascribed to attaining the black belt and their martial arts journey overall. Using a conventional content analysis, four themes were derived from the data: importance of the black belt, benefits of training in MMA, dealing with injuries, and being part of the MMA community. Training in MMA was very positive, with both individual benefits (improved physical and mental health, skill development, and personal growth) and interpersonal benefits (relationship development and sense of community) being reported. Self-determination theory [Ryan & Deci 2000] and goal setting theory [Locke & Latham 2002] are used to discuss participants' motivation in their pursuit of the black belt and continued training.

Like if I didn't have this [jiujitsu], I don't know who I'd be as a person. I got asked when I joined the [job], I got asked if I'd be willing to give up fighting for work, in my interview. And I didn't have an answer to the question because I've been doing this [jiujitsu] for so long. I don't know what I would do if I didn't have this. I can't picture my life not doing this. It's just part of me now, it's like you're tied to this. This is part of your identity... Like to me, this is the same as eating. It's the same as f\*\*\*ing drinking water. You just do it and you go every day. You do it. [M5]

Mixed martial arts, or MMA, is a physical combat sport that combines techniques and theories from a variety of disciplines. Striking-oriented disciplines, such as boxing, kickboxing, and karate, focus on using punches, kicks, knees, elbows, and blocks to attack and defend oneself from a standing position. Grappling-oriented disciplines, such as jiu-jitsu, wrestling, and judo focus on taking an opponent to the ground through throws and takedowns, and using clinch fighting, pinning or controlling techniques, and submission holds [Rousseau 2018]. While MMA derived from the combat sport of Pankration at the Olympic Games in 648 B.C [Stenius 2014], in our more modern era it has been commercialized into a professional league of competitive fight events, such as the Ultimate Fighting Championship (UFC) [Walters 2015]. The last two decades has seen considerable growth in participation in MMA [Mierzwinski et al. 2014]; however, this participation can be competitive or recreational in nature and not all martial arts practitioners will engage in competitions (at a professional or amateur level).

MMA has often been presented in a negative light, with these beliefs primarily being endorsed through the media and entertainment industry, which promotes MMA as a media spectacle [Smith 1999; van Bottenburg & Heilbron 2006]. MMA has been portrayed or stereotyped as consisting largely of physical combat and cage fighting in which competitors represent a masculine archetype, like a modern gladiator, and participation in the sport is full of violence and aggression [Abramson & Modzelewski 2011; Channon & Matthews 2015; Cynarski & Litwiniuk 2006; Green 2015; Mierzwinski et al. 2014; Rosario et al. 2014; van Bottenburg & Heilbron 2006]. Some studies have shown an increase in aggression [Reynes & Lorant 2002] and antisocial behaviour [Endresen & Olweus 2005] among male boys and youth as a result of participating in martial arts and combat sports. However, Rosario and colleagues [2014] note that some forms of aggression are acceptable and can be healthy and appropriate within this sport context. For example, aggression can be seen positively as a form of self-assertion, or negatively as a form of hostility, with combat sports tending to be more associated with the latter [Basiaga-Pasternak et al. 2020]. In a study that compared various type of aggression between amateur and professional-level combat sport athletes, Basiaga-Pasternak and colleagues [2020] found that aggression tended to be slightly lower among the professional athletes, and surmised it could be a result of learned self-control over the length of their training. Moreover, Kuśnierz and colleagues [2014] compared aggression levels among men practicing MMA (capoeira, boxing, or jiu-jitsu)

and a group of non-practicing controls and found the non-practicing controls to show higher levels of overall aggression.

There have also been several benefits identified as a result of participating in martial arts. For example, many traditional approaches to teaching martial arts use meditation and mindfulness techniques [Harwood et al. 2017; Milligan et al. 2015; Vertonghen & Theeboom 2010], which has been linked to improved self-regulation and performance in MMA fighters [Massey et al. 2015], as well as increasing self-understanding and calmness, and better tolerating discomfort in youth with learning disabilities [Milligan et al. 2015]. Additionally, Bird and colleagues [2019] found that offering MMA training, in combination with psychotherapy, resulted in improved mental health, as well as having a positive impact on other aspects of their life due to an increase in confidence and self-reflection. In fact, Vertonghen and Theeboom [2010] and Harwood and colleagues [2017] reviewed the literature on the impacts of involvement in martial arts for youth, and though their inclusion criteria were different, both reviews found that consistent involvement in martial arts improves mental and physical well-being, and also decreases tendencies to respond aggressively or with violence.

Most disciplines of martial arts have a ranking system. While rank and belts are not fully equivalent across disciplines, they all start at the white belt level and ultimately progress to a black belt (and higher degrees of black belts). The length of time or training required to achieve a black belt also differs across disciplines, with some disciplines, such as Brazilian jiu-jitsu often taking 10 years of dedicated training to achieve a black belt [MMA Guru n.d.]. The process of attaining a higher rank or belt level is called a promotion and is achieved through a testing of technical and practical skills, which may include sparring, that the trainee has learned through the training process. Obtaining a black belt in any form of martial arts requires perseverance and dedication by the trainee, and few people who begin training in martial arts will progress to this level, making the attainment of a black belt a substantial accomplishment [Layton 1988].

The purpose of this narrative study was to use qualitative methods to explore the experiences of adults who engage in mixed martial arts. Participants needed to have a black belt in a discipline of martial arts, or needed to have trained in a discipline of martial arts for a minimum of five years and were near to having a black belt. The sample included both those who were high-level competitors and those who engaged in martial arts at a recreational level. The first objective of this study was to gain a better understanding of the meaning that those training in martial arts ascribed to the black belt and attaining the black belt. During the course of the study, a second objective was added to explore, more broadly, the meaning that trainees ascribed to their entire martial arts journey, as it became clear that the black belt was only one small element of this journey.

## METHODS

Ethical approval was granted by the institutional research ethics board [REB # 2020-31].

### *Participants*

A total of 10 participants (9 male, 1 female) were recruited for this study. Participants were recruited through contacts of the first author (who is also involved in MMA) and through snowball sampling. Seven of the participants had achieved one or more black belts in a discipline of martial arts (Brazilian jiu-jitsu = 4; Hap Do Sool = 2; Uechi-Ryu Karate Do = 1; Taekwondo = 1) and three of the participants were one belt level away from a black belt (one each in Jeet Kune Do, Hap Do Sool, and Brazilian jiu-jitsu). All participants had trained in a variety of disciplines of martial arts: Brazilian jiu-jitsu = 9; boxing = 8; kickboxing = 7; wrestling = 6; Kung Fu = 2; Taekwondo = 2. In terms of the experience levels, participants had been practicing martial arts for a minimum of four years to a maximum of 35 years; only one participant was not currently still involved in martial arts. Participants ranged in age from 28 to 51 years, with an average age of 36 ( $SD = 8.48$ ). The majority of participants were White ( $n = 7$ ), one was Asian, one was South Asian, and one was mixed White, Black, and Native.

### *Interview schedule and procedure*

All data were collected through individual interviews conducted by the first author. Electronic consent was obtained through Qualtrics prior to conducting the interview. With the consent of each participant, we audio recorded each session and then transcribed these sessions verbatim. We used a semi-structured interview format whereby a set of 10 open-ended questions were asked regarding their experiences in mixed martial arts (e.g., how they got involved in martial arts; highlights and challenges of their training; their views on achieving a black belt on and competitions; the impact of martial arts on their well-being). Interviews ranged from 25 minutes to one hour and forty minutes, with most interviews taking approximately 40 minutes. All participants were offered a \$5 Starbucks e-card as a thank you for their participation.

### *Analysis*

Data analysis was conducted using QSR International's NVivo (version 12; NVivo, 2018) and followed a conventional content analysis approach [Hsieh & Shannon 2005]. This approach was selected as it is suitable for exploration in an area that is understudied and could benefit from further exploration. To begin, the first author (SR) read through the first eight transcripts several times to allow for data immersion and to get an understanding of the data as a whole. Next, SR took notes on her first impressions, thoughts, and initial analyses, and developed codes directly from the text for each unit of meaning identified. These

codes were then organized into themes and subthemes based on similarities. Each of these themes and subthemes was then defined to clarify their meaning and a coding book was developed. All transcripts were then reviewed again and coded based on themes/subthemes in the coding book, with adjustments being made to the coding book as needed. Exemplars reflective of each theme/subtheme were also selected. Two more interviews were then conducted, transcribed, and coded based on the coding book. As a reliability check, three of the transcripts were coded again by the second author (AD), which resulted in an intercoder reliability of 79% agreement with the first author's codings [Miles & Huberman 1994]. Cases of disagreement were discussed to reach a final consensus. Memos were then written for each of the themes.

The following strategies were used to ensure the trustworthiness and credibility of our findings: (a) member checking where each participant was provided with a summary of the findings and asked to confirm the accuracy of the synopsis—six of the participants responded to this, confirming the accuracy, (b) writing memos throughout the analytical process in order to document the evolution of codes, analytical ideas and decisions, and (c) using descriptive quotation exemplars as evidence of our findings [Hsieh & Shannon 2005; Lincoln & Guba 1985].

## RESULTS

There were four overarching themes that were derived from this analysis: (1) importance of the black belt, (2) benefits of training in martial arts, (3) dealing with injuries, and (4) being part of the martial arts community. There were six subthemes within the benefits of training in martial arts theme and one subtheme within the being part of the martial arts community theme that will be further described below.

### *Importance of the black belt*

The participants had some mixed, and inconsistent, feelings about how important it was for them to have achieved a black belt. For the seven participants who had a black belt, four of them stated that getting the black belt was a goal for them right from the start, or that it became a goal as they started to progress through the belt levels, and that when they got their black belt it was one of the biggest highlights of their training.

I got my black belt in 2018, which was actually a massive highlight. And that was in Brazilian jiu-jitsu which takes forever to get a belt in. [M9]

I felt on top of the world and it was just amazing. It truly was because there were so many years, so much sweat, so much everything ... it meant a lot to me. [M6]

The other three participants reported that their ultimate goal was more about skill development than achieving the black belt. However, even though they had initially said the black belt was not important to them when asked directly, in continued conversation it clearly did hold meaning for them when they had achieved it. Given that they had achieved their black belts many years ago, perhaps they were currently more focused on their continued skill development and did not remember their former drive for the black belt before they had actually attained it.

I didn't even think of black belts at all when I started, like it was all just to do it to be proficient ... I actually kinda hated the idea of belts. I'm really not all that sold on the idea of belts to tell you the truth. I don't know. I think it's kind of like a North American, like impatient kid, kinda just needing to be told they're doing well ... well, when I got it, it was kind of a bigger deal than I thought it would have been. But I don't know. I like go back and forth with it now because like now, like I do see it as a pretty cool thing to be able to achieve. [M10]

When further asked about what the black belt signified for them, the participants reported that it represented a long-term accomplishment, credentials for running or instructing at a gym, the development of long-term relationships, and/or a way to identify skill levels among different belt ranks.

It means proficiency and it means that you, you haven't given up and that you have a sound understanding of that martial art in question. [M7]

For the three participants who did not yet have a black belt, getting their belt was an important goal because, for them, it signifies having put in the effort to master something and earning the respect of their peers.

It shows that I basically went from a complete scrub in the beginning to like someone that has basically mastered everything. [M2]

It symbolizes how much effort, how much work you put it. [M5]

### *Benefits of training in Martial Arts*

The most dominant theme from the interviews was the many benefits that the participants had received from their training and journey in martial arts. For nearly all of the participants, they viewed martial arts as an integral part of their lives and plan to continue in martial arts for as long as they are able. There were six types of benefits that participants identified from their involvement in martial arts: learning and maintaining their skills, self-defence, physical health benefits, mental health benefits, personal growth, and learning how to win and to lose through competitions.

### *Learning and maintaining skills*

All participants discussed that one of the main reasons that they enjoyed martial arts and continued training, often for decades or more, was because they were constantly developing their skills and learning new skills. They noted that martial arts are always evolving and that nearly every training session offers something new. They compared this against other activities, such as running or weightlifting, which they remarked was very repetitive.

But I think what I love with martial arts is that there's no limit to what you can learn. Like everybody always has something new. It's always evolving. And I think that's just what I really like. [F8]

For me it's about learning. Just getting better, always improving. [M1]

Additionally, many of the participants expressed that they plan to stay in martial arts, with some saying that it is a life-long endeavour. This was particularly expressed by those training within Brazilian jujitsu. The participants who were initially, or primarily, involved in boxing and kickboxing commented that they had either switched to jiu-jitsu or that they plan to eventually switch to only jiu-jitsu because they felt it was easier on the body and was something they could do into old age.

I would like to keep doing jujitsu. And the other thing about jujitsu is the older you get, the less you want to get punched in the head ... And I think jujitsu is a good way to age through, to be able to train forever. [M1]

I feel like martial arts will always, it will always be part of my life. [M7]

### *Self-defence*

Another benefit that six of the participants mentioned was that their training and skill development made them feel confident that they could defend themselves, and even others, if needed.

[I'm] not looking for a fight, and I know most people are just generally minding their own business, but at least in the back of my head I know that I have tricks up my sleeve. [F8]

And I like having the skills to know I can protect myself or my family. [M7]

### *Physical health benefits*

Six of the participants talked about the physical benefits of training in martial arts. This included being physically in shape, both in terms of cardiovascular health and the tone and shape of their body. They also

spoke about how physically challenging their training can be.

And I like pushing myself. Honestly, it's one of the best ways to keep in shape. It just kinda hits everything in terms of really good cardio, building natural muscle, agility, everything. [F8]

### *Mental health benefits*

Nine participants talked about benefits related to their mental health, explaining that the physical exercise was an effective way to reduce stress, tension, and anxiety and to feel more energized.

Actually, my anxiety gets really bad if I don't train ... but I think just having that hour or two where everyone leaves me alone and you're doing one thing. There is nothing else to worry about ... for that one hour everything just kind of goes away. I think that's really important. [M1]

I find that when, after I'm done training, it's the worries of my day or my life aren't there anymore. [M7]

Seven of the participants also discussed feeling more self-confident because of their training and the skills they had developed.

As far as self-confidence, I feel incredibly powerful. You know it just makes me feel good that I have abilities. It makes me feel good that I can feel strong. It makes me feel good that I am technically sound ... it just really makes me feel good about myself. Like as far as confidence, you know to, to, it allows you to believe in yourself. And it gives you a real-life situation where you can justify believing in yourself. [M6]

And, for some of these participants, they reported that this confidence extended into other areas of their lives, such as work or school.

What training helped me with accomplishing is that every time I was able to do a move that kind of gained my confidence. And every time I do that skill more and more and more I become more confident. And that translated to my lifestyle to where I think ok, I think I can do this, and I do it. And it works because I was more confident about it. [M2]

Additionally, one participant talked about how their training helped them focus and assess situations more clearly, both in and out of the gym.

I think jiu-jitsu helped me learn to really calm down and assess the situation a lot better... It's not going to help you in a situation to s\*\*z out and to waste energy really. You just need to calm yourself down, take a breath, and think. And I think that really works its way into all aspects of life really well. [M10]

### *Personal growth*

Nine of the participants spoke to the ways in which participating in martial arts had contributed to their growth as a person – beyond just the learning and development of skills – and that this impacted all aspects of their lives.

And it's all about like personal growth, like you just need to focus on getting better yourself. Don't focus on everybody else, it's all about you. [F8]

And then just like the growth that you get and the knowledge itself that you get from experience that you, that you gain in martial arts and in competition I find to be, I found to be very valuable. [M9]

Three participants specifically noted that martial arts helped keep them out of trouble and gave them something to focus on as both an outlet for aggression and stress and as a goal to keep them motivated.

And without all the lessons that I learned, I don't know what I would be. It's almost terrifying to think of it. I'd probably be where a lot of my other friends were when I started fighting, where a lot of my other friends that I had then ended up now is like a lot of people in jail, a lot of people on drugs, a lot of people are dead. So I feel that I've really become a whole different person because of it... and I'm really grateful. [M9]

I feel like if I hadn't had the martial arts in my life I would have had more, I would have been more of a troublemaker. Like I enjoy fighting. I thoroughly enjoy fighting. And if I didn't do it there, I'd probably do it somewhere else. [M5]

Several participants also spoke to martial arts helping them to identify their own weaknesses and overcome these weaknesses, such as their own ego, claustrophobia, getting upset about trivial things, and anger issues.

You're constantly overcoming things you didn't think you're possible of and that transcends into everyday life. And it changes your perception of what you think you can do. [M3]

I used to be a cry baby. I'd cry about the little things. Like even when it's not supposed to be a big deal, I make it a big deal... This is kind of a weird thing, but I always think that, you know what, this is not as bad as getting punched in the face. Like if I'm getting punched in the face and I can take it, I can take someone calling me stupid or idiotic, calling me names. It's like I'm not going to cry about that. [M2]

The participants also noted that in order to succeed in martial arts and achieve a black belt, certain traits are required, such as persistence, drive, self-motivation, and discipline.



You need discipline because you can't just show up once or twice a week and expect to get it. If you don't put the time in you won't get it... So if you want to achieve anything you need to be self-motivated. You need to be able to get up and want to do it. And if you don't, you're not going to go very far in martial arts or in life. [M4]

### *Learning to win and to lose through competition*

When asked about whether they had competed as part of their training, nine of the participants had competed; this ranged from one tournament to hundreds of matches. These nine participants also indicated that sparring and competition were important parts of their training and/or that they had an important role in MMA training generally. Many of the participants talked about sparring and competition as a highlight of their training, particularly when they won a match or competition. There were two key benefits that the participants received from this. One was that it allowed them to test their skills.

The training, you know it's satisfying if you're training for a fight, and especially if you win. Being able to hold your own against somebody who used to be able to beat you is inspiring. [M1]

I got to learn what hard work really is. And how rewarding hard work can be when you do the hard work. So I would train probably two months before the tournament and after that tournament time I go in and I fight and I get medals and that's all from the hard work I've done. [M2]

The second benefit was that it allowed them to overcome challenges within themselves, including learning how to take a loss.

You just get hungry for this challenge [competition]. Even if you fail, it's what you learn in the process. That's what martial arts is to me. The fact that you brought yourself in, you brought yourself in to the challenge. [M3]

I think competition is super important to anyone's development. I think it really is like learning how to lose, learning how to accept that you need to go back and work on what you messed up. Uh, developing yourself and not putting the blame on other people when you do lose. [M5]

### *Dealing with injuries*

There was only one recurring negative aspect of martial arts training that was mentioned by the participants: dealing with injuries. Nine of the participants commented on injuries they had received while training or competing. Only one participant reported not having any injuries beyond some bruises.

Obviously for the amount of time that I've been in it, I've been very lucky [no injuries]. The amount of times that I have been hit in the nose, like come on (laughs)... But you know that's just the game. [F8]

Injuries were raised when the participants were asked about challenges they have faced during their martial arts training. Shoulder and knee injuries were the most commonly reported injuries (aside from bruises and scratches), with broken or sprained toes and fingers also being quite common (particularly for those involved in jiu-jitsu). Some participants did mention some fairly serious injuries, such as concussions and fractured facial bones, and a few have had surgeries related to their injuries.

Torn knee twice, torn shoulders, primarily with jiu-jitsu. Not to steer anybody clear of it... I'm more thankful for what jiu-jitsu has given me positively than any other art. But the injuries come regularly, just tears and stuff... over the course of ten years, over a year for sure has been down on injuries. I wouldn't trade a minute of it. [M3]

Interestingly, several participants noted that it was not the injury itself that was the negative aspect, but rather that the injury prevented them from training. This often led them to feeling frustrated at not being able to train and losing any progress they had been making in their training.

And I'm not, again, not really the person to take time off. I've trained through almost every injury I've ever had... The injury itself is nothing, like it's ok to be injured. In a sport like this, you're going to get injured at some point. It's going to happen. But not being able to train is like, it's like, jiu-jitsu, even if I'm having a bad day anywhere I can go do jiu-jitsu and have at least an hour or two of good day. [M5]

When you get an injury you know suddenly all your progress is gone. And then you also start going backwards, right, you start losing your skill and your time and, and you can't train and that's frustrating too. [M6]

### *Being part of the Martial Arts community*

The last theme that emerged centered on the martial arts community and the sense of belonging that the participants felt within this community. Nine of the participants talked about the friendships that they had formed, which were often built on trust and respect because of the level of physical intimacy that is involved in training in martial arts, and particularly jiu-jitsu. Many of these friendships have been formed over a long period of training together.

The camaraderie of being with like-minded people. We would have students come and go, but it was the people that stuck around, and then we would train together and we would learn from each other and it made it a lot more fun. [M4]

The friendships I've made along the way. Like there's, you don't get, the way you're close with someone you've beaten up or been beaten up by, it's so different to like the way a normal friendship is. There's like a huge amount of intimacy in that. And like me, one of my best friends, I've only known for like a year, but we are super close because we train six, seven days a week together, try to hurt each other every day, just builds that, there's like a trust to it. [M5]

Three of the participants also commented that within the jiu-jitsu community there is a world-wide acceptance of martial artists and that someone who trains in jiu-jitsu can walk into another jiu-jitsu club anywhere in the world and be welcomed and invited to train.

Take it [martial arts gi] always with the team patch and you're welcome anywhere in the world... what else does that for you? The ability to connect with other humans on the other side of the world. [M3]

With BJJ you can go anywhere, anywhere in the world ... as long as you know this art, you have this language. And you can't even speak the same language, but everyone that you know in this place they speak jiu-jitsu so you can train with them and speak a language with them. And it's a beautiful thing. [M6]

### *Role of teaching*

Within the theme of the martial arts community was a subtheme related to teaching. Seven of the participants are currently, or have previously been, involved in teaching. All these participants loved teaching and felt very passionate about their teaching. And when asked what some of the most rewarding aspects of being involved in martial arts was, they responded it was the teaching. There were two primary factors that motivated these individuals in their teaching. One was that it helped them to improve and refine their own skills because teaching it forced them to learn and understand the techniques themselves so they could teach it to others.

Having to think things through, how you do something or why you're doing it and having to explain it to someone actually reinforced the technique and the principles with yourself ... made me a better practitioner. [M7]

It helps when I'm instructing because I get to show everybody how, how to do the moves and how I was taught the moves. It also helps remind me how to do the moves and stuff when I show it to other people. [M3]

The second factor had to do with the more interpersonal aspects of working with kids and adults and how the participants felt rewarded by being in a mentorship role. They enjoyed seeing the progress and gains that their students would make and developing long-term relationships with their students.

The really rewarding stuff is the coaching ... walking around town and seeing kids that you taught when they were little ... it makes you feel old, but it's cool. That's the really rewarding part. [M1]

Even now owning a gym I really love the transformative aspect of it and how we can, how we can really help to change people with it [martial arts]. [M9]

A couple of these participants also noted that this was a way to pay it forward and give back in a way that they had experienced as a student.

And how I can kind of explain all of the lessons and the journey that I've experienced to them. [M9]

They tell me, 'oh thank you for teaching me'. And I just smile. I smile because, you know, I tell them this, I go, you remember that first guy I told you about, I called him my grandpa and stuff like that? [referring to a mentor when first starting in martial arts] I go, you know what, someone taught me when I first started. So I'm happy to teach you. I'm happy because you know I was a 16-year-old kid who didn't know anything and this guy came and he taught me. So hey, you know, if I can teach you, it's a blessing to me. It makes me very happy. [M6]

## DISCUSSION

In this study, we qualitatively explored the meaning that participants ascribed to achieving a black belt and to their involvement in martial arts as a whole. Being involved in martial arts was overwhelmingly seen in a positive light, with both individual benefits (improved physical and mental health, skill development, and personal growth through both training and competitions) and interpersonal benefits (relationship development and developing a sense of community within martial arts) reported by all participants. The findings from this study are consistent with the results of previous studies. Overton [2017] also found that participants in his study spoke of personal growth and skill development as a result of participating in martial arts. Additionally, these participants spoke of the value of martial arts for self-defence, physical benefits, mental health benefits, and relationship formation. Chinkov and Holt [2016] interviewed men and women involved in Brazilian jiu-jitsu and found that all participants reported positive benefits of being involved in the sport, including physical and emotional changes, skill development, a sense of commitment and dedication, and personal growth,

including increased self-confidence inside and outside of the gym. Peer support and a sense of community was also identified by these participants as important to their training and development. Studies focusing on the use of a mixed martial arts program for at-risks youth and young men reported physical benefits, improved mental health (confidence and emotion regulation) and relationship development [Bird et al. 2019; Milligan et al. 2017]. Additional benefits outside of the program, such as improved academic performance and their own sense of personal growth were also found [Milligan et al. 2017]. A study involving older adults found that involvement in karate improved mental health among older adults [Jansen et al. 2016]. Finally, a quantitative study of over 900 men in Brazil that were engaged in martial arts (Brazilian jiu-jitsu, judo, karate, kung-fu, or taekwondo) reported an overall higher quality of life compared to a normative sample based on national data [Schwartz et al. 2021].

Being injured, and the resulting break in their training, was the only consistent negative aspect that was mentioned as a result of participating in this sport. Injuries have been commonly associated with involvement in martial arts, with a systematic review of injuries sustained in this sport finding an incidence rate of 246 per 1000 athletic encounters [Thomas & Thomas 2018]. Jensen and colleagues [2017] found an incidence rate of 23-29 per 100 fight-participations, with disciplines such as boxing, kickboxing and karate having higher rates of head and facial injuries, and disciplines such as Brazilian jiu-jitsu, judo, and wrestling having higher rates of joint injuries. However, despite the risk of injury as a result of this sport, this has not been a deterrent to anyone that participated in this study to discontinue their training.

#### *Role of motivation in Martial Arts*

Each of the participants in this study has shown high levels of dedication and motivation in their pursuit of a black belt and in choosing to continue to train in mixed martial arts. Self-determination theory (SDT) [Ryan & Deci 2000], which seeks to explain human motivation, can be drawn upon to explain this long-term commitment. SDT proposes that, within a social context, individuals have three basic needs that must be met to help fuel their self-motivation: autonomy, relatedness, and competence [Ryan & Deci 2000]. An individual is autonomous to the extent that their behaviour is willingly enacted and that the actions and values related to the behaviour are fully supported by the individual [Chirkov et al. 2003]. Relatedness refers to the sense of belonging and cohesion that an individual feels within the social environment [Calvo et al. 2010]. Competence, which is particularly influential to motivation in a sport context [Reinboth & Duda 2006], relates to an individual's ability to perform well in the sport.

SDT also distinguishes between three distinct types of motivation and their effects on learning, performance, and well-being [Ryan & Deci 2000]. Intrinsic motivation is an individual's innate tendency to seek out and participate in activities that they find interesting and enjoyable for their own sake and satisfaction. Extrinsic motivation is when

an individual engages in an activity because there are certain outcomes that they value or are looking to achieve. These outcomes could include rewards or acknowledgements. A third type of motivation is amotivation which refers to having no intention to be actively involved in the activity or just going through the motions of the activity with no real intent.

We found that the participants in our study demonstrated elements of both intrinsic and extrinsic motivation throughout their years of training. We can see their intrinsic motivation through their talk about wanting to continue to learn and develop their skills, even after achieving their black belt. Many participants spoke of their intentions to continue to be involved in martial arts, and jiu-jitsu in particular, for the foreseeable future, which clearly demonstrates a strong level of intrinsic motivation. The development of relationships with their peers and instructors, the sense of community they feel – and the role of mentorship for those who teach – may also contribute to their intrinsic motivation. The goal of achieving the black belt and in engaging in competitions demonstrates the influence of extrinsic motivation. They have been rewarded, or are on the road to be rewarded, with the black belt for the hard work and dedication they have put in. In the case of competitions, the incentives are the social acknowledgments and medals/trophies that they get through competition and winning. Overall, research supports that those who experience higher levels of satisfaction and the attainment of the needs of autonomy, relatedness and competence demonstrate higher levels of motivation and achieve greater overall well-being [Chirkov et al. 2003; Ryan & Deci 2000; Sheldon & Kasser 1998].

Another theory relating to human motivation that we can draw upon is goal setting theory [Locke & Latham 2006]. As defined by Locke and Latham [2006], 'a goal is a level of performance proficiency that we wish to attain, usually within a specific time period' [332]. According to goal setting theory, if individuals set realistic goals, such as achieving a specific standard of achievement (like a black belt or entering a competition), this will increase motivation through a desire to attain the goal, which will, in turn, improve performance. By setting a goal, an individual draws their attention and effort towards the goal. This then helps them to focus on actions that will lead to the attainment of the goal and away from actions that would reduce their likelihood of achieving the goal [Latham 2004].

One's level of commitment toward achieving a goal is influenced by two key factors: importance and self-efficacy [Locke & Latham 2002]. Goal importance relates to the purpose and value in achieving the goal and the expected outcomes in achieving the goal. Self-efficacy reflects the belief that one has in being able to attain the goal. Self-efficacy is key because if one believes they can attain the goal, they will be more motivated to do so. Furthermore, through the achievement of the goal, one can experience many positive outcomes such as an increased interest in the activity, pride in performance, an enhanced sense of personal satisfaction, greater happiness, and a higher level of satisfaction and well-being [Latham 2004; Latham & Locke 2006].



Setting goals have a number of important psychological benefits [Latham 2004]. One, in selecting and committing to a goal, an individual focuses their attention and energy on the goal and away from other goal-irrelevant activities. Two, having a goal can serve to energize an individual and keep them focused on success and on staying committed to the goal. Three, goals can encourage individuals to use their prior knowledge and experience to help them in achieving their goal or strategizing how to achieve their goal. While goals can be performance-based, such as achieving a black belt, they can also be learning-based. We see this in the way that nearly all of the participants who had attained their black belt have continued on in their training. Only one participant quit martial arts after earning their black belt. By having a goal to continue to develop their skills, to learn new skills, and to teach others, they continue to stay motivated and engaged in their martial art, and continue to assign importance and value to their training.

## LIMITATIONS

There are four key limitations of this study to note. One, it is likely that the views expressed by the participants in this study, who have stayed involved in martial arts for years, and even decades, are different from the views of those who choose to leave the sport early. Two, there was only one female participant in this study and, although her views were aligned with the male participants, there are also likely important aspects of participating in martial arts that are gender-based. Further research with a larger female sample would be of great value. For instance, as a female involved in the sport myself (first author), I believe that there may be some differences regarding acceptance in the martial arts community for women who train in gyms that are largely male dominated. Additionally, as a female interviewer, there is a chance that the male participants may have refrained from discussing some aspects related to martial arts involvement, such as masculinity or violence [Green 2015]. However, given that many of the participants were personally known to the first author or were known acquaintances of other participants, we feel that participants were quite open in these discussions of their involvement in this sport. Fourth, this study was based on a relatively small sample size and short duration and would benefit from a more in-depth consideration of this topic.

## CONCLUSION

In sum, this study shows that, for those who have stayed committed to the sport of martial arts, there are numerous physical and psychological benefits: improved cardiovascular endurance and muscular strength; skill development, including self defense; improved mental health, including increased self-esteem and confidence and reduced anxiety and stress; and a sense of belonging within the martial arts community. There are also high levels of intrinsic motivation among these individuals as they have been involved in the sport for years, and even decades, and many choose to continue their training long after achieving the black belt and to engage in life-long learning and skill development. Research has shown that engagement in sport has been positively linked to overall mental health [Snedden et al. 2019]; thus, having long-term involvement in this sport may positively influence one's mental well-being across decades. Martial arts is a sport that is welcoming of people of all ages from young children to older adults. This not only allows for individuals to get involved in this sport in their youth and remain involved for decades, but also provides the opportunity for multiple generations to interact with, learn from, and mentor one another. One benefit enjoyed by many of our participants was the ability to pay it forward to those starting out in martial arts. Finally, these findings may also make a meaningful contribution to the sociology of sport and have demonstrated the importance of friendships, mentorship, and the sense of belonging that one feels as part of the martial arts community. We, as humans, are social animals and social interaction is another important element for our health and mental well-being [Snyder-Mackler et al., 2020].

## REFERENCES

- Abramson, CM. and Modzelewski, D. 2011. 'Caged morality: Moral worlds, subculture, and stratification among middle-class cage-fighters'. *Qualitative Sociology*, 34(1): 143–175. <https://doi.org/10.1007/s11133-010-9175-8>
- Basiaga-Pasternak, J., Szafraniec, L., Jaworski, J. and Ambrozy, T. 2020. 'Aggression in competitive and non-competitive combat sports athletes'. *Ido Movement for Culture. Journal of Martial Arts Anthropology*, 20(2): 17–23. <https://doi.org/10.14589/ido.20.2.3>
- Bird, N., McCarthy, G. and O'Sullivan, K. 2019. 'Exploring the effectiveness of an integrated mixed martial arts and psychotherapy intervention for young men's mental health'. *American Journal of Men's Health*, 13(1): 1–11. <https://doi.org/10.1177/1557988319832121> PMID:31068064 PMCID:PMC6440068
- Calvo, TG., Cervello, E., Jimenez, R., Iglesias, D., Murcia, JAM. 2010. 'Using self-determination theory to explain sport persistence and drop-out in adolescent athletes'. *The Spanish Journal of Psychology*, 13(2):677–684. <https://doi.org/10.1017/S1138741600002341> PMID:20977017
- Channon, A. and Matthews, CR. 2015. "It is what it is": Masculinity, homosexuality, and inclusive discourse in mixed martial arts'. *Journal of Homosexuality*, 62(7): 936–956. <https://doi.org/10.1080/00918369.2015.1008280> PMID:25603357
- Chinkov, AE. and Holt, NL. 2016. 'Implicit transfer of life skills through participation in Brazilian jiu-jitsu'. *Journal of Applied Sport Psychology*, 28(2): 139–153. <https://doi.org/10.1080/10413200.2015.1086447>
- Chirkov, V., Ryan, RM., Kim, Y. and Kaplan, U. 2003. 'Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being'. *Journal of Personality and Social Psychology*, 84(1): 97–110. <https://doi.org/10.1037/0022-3514.84.1.97> PMID:12518973
- Cynarski, WJ. and Litwiniuk, A. 2006. 'The violence of boxing'. *Archives of Budo*, 2: 1–10.
- Endresen, IM. and Olweus, D. 2005. 'Participation in power sports and antisocial involvement in preadolescent and adolescent boys'. *Journal of Child Psychology and Psychiatry*, 46(5): 468–478. <https://doi.org/10.1111/j.1469-7610.2005.00414.x> PMID:15845127
- Green, K. 2015. 'Tales from the mat: Narrating men and meaning making in the mixed martial arts gym'. *Journal of Contemporary Ethnography*, 45(4): 419–450. <https://doi.org/10.1177/0891241615573786>
- Harwood, A., Lavidor, M. and Rassovsky, Y. 2017. 'Reducing aggression with martial arts: A meta-analysis of child and youth studies'. *Aggression and Violent Behavior*, 34: 96–101. <https://doi.org/10.1016/j.avb.2017.03.001>
- Hsieh, H-F. and Shannon, SE. 2005. 'Three approaches to qualitative content analysis'. *Qualitative Health Research*, 15(9): 1277–1288. <https://doi.org/10.1177/1049732305276687> PMID:16204405
- Jansen, P., Dahmen-Zimmer, K., Kudielka, BM. and Schulz, A. 2016. 'Effects of karate training versus mindfulness training on emotional well-being and cognitive performance in later life'. *Research on Aging*, 39(10): 1118–1144. <https://doi.org/10.1177/0164027516669987> PMID:27688143
- Jensen, AR., Maciel, RC., Petrigliano, FA., Rodriguez, JP. and Brooks, AG. 2017. 'Injuries sustained by the mixed martial arts athlete'. *Sports Health: A Multidisciplinary Approach*, 9(1): 64–69. <https://doi.org/10.1177/1941738116664860> PMID:27530614
- Kuśnierczak, C., Cynarski, WJ., Litwiniuk, A. 2014. 'Comparison of aggression levels in combat sports and martial arts male athletes to non-practising peers'. *Archives of Budo*, 10: 253–260.
- Latham, GP. 2004. 'The motivational benefits of goal-setting'. *Academy of Management Perspectives*, 18(4): 126–129. <https://doi.org/10.5465/ame.2004.15268727>
- Latham, GP. and Locke, EA. 2006. 'Enhancing the benefits and overcoming the pitfalls of goal setting'. *Organizational Dynamics*, 35(4): 332–340. <https://doi.org/10.1016/j.orgdyn.2006.08.008>
- Layton, C. 1988. 'The personality of black-belt and nonblack-belt traditional karateka'. *Perceptual and Motor Skills*, 67: 218–218. <https://doi.org/10.2466/pms.1988.67.1.218>
- Lincoln, YS. and Guba, E.G. 1985. *Naturalistic inquiry*. Sage. [https://doi.org/10.1016/0147-1767\(85\)90062-8](https://doi.org/10.1016/0147-1767(85)90062-8)
- Locke, EA. and Latham, GP. 2002. 'Building a practically useful theory of goal setting and task motivation: A 35-year odyssey'. *American Psychologist*, 57(9): 705–717. <https://doi.org/10.1037/0003-066X.57.9.705> PMID:12237980

- Locke, EA. and Latham, GP. 2006. 'New directions in goal-setting theory'. *Current Directions in Psychological Science*, 15(5): 265–268. <https://doi.org/10.1111/j.1467-8721.2006.00449.x>
- Massey, WV., Meyer, BB. and Naylor, AH. 2013. 'Toward a grounded theory of self-regulation in mixed martial arts'. *Psychology of Sport and Exercise*, 14: 12–20. <http://dx.doi.org/10.1016/j.psychsport.2012.06.008>
- Massey, WV., Meyer, BB. and Naylor, AH. 2015. 'Self-regulation strategies in mixed martial arts'. *Journal of Sport Behavior*, 38(2): 192–211. <https://journalofsportbehavior.org/index.php/JSB>
- Milligan, K., Badali, P. and Spiroiu, F. 2015. 'Using integra mindfulness martial arts to address self-regulation challenges in youth with learning disabilities: A qualitative exploration'. *Journal of Child and Family Studies*, 24(3): 562–575. <https://doi.org/10.1007/s10826-013-9868-1>
- Milligan, K., Cosme, R., Wolfe Miscio, M., Mintz, L., Hamilton, L., Cox, M., Woon, S., Gage, M. and Phillips, M. 2017. 'Integrating mindfulness into mixed martial arts training to enhance academic, social, and emotional outcomes for at-risk high school students: A qualitative exploration'. *Contemporary School Psychology*, 21: 335–346. <https://doi.org/10.1007/s40688-017-0142-1>
- Mierzwinski, M., Velija, P. and Malcolm, D. 2014. 'Women's experiences in the mixed martial arts: A quest for excitement?' *Sociology of Sport Journal*, 31: 66–84. <https://doi.org/10.1123/sj.2013-0125>
- Miles, MB. and Huberman, AM. 1994. *Qualitative data analysis: An expanded sourcebook*. 2nd ed. Sage Publications, Inc. <https://psycnet.apa.org/record/1995-97407-000>
- MMA Guru. No Date. *Which black belt takes the longest to achieve?* Available at <https://themmaguru.com/which-black-belt-takes-the-longest/> [Last accessed 07 January 2022].
- Overton, MD. 2017. "Living it in the day to day": Narratives of advanced martial artists'. [Doctoral dissertation, University of Tennessee]. *Electronic Thesis and Dissertation Repository*. [https://trace.tennessee.edu/utk\\_graddiss/4812](https://trace.tennessee.edu/utk_graddiss/4812)
- QSR International Pty. Ltd. 2018. NVivo (Version 12). <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>
- Reinboth, M. and Duda, JL. 2006. 'Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective'. *Psychology of Sport and Exercise*, 7(3): 269–286. <https://doi.org/10.1016/j.psychsport.2005.06.002>
- Reynes, E. and Lorant, J. 2002. 'Karate and aggressiveness among eight-year-old boys'. *Perceptual and Motor Skills*, 94(3): 1041–1042. <https://doi.org/10.2466/pms.2002.94.3.1041> PMID:12081264
- Rosario, D., Kerr, JH. and Rhodius, A. 2014. 'The experience of aggression among mixed martial arts athletes interpreted through reversal theory'. *International Journal of Sport Psychology*, 45(2): 79–99. <https://psycnet.apa.org/record/2014-31528-001>
- Rousseau, R. 2018. 'What are the different types of martial arts?' *Live-About*, 14 April. Available at <https://www.liveabout.com/martial-arts-styles-2308281> [Last accessed 07 January 2022].
- Ryan, RM. and Deci, EL. 2000. 'Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being'. *American Psychologist*, 55(1): 68–78. <https://doi.org/10.1037/0003-066X.55.1.68> PMID:11392867
- Schwartz, J., Takito, M., Warburton, D., Antonietti, L. and Franchini, E. 2021. 'Quality of life in Brazilian martial arts and combat sports practitioners'. *Biomedical Human Kinetics*, 13(1): 212–220. <https://doi.org/10.2478/bhk-2021-0026>
- Sheldon, KM. and Kasser, T. 1998. 'Pursuing personal goals: Skills enable progress, but not all progress is beneficial'. *Personality and Social Psychology Bulletin*, 24(12): 1319–1331. <https://doi.org/10.1177/01461672982412006>
- Smith, R. 1999. *Martial musings: A portrayal of martial arts in the 20th century*. Via Media Publishing.
- Snedden, TR., Scerpella, J., Kliethermes, SA., Norman, RS., Blyholder, L., Sanfilippo, J., McGuine, TA., and Heiderscheid, B. 2019. 'Sport and physical activity level impacts health-related quality of life among collegiate students'. *American Journal of Health Promotion*, 33(5): 675–682. <https://doi.org/10.1177/0890117118817715> PMID:30586999 PMCID:PMC7213817

Snyder-Mackler, N., Burger, JR., Gaydos, L., Belsky, DW., Noppert, GA., Campos, FA., Bartolomucci, A., Yang, YC., Aiello, AE., O'Rand, A., Harris, KM., Shively, CA., Alberts, SC., and Tung, J. 2020. 'Social determinants of health and survival in humans and other animals'. *Science*, 368(6493): eaax9553. <https://doi.org/10.1126/science.aax9553> PMID:32439765 PMCID:PMC7398600

Stenius, M. 2014. 'The legacy of pankration: Mixed martial arts and the posthuman revival of a fighting culture'. *Journal of Combat Martial Arts and Science*, 13(5): 40–57.

Thomas, RE. and Thomas, BC. 2018. 'Systematic review of injuries in mixed martial arts'. *The Physician and Sportsmedicine*, 46(2): 155–167. <https://doi.org/10.1080/00913847.2018.1430451> PMID:29347856

van Bottenburg, M. and Heilbron, J. 2006. 'De-sportization of fighting contests: The origins and dynamics of no holds barred events and the theory of sportization'. *International Review for the Sociology of Sport*, 41(3-4): 259–282. <https://doi.org/10.1177/1012690207078043>

Vertonghen, J. and Theeboom, M. 2010. 'The social-psychological outcomes of martial arts practice among youth: A review'. *Journal of Sports Sciences and Medicine*, 9: 528–537.

Walters, JV. 2015. "There are no rules! Except these 108." *The multidirectional flow of influence between sportification, subculture, and violence on the history of mixed martial arts*. [Master's thesis, The University of Western Ontario]. Electronic Thesis and Dissertation Repository. <https://ir.lib.uwo.ca/etd/3148/>

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### Journal DOI

10.18573/ISSN.2057-5696

### Issue DOI

10.18573/mas.i

*Accepted for publication 16 January 2023*

### **Martial Arts Studies**

Journal design by Hugh Griffiths

Issue layout by Lucy Aprahamian



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