

Article

# Why do People Train Martial Arts? Participation Motives of German and Japanese Karateka

Martin Meyer <sup>1,\*</sup> and Heiko Bittmann <sup>2</sup>

<sup>1</sup> Faculty I, Department of School Education, University of Vechta, Vechta 49377, Germany

<sup>2</sup> Division of Global Affairs, School of International Education, Kanazawa University, Kanazawa-shi 920-1192, Japan; bittmann@staff.kanazawa-u.ac.jp

\* Correspondence: martin.meyer@uni-vechta.de or dr.martin.joh.meyer@icloud.com

Received: 22 October 2018; Accepted: 11 December 2018; Published: 17 December 2018



**Abstract:** Meyer's (2012) qualitative research on motivation of German *karateka* initiated the coordinated research project Why Martial Arts? (WMA) to analyse motives in various martial arts styles, like *jūdō*, *taiji*, *krav maga* and *wing chun*. In 2017, the Japanese Society for the Promotion of Science (JSPS) supported the transposition of the research question to Japanese *karatedō* and *jūdō* practitioners. For the German sub-study, 32 interviews were conducted about entry/participation motives, fascination categories, and reasons for choosing *karatedō*. The design of the Japanese sub-study was based on the aforementioned German study, but due to the higher number of participants (n = 106), a mixed method questionnaire was used and distributed via paper and online versions. The results demonstrate that many motivation categories of Japanese and German *karatedō* practitioners share similarities in importance and content, although the characteristics of motives can be very different—partly due to cultural specifics.

**Keywords:** motivation; martial arts; *karatedō*; self-defence; strength; fascination

## 1. Introduction

Due to the lack of dedicated research networks and the vast size of the field, strategic research martial arts research is quite a recent phenomenon. During the last decades, researchers have begun pioneering work to map this scientific field. In 2011, the first German academic Martial Arts conference was held in Bayreuth, Germany. In 2012, it was followed by the first conference of the International Martial Arts and Combat Sports Scientific Society (IMACSSS) held in Genova, Italy. Finally, in 2015, the first British symposium focusing on martial arts was held in Cardiff, Great Britain. Martial arts research has flourished ever since.

### 1.1. Previous Studies about Motivation in Martial Arts

One of the core leading questions through which the academic field is explored, asks for the motivation and motives of martial arts practitioners. Since the late 1970s, several studies were conducted, which will be presented briefly in chronological order.

Hannak and Nabitiz [1] examined *jūdō* (Japanese martial art, literally: “Way of Softness”) in Germany. The authors were interested especially in the fact that Western people participated in Japanese sports. At the University of Tübingen they conducted a quantitative research including 37 beginners and 16 advanced *jūdōka* (the suffix *-ka* means practitioner in Japanese martial arts). It turned out that beginners were described as tough and disciplined, whereas advanced students were softer as well as more gentle and creative. As they expected, the achievement motive was stronger among the advanced *jūdōka*. The health motive was mainly quoted by beginners. Altogether, competitors were more interested in engaging in *jūdō* techniques. Hannak and Nabitiz speculated that

beginners were initially overwhelmed by the exoticism of the Japanese sport, i.e. the strict etiquette, the practice of how to fall properly and the unfamiliar duel situation. Later, typical sport motives like performance or health (see Gabler [2]) would dominate.

An interesting research was provided by Hartl, Faber and Bögle [3]. They examined the reception of *taekwondo* (Korean martial art) in the west and concluded that a traditional, auto sufficient style as well as a modern, agonal style had established. Therefore, they interrogated about 20 *taekwondo* practitioners in narrative, open interviews. These spoke, depending on their favoured style attachment, about various motives. The most interesting ones were the father figure motive (the teacher or *sensei*, literally “before-born” (先生), Japanese term for teacher or master, had the function of a wise, supreme father), the education motive (by parents that sent their children to training) and the disciplinary or obedience motive (“taming of the shrew”).

Due to his research concerning the change of personality traits in *karatedō* (Japanese martial art, literally: “Way of the Empty Hand”), Bitzer-Gavornik [4] researched motive dimensions of 270 subjects. Bitzer-Gavornik used the Attitude towards Physical Activity questionnaire with Likert scale items. One of the main conclusions was that the *karatedō* group showed higher valuation in aesthetic, cathartic, ascetic, and risk-based dimensions in comparison to the control group. Furthermore, Bitzer-Gavornik determined gender and age differences as well as meanderings between *karateka* and non-athletes. The effects of the parameters age and gender cumulated (for example young men’s motives differed significantly from elder women’s motives). The parameters duration and frequency of training as well as social class were almost exclusively ineffective in contrast.

As a basis of their research, Columbus and Rice [5] presumed that specific life-world experiences could provide an impulse wanting to learn martial arts as a coping strategy. Accordingly, they wondered: “What are the contexts or grounds for these perceptions and experiences? How are contexts and meanings similar or different for various reported motivations for martial arts practice?” Columbus and Rice used a narrative-biographic methodology. The subjects were asked to answer the following question in written form: “Please describe in writing your experience of an everyday life situation in which you realised that training in a martial art is, or would be, a worth-wile activity.” The 17 test persons attended an American college and practised *karatedō*, *taekwondo*, or *taiji* (also known as tai chi, Chinese martial art). The results demonstrated that martial art skills were particularly declared as useful in four distinct topics:

- Criminal Victimization: conquest and prevention of physical and sexual threats
- Growth and Discovery: emotional, mental and spiritual self-development and dismantling of psychic barriers
- Task Performance: application of mental techniques learned in martial arts training to cope with everyday and professional tasks.
- Life Transition: experience of structure, control and order in martial arts exercises as a counterpart to chaos in private life (divorce, job loss).

Columbus and Rice concluded that martial arts training was applied to reach either compensatory or emancipatory goals: Compensation in terms of a need for security and order (“assaults” or “life change”), emancipation in terms of internally or externally needed self-update (“development and discovery” or “task accomplishment”).

Breese [6] examined access and drop out reasons of *taekwondo* practitioners in New Zealand. He used an open-ended questionnaire to collect qualitative data from 72 individuals. Doing content analysis, he isolated several motive themes based on the similarity of meaning. The higher order themes representing reasons for participation turned out to be:

1. fitness (fitness, flexibility, health)
2. personal power and control (self-defence, self-control, self-confidence, mental aspects)
3. competence (self-improvement, achievement, good at it, goal achievements)
4. affiliation (social aspects, family sport, friends, helping others)

5. enjoyment (fun, enjoyment)
6. activity (after school activity, keeps me busy)
7. contextual factors (the pace of grade, the detail focus, the discipline, different).

Furthermore, the results showed an increasing interest in personal power and control motives and a decrease interest in fitness motives with rising training experience. Individuals with four or more years of experience in *taekwondo* showed greater importance for affiliation (25%), in contrast to individuals with less involvement in *taekwondo*. Competence played a more important role for higher belt ranks than lower ranks. "The results showed individuals at white and yellow belt ranks are primarily motivated to participate by themes of fitness, personal power and control and enjoyment. Fitness and personal power and control dominate the first and second themes for participation. In contrast, green and blue belts rank enjoyment as their first theme for participation. Second participation themes are fitness and personal power and control. Some green and blue belt participants are also interested in affiliation, as a secondary reason for participation. Furthermore, competence was stated by 10% of green and blue belt respondents as the primary reason for their participation. Red, black, and greater than black belt participants' primary reason for participation is for personal power and control; however, competence and fitness, were other primary themes for some respondents." Major motives for starting *taekwondo* were learning self-defence (19%) and fitness (15%). Especially the aspects of fitness (22%), patterns (18%), techniques (11%), sparring (11%), and self-defence (8%) fascinated the athletes.

Bogdal and Syska [7] analysed the emphasis of three key motives in their study:

1. athletic success
2. health, fitness and stamina
3. *karatedō* as a way of life

They questioned 300 Polish *karateka* using an undefined questionnaire with 48 items. 66% of the subjects chose "*karatedō* as a way of life" as their most important motive, 20% chose "athletic success", and 12% chose the health motive. The "way of life" motive was significantly more meaningful to subjects with several years of training experience, older age (>30 years) or more frequent training. Younger, less trained, and less educated *karateka* were significantly more interested in athletic success. Bogdal and Syska explain this finding with the desire to emulate popular *karatedō* role models. This aspect of "looking for masculinity" was generally short-termed, as eventually either the training was discontinued or the dominant participation motive shifted.

Examining the initial motives of *jūdōka* and *karateka* were the key interest of Zaggelidis, Martinidis and Zaggelidis [8]. The sample consisted of 103 Greek martial artists (56 *jūdōka* and 47 *karateka*), who were interrogated with a questionnaire originally used by the Japanese *Kōdōkan* (*jūdō* organisation). The questionnaire was divided in a quantitative part with 28 items, where motives had to be rated on a Likert scale, and a qualitative part to discuss unknown motives. Zaggelidis, Martinidis, and Zaggelidis used factor analysis for data evaluation. In total, they revealed 12 motive groups:

1. physical-personal benefits (health, strength, ability, character)
2. interesting sport
3. suitable (not seasonal, cheap, nearby)
4. recreation
5. means of demonstration (book-magazine, T.V., film, lecture, in vivo display)
6. external image (eastern origin, outfit, belt, atmosphere)
7. structure—nature of *jūdō*/*karatedō* (one to one, small versus big, body size)
8. safety (no injuries)
9. competition (hard)
10. family urge

11. peers (friends)
12. other.

The only sex difference found was that the item “family urging” was significantly higher rated by women (especially *karateka*).

Jones, Mackay and Peters [9] utilised the Participation Motivation Questionnaire (PMQ) by Gill, Gross, and Huddleston [10] for their research, which they expanded with demographic questions and eight items about specific martial arts motivation. The sample consisted of 75 martial artists from the British West Midlands. The subjects trained *taiji*, *karatedō*, *kung fu* (Traditional umbrella term for Chinese martial arts, recently often replaced with the term *wushu*), *aikidō* (Japanese martial art, commonly translated: “Way of Harmony with Life-Energy”), *jeet kune do* (Chinese martial art, founded 1967 by Bruce Lee), *British free fighting*, *taekwondo*, and/or *jūjitsu* (Japanese martial art, literally: “Art of Softness”). The most important motives were (in descending order) affiliation, fitness, skill development, friendship, rewards/status, situational, and competition. The importance of motives like fun, physical exercise, skill development and friendship was similar compared to other sports. The research team proved that participants with a higher training intensity showed “greater importance placed on the underpinning philosophy of the martial art.” No significant gender or training experience related differences were discovered, possibly due to the high percentage of men (76%).

For his survey of 170 martial artists, Twemlow [11] applied an undefined Likert scale questionnaire containing 13 items. The most important motives were (ranked by amount of positive ratings) self-defence (154), physical exercise (152), improving self-confidence (143), self-discipline (141), fun or something to do (135), sport engagement (116), *karatedō* movies (114), spiritual practice (111), and meditation (104). Surprisingly, the competition motive was positively rated by 84 test persons while 63 rated it negatively. Speaking of *karatedō* motives, Twemlow states: “There is much to suggest that an interest in the martial arts may be motivated by magical wishes and wishes for power, as suggested by the high interest in karate motives.”

Rink [12] questioned 50 German *karateka* about their participation motives, using a Likert questionnaire with 37 predefined motive items. The resulting motive ranking is listed in Table 1.

**Table 1.** Motive ranking evaluated by Rink

Rank	Motive (I do karate, because ...)	Rating
1	I want to do some exercise	4.40
2	I want to be physically fit	4.32
3	I want to be physically healthy	4.18
4	I want to have fun	3.76
5	I want to master self-defence	3.70
6	I want to reduce stress	3.68
7	I want to know my own limits	3.62
8	I want to accomplish a distinct performance	3.62
9	I want to achieve mental wellness	3.56
10	I want to achieve mental balance	3.48
11	I want to prove my willpower	3.44
12	I need compensation for work	3.40
13	I want to face new challenges	3.28
14	I want to accomplish beauty and elegance	3.26
15	I want to do sports with other people	3.22
16	I want to prove myself something	3.06
17	I want to do sports as a group	3.06
18	I think it is self-realisation	3.00
19	I want to share some time with other <i>karateka</i> after training	2.98
20	I want to stand my ground	2.68

Table 1. Cont.

Rank	Motive (I do karate, because ...)	Rating
21	I want to get to know people	2.66
22	I want to perform better than my enemy	2.66
23	I need social contact	2.64
24	I have to let off some steam	2.64
25	I want to agonise	2.60
26	I want to improve my self-confidence	2.50
27	I want to defeat the enemy	2.50
28	I want to reduce my body weight	2.44
29	I want to compete with other people	2.36
30	I want to get high belt rankings	2.34
31	I want to perform better than other people	2.30
32	I want to learn acrobatic techniques	2.06
33	I want to participate in competitions	1.96
34	I want social appreciation	1.80
35	I want to be able to harm people	1.30
36	I want to be appreciated by my friends	1.26
37	I want to be in the public eye	1.24

Ko [13] asked 307 participants of a multi-style martial arts competition about their training motivation. The study used an adapted version of the motivation scale of McDonald, Miline, and Hong [14]. The original 13 motivational factors were extended with the motive items cultural awareness, fun, and self-defence. Ko questioned the test persons: “What are the important aspects in the training of martial arts?”, “How did martial arts training help you in your life?” and “What did you improve most since taking this class?”. The most significant motives for training proved to be (moral) value development (46%), self-esteem (44%), physical fitness (42%), self-defence (38%), self-actualisation (36%), skill mastery (30%), stress release (8%), and cultural awareness (7%). Ko ascertained “that more experienced martial arts participants were more motivated by value development; and beginners were more motivated by self-defence than others.” In comparison, *jūdō/jūjitsu* participants were more motivated by aggression than other martial artists. *Aikidō/hapkido* and *kung fu/wushu* participants were relatively more motivated by social factors. *Karatedō, taekwondo* and *jūdō/jūjitsu* participants were more motivated by self-defence. Regardless of the discipline, aesthetics turned out to be a main motivational factor for all participants.

Patel, Shukla, and Pandey [15] focused especially on gender differences during their research about participation motives. They interrogated 50 male and 50 female Indian *taekwondo* practitioners using the PMQ by Gill, Gross, and Huddleston [10]. The evaluation of the 30 items questionnaire did not show significant gender-related differences in the motive hierarchy. Only five of 40 items differed significantly between male and female participants.

In summary, the presented studies provided lots of information about the variety and range of motives, as well as different rankings of motive importance. However, the studies

- (a) did not suffice to elaborate a motive spectrum in its entirety,
- (b) did not suffice to illustrate motive changes related to individual biographies,
- (c) did not differentiate between entry and participation motives,
- (d) did not suffice to explain consistently the influence of personal factors on motives.

To fill in these research gaps, Meyer [16] interviewed 32 German *karateka* about their participation motives, entry motives and *karatedō* fascination to gain an explorative, complete motive overview. Furthermore, the test persons were asked about alterations of their motive composition and remarkable moments in their *karatedō* training career. Qualitative content analysis isolated 60 different participation motives, which Meyer clustered into 22 core categories (see chapter results).

### 1.2. Why Martial Arts? (WMA) Project Results

Due to the statistically significant and highly interesting results, the German committee for martial arts studies launched the strategic research project Why Martial Arts? (WMA), emulating the methodology of Meyer. At first, Kuhn and Macht [17] extended Meyer's survey up to 183 participants by conducting an online study. They streamlined the methodology and focused on *karatedō* fascination rather than motivation. 538 fascination categories for adults and 100 for children were found. In spite of this survey containing ten times the number of categories found in the previous survey, it did not reveal much new content, but added many details.

For the survey, Kuhn and Macht assumed that the terms "motivation" and "fascination" are interchangeable. Whereas the terms "motivation" and "motive" have been used by participants generally as synonymous for "reason" (to practice) and inherit a long psychological history, "fascination" remains somehow blurry and unsuitable for scientific purposes.

In Kenyon's [18] well-known conceptual model for characterising physical activity, he defined six dimensions of the instrumental value of physical activity:

Physical activity ...

1. as a social experience
2. for health and fitness
3. as the pursuit of vertigo
4. as an aesthetic experience
5. as catharsis
6. as an ascetic experience

These dimensions can be defined as basic sport motive subsets, which are reflected in the aforementioned sub-studies. Kenyon's dimensions were used by the research team as starting point for the motive categorisation process (see chapter results).

According to Gabler [2], sport motives "are meant as personality-specific dispositions aimed at sporting situations" (translated by authors). The entirety of motives which are operative in a specific environment, is called the motive spectrum.

The Rubicon model of action phases, developed by Heckhausen [18] and Gollwitzer [19], describes the interactions of motivational and volitional factors that lead to an individual's action:

1. pre-decisional phase: The individual chooses a goal (motivational perspective)
2. pre-action phase: The individual plans the realisation (volitional perspective)
3. action phase: The individual executes its plans (volitional perspective)
4. post-action phase: The individual evaluates its efforts to reach the goal (motivational perspective).

In this work, the focus is set on motivational perspectives rather than volitional. However, it is apparent that the realisation of motives is strongly connected to facilitating volitional circumstances, like the fact that a subject had easy access to a nearby *karatedō dōjō* (Literally "practice place of the way" (道場), training place in Japanese martial arts) or that parents were already practicing *karatedō*. For this study, the rubicon model served to help distinguishing between motivational and volitional factors as well as interpreting the background mechanics of certain motives that are especially dependent of volitional acts.

As mentioned, "fascination" is not a term that is commonly used in motivational theories, despite it being used by several aforementioned martial arts motivation studies. Nevertheless, it proved to be useful, helping people to describe

- (a) their most important motive,
- (b) a cluster of important motives,
- (c) their dominating entrance motive,

(d) a strong motive which is tied to an essential characteristic (of *karatedō*).

While participants tended not to differentiate between motivation and fascination verbally, fascination was apparently used to embolden the uniqueness and individual importance of certain motives. Looking at the WMA sub-studies, which perceived motivation and fascination almost synonymously, we have to keep the proximity of both concepts in mind, being aware that they are not equally used by participants.

In 2014, Kuhn et al. interrogated *taiji* practitioners online [20]. In addition to the qualitative module targeting fascination, they implemented a quantitative module, which contained 37 motives on a Likert scale. Tests of 243 persons completed the questionnaire. Kuhn's research team isolated 377 categories of *taiji* fascination. These were clustered into 36 axial categories called "themes". Kuhn et al. discovered gender-related and age-related differences for the ratings of specific motives.

Liebl and Happ [21] mirrored Kuhn's research design for *jūdō*. In total they questioned 1.273 *jūdōka* with a slightly modified motive pool. The two evaluation teams found 62 and 81 fascination categories, respectively. Unlike Kuhn et al., Liebl and Happ did not discover significant differences between the two sexes, but they found out that the age of the test persons affected their motive importance.

In 2016, Heil, Körner, and Staller [22] conducted a double sub-study of the WMA-project. They questioned 217 *krav maga* (Israeli martial art) practitioners and 63 *wing chun* (Chinese martial art) practitioners about their motivation categories. For the qualitative module, the research team modified the stimulus question of the previous sub-studies, returning to Meyer's approach. Instead of asking about fascination, they pointed directly at former and current motives. The results confirmed the hypothesis that the participants of *krav maga* and *wing chun* are very interested in self-defence, which both systems are known to emphasise. Females were even more interested in self-defence than their male counterparts. The actual participation motives differed greatly from starting motives. In particular, the self-defence motive lost importance and was replaced (to a degree) by fitness and fun motives in *krav maga* and spiritual and social motives in *wing chun*, respectively.

Regarding the several sub-studies of the WMA project, the results unveiled great differences between motive importance and structures as well as fascination categories, depending upon the practiced martial art. Surprisingly, they also unveiled that age and gender only have minor influence. However, it is unclear whether the methodological disparities watered down the significance of the results.

### 1.3. Taking the International Step

Japan was chosen as first international research target because the starting point of the WMA project was based on Japanese martial arts like *karatedō* and *jūdō*. Moreover, both martial arts are very popular in Germany as well as in their home country Japan and have been adapted in Germany to a certain degree. Another reason for the selection of Japan was its traditional martial arts culture, which has been cultivated in Japanese society throughout its history. Thus, not only an intercultural comparison of fascination and motive categories in the martial arts was expected, but also conclusions to what extent martial arts as cultural heritage depend (or not) on their original culture and society, regarding its value orientations, goals and symbol codes. Therefore, studying martial arts fascination and motivation in Japan would open a new research dimension, which could serve as a pilot scheme for further intercultural WMA sub-studies (for example *krav maga* in Israel; and *wing chun* and *taiji* in China). Subsequently, the Japanese Society for the Promotion of Science (JSPS) funded a project to examine fascination and motivation of Japanese martial artists as a keystone for further intercultural and international sub-studies in the field.

Our research team assumed that there would be major differences between German and Japanese *karateka* and *jūdōka*, as well as between both martial arts. This article however only focuses on *karatedō* and compares these results to the survey undertaken by Meyer [16].

## 2. Methods

Host researcher Heiko Bittmann, who is fluent in Japanese and has been living in Kanazawa for more than 20 years, teaches *karatedō* as a high degree black belt to Japanese and international students alike. He is also a nationwide acclaimed expert for *iaidō* (Japanese martial art, commonly translated: “Way of Sword-drawing”) and *jōdō* (Japanese martial art, literally: “Way of the Stick”) for which he held high rankings, too. For the time of the scholarship, Martin Meyer became member in a *karatedō* club to understand the culture and the surrounding society. This approach, emulating Wacquants [23] famous boxing study on a small scale, proved to be very fruitful in confronting German and Japanese utilisation and practice of *karatedō*. It especially helped to nail down the ambiguity of the Japanese language as well as the intended semantic nebula, with which the Japanese respond to ensure the compliance of their opinions.

Due to the unknown effects of the mutating methodology through the WMA sub-studies, we tried to emulate the methodology of the original study by Meyer [16], which had a strong fieldwork approach. Meyer applied the questions as an interview guide (see Table 2).

**Table 2.** Interview guide, used by Meyer (2012) for the German survey.

	Translated Question	Original Question
1.	Do you remember how you first came into contact with martial arts in general?	Erinnern Sie sich, wie Sie zum ersten Mal mit Kampfsport allgemein in Kontakt kamen?
2.	What fascinates you about this martial art?	Was fasziniert Sie an dieser Kampfsportart?
3.	Why did you start practising martial arts?	Warum begannen Sie mit dem Kampfsport?
4.	Do you look forward to your <i>karatedō</i> training?	Freuen Sie sich auf das Karatetraining?
5.	Over time, have your aims concerning <i>karatedō</i> changed? Do you consider certain elements more important today than you did in the past?	Haben sich Ihre Karateziele im Laufe der Jahre verändert? Ist Ihnen heute etwas wichtiger als früher?
6.	So far, are you proud of anything you have achieved as a martial artist?	Empfinden Sie Stolz auf etwas, das Ihnen als Kampfsportler gelungen ist?
7.	Do you remember any especially outstanding or defining moments regarding <i>karatedō</i> ?	Erinnern Sie sich an einen besonders beeindruckenden oder prägenden Moment im Karate?
8.	Did you always want to practice ( <i>Shōtōkan</i> ) <i>karatedō</i> or did you also have other disciplines of martial arts in mind?	Wollten Sie immer schon ( <i>Shōtōkan</i> -) Karate trainieren oder hatten Sie eine andere Kampfsportart im Sinn?
9.	In your opinion, why did your colleagues start practising martial arts?	Was denken Sie, warum Ihre Trainingskollegen mit dem Kampfsport begonnen haben?
10.	In your opinion, why is your <i>sensei</i> (or those of any other role model concerning the issue) practising martial arts?	Was glauben Sie, sind die Gründe, warum Ihr <i>Sensei</i> (oder Ihr diesbezügliches Vorbild) Kampfsport betreibt?
11.	What do you consider to be your own students' reasons for practising <i>karatedō</i> ? (optional)	Was beobachten Sie, welche Ziele Ihre eigenen Schüler dazu bewegen, Karate auszuüben? (optional)
12.	Have you met any <i>karateka</i> thus far whose motives you are strongly opposed to?	Sind Ihnen Karateka aufgefallen, deren Beweggründe Sie ablehnen?

Due to the larger survey scale, the research team had to abolish the qualitative interview technique. Instead, we applied a mixed method questionnaire, which was spread as a carbon copy and online (see below). The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Ethics Committee of Vechta University.

The conceptualisation of the methodology for the Japanese sub-study contained the following development steps:

- Adaption of methodology: The quantitative module as developed by Liebl and Happ [21] was starting point of our quantitative part. The response options in the demographic module however had to be modified to serve Japanese realities (concerning school education, employment categories, etc.).

- Translation of the questionnaire:
  - (a) First draft: Two translators with research field knowledge translated the German version into their native language Japanese. Through consensual discussion among the research team a synthesis was made of both translations.
  - (b) Retranslation: Two native German speakers retranslated the first draft into German language. The accordance of original version and retranslation was subsequently evaluated.
  - (c) Assessment: The (re-)translated versions were discussed among an expert board, with the research team, expert translators, and research fellows as associates. The assessment lead to a final draft.
  - (d) Field test: Five Japanese martial artists filled in the questionnaire and provided final feedback about the wording and layout.

The final draft applied three impulse questions in the qualitative module:

1. For which reason(s) have you started *karatedō* training?  
あなたはどんなきっかけ・理由で空手道を始めましたか。
2. Have your reasons to train changed over time? Are there reasons that are currently more or less important than in former times?  
その動機・きっかけは今までの稽古を通じて変わりましたか。それは以前よりも重要になりましたか。重要さは薄れましたか。
3. What fascinates you about *karatedō*?  
あなたは空手道のどこに魅力を感じますか。

To prevent interferences between motivation and fascination (see discussion above), we exerted the term “reason” instead of “motive” in the questionnaire.

For the quantitative module, we compiled the motive items of all former WMA sub-studies and martial arts motivation studies. Through merging, 48 motive categories were singled out. During the questionnaire development process, the following changes were made:

1. The direct translation of “*karatedō* movement”, which was meant to describe physical technique patterns, had to be changed due to expert concerns that Japanese audiences would confuse it with a social movement.
2. The motive “authority through power”, i.e., the desire to have power over other people—especially in combat—was estimated as offensive for Japanese audiences and was subsequently deleted.

The original motive description “I like to brawl” was changed into “I enjoy impact techniques” to diminish the meaning of brutality, which could be offensive to Japanese audiences.

Besides these adaptations, the following elements were added:

1. We inserted the motives “to become stronger” (強くなるため *tsuyoku naru tame*) and “to acquire respectful manners” (礼儀作法を身につけるため *reigi sahō wo mi ni tsukeru tame*) due to the assumption that these motives are very important for Japanese *karateka*. Both motives are not represented in the German sub-studies, although there is a respect-affiliated motive.
2. Three blank items were inserted to provide opportunities to fill in missing motives (though they were not used by any participant).
3. An explanation was added that items could be skipped in case the participant does not want or is unable to answer.
4. Due to Harzing’s [24] discovery that Asian populations tend to answer socially desirable, controversial items (like “because people should fear me”, “to do self-torment”, etc.) were shifted into the second half of the item list to not bias participant respondents.

5. Takahashi et al. [25] pointed out that Japanese people tend to avoid choosing extreme answers (like 0 or 10 on a 10-tier Likert scale). Therefore, we preferred a 4 tier Likert scale and dismissed a neutral option to prevent participants from avoiding statements.

The finalised list of quantitative items is showed in Table 3 (including Japanese original text):

**Table 3.** Quantitative item module used for the Japanese survey.

Translated Question	Original Question (Japanese)
1. Because <i>karatedō</i> fosters my health	健康のため
2. To meet friends and acquaintances	友達や知人に会うため
3. Interest in Japanese culture and tradition	日本の伝統と文化に興味があるから
4. To strengthen my self confidence	自信をつけるため
5. To have fun	楽しいから
6. Enjoyment of <i>karatedō</i> movements and techniques	空手道の動き・技をするのが楽しいから
7. Because I like discipline	規則・規律が好きだから
8. To let loose and work off	体力を消費し、ストレス発散させるため
9. To get to know people	未知の人と知り合うため
10. To participate in competitions	試合に出場するため
11. Just to do some exercises	ただ運動するために
12. To be loyal towards the <i>sensei</i> /the <i>dōjō</i>	先生や道場に忠実でありたいから
13. To develop a mental attitude for everyday life	日々の生活の中での精神的な支えを学ぶため
14. Because I am curious, and I want to do something new	好奇心が強く、自分が常に何か新しいことに挑みたいから
15. To be able to defend myself	自己防衛のため、自分を守ることができるから
16. Because I like to concentrate myself mentally and physically	心身ともに集中するのが好きだから
17. To call attention and get prestige because I am doing <i>karatedō</i>	空手道をしていることで、注目されるから
18. To relax myself	リラックスするため
19. Because I enjoy impact techniques	相手に対して効果のある技が好きだから
20. To feel community spirit	仲間との一体感を感じられるから
21. To compete with people	他人と競うため
22. To experience fighting thrill	格闘中にスリルを味わえるため
23. Because I strive for the perfection of technique	技術を完成させるため
24. Out of habit	習慣だから
25. To stay or to become more fit	もっと健康になるため、健康を維持するため
26. My parents wish that I join training	親が稽古に行くことを望んでいるから
27. To prove myself that I endure training	練習に耐えられることを証明するため
28. To learn a lot about <i>karatedō</i> generally	空手道について多くのことを学ぶため
29. To prepare myself for dangerous situations at work	仕事上、危険な場面を想定し、準備するため
30. To strive for perfection of my character	人格を完成させるため
31. To improve my body control	身体の動きをよくするため
32. Because <i>karatedō</i> training develops respect	空手道の稽古は尊敬の念を育てるから
33. To do self-torment	自分を追いつめたいから
34. Because <i>karatedō</i> is a lifelong, life-accompanying way	空手道は生涯の道であるから
35. To gain higher belt graduations	昇級・段するため
36. To fight against my anxieties	自分の恐怖心を抑えられるため
37. To distract myself from worries and problems	悩みや問題などを考え込まないようにするため
38. To become stronger	強くなるため
39. To be proud of myself	自分の誇りのため
40. Because I like the beauty of <i>karatedō</i> movements	空手道の動きの美しさが好きだから
41. Because my friends are going to training, too	友達も稽古に行っているから
42. Because in some moments, I forget everything around	無心を得るため
43. To become invincible or to feel like invincible	無敵になる、あるいは無敵だと感じたいから
44. To improve my <i>karatedō</i>	空手道の上達を目指すため
45. Because people should fear me	人が私のことを怖れるため
46. To have a father/ <i>sensei</i> figure	父親的模範像・師範模範像を見つけるため
47. To teach people <i>karatedō</i>	人に空手道を教えるため
48. To acquire respectful manners	礼儀作法を身につけるため

## Survey

In Meyer's sub-study [16], 32 German *karateka* were interrogated, consisting of 22 males and 10 females (see Table 4). All of them practised *Shōtōkan* style *karatedō*. *Kyū* is a ranking system in Japanese martial arts for student degrees. Grades are from 9th to 1st (depending on the specific club, specific ranks may be skipped). *Dan* denotes the master ranks, counting from 1st to (usually) 10th Dan.

**Table 4.** German survey statistics.

	Min.	Av.	Max.	Standard Deviation
Age	9	31.8	67	15.09
Belt graduation	8th <i>kyū</i>	2nd <i>kyū</i>	4th <i>dan</i>	3.32 ranks

For the sub-study conducted by Meyer and Bittmann, 106 Japanese *karateka* completed the questionnaire. 45 *karateka* did the survey via online questionnaire while 62 filled out the paper version. One questionnaire had to be dismissed due to formal issues. Of the 105 valid responds, 60 were filled out by males, and 45 by females (see Table 5). The participants practised various *karatedō* styles (including full-contact and semi-contact styles). Evaluating the little value from data provided by very young test persons in the German sub-study (despite the interview questions were verbally simplified to suit to the age), the research team set a minimum age of 12 for the Japanese study.

**Table 5.** Japanese survey statistics.

	Min.	Av.	Max.	Standard Deviation
Age	12	29.1	74	14.48
Belt graduation	/	1st <i>kyū</i>	7th <i>dan</i>	3.82 ranks
Training years	0	11.1	55	11.60

During the parallel process of generating and analysing data, data saturation was eventually reached. For the German sub-study, the turning point was determined after the 27th interview, while for the Japanese survey, it was determined after around 95–100 participants. Data saturation itself was detected when no more significant new outcomes could be generated through new data acquisition.

### 3. Results

For both studies, the qualitative modules (interviews) were analysed by the research team using qualitative content analysis, formulated by Mayring [26]. For the Japanese study, the research team initially translated answers and discussed content analysis afterwards. Sometimes Japanese *karatedō* experts were consulted to provide advice when the core research team did not agree or was unsure about specific data interpretations.

The quantitative and demographic parts were analysed using Apple numbers with a self-programmed crossover testing method, containing the Fisher's exact test, chi-squared test, g-test, and ANOVA.

#### 3.1. Entry and Participation Motives

The resulting motive categories were assigned to twenty-two axial categories by axial coding (which was built on the German results). The definitions of these categories rested upon the interlinking topic of the related categories. There are six motive branches (see Table 6, branches and motives are described below).

**Table 6.** Organised axial categories.

Society	Efficacy	Spirit	Body	Emotion	Preference
social support	profession	knowledge	health	joy	habit
communication	protection	focus	body control	flow	curiosity
respect/manners		spirituality/tradition	catharsis	aesthetics	
self-confidence power		(mental and physical) strength		thrill order	
pride					

##### 3.1.1. Society Motives

This branch consists of interpersonal contact motives. However, it is also defined by motives aiming at an improvement of the social status.

The most important category in this branch is social support, which is a very well researched motive in sport contexts (especially in youth sport engagement, see Beets et al. [27]). Technically, this is a kind of hybrid motive because the intention to participate is partly or mainly external: Japanese and German *karateka* were introduced frequently to the martial art by siblings, parents, children or friends. Additionally, they were impressed by promotional demonstrations of senior students (先輩 *senpai*). In comparison, the gatekeepers in Japan—according to our results—are part of the family, whereas in Germany especially non-related school friends or co-workers accompanied *karatedō*-interested people to training sessions. Parents tended to initiate kids' *karatedō* training with the intention to lose weight, to learn subordination, or to exhaust physical powers. Japanese adults occasionally reported the desire to share leisure time with their children (or grandchildren), which lead them to *karatedō*.

The branch also inherits sport motives (as found by Gabler [2]) like “to develop self-confidence”, “to be proud of oneself” and the joy of meeting friends and new people, which are important in both cultures.

The motive “because people should fear me” is very complex, as it is not only one of the least important motives (in Japan, it is indeed the least favourite motive), but was (in Germany) generally observed on club mates. The motive seems to be strongly connected to bullying. Either *karateka* may try to improve their fighting skills to become (more) effective bullies or they may try to get an infamous reputation, which deflects the attention of bullies. Some Japanese participants reported that they started *karatedō* training because they were bullied.

The pride motive is tied to victories in competitions as well as to higher belt graduations. Unsurprisingly, the competition motive is more important for younger *karateka* with less training experience. The first *dan* is considered to be a transition to adulthood, from student to master, in both countries and is granted after passing an extremely challenging examination procedure.

An interesting aspect marks the respect or manners category. The results demonstrated that German *karateka* like the manners, the respect networking (visible in bowing, etc.), and the hierarchical clarity in *karatedō* very much. For Japanese *karateka*, this motive is even more important, despite respectful manners are applied on social basis. The participants explained that politeness in Japanese society is an extremely complex phenomenon. There are many different layers of actions and phrases to express politeness, depending on situation, gender and rank of the participants. By addressing people in reference to their social rank, language, and gestures change accordingly. In the strict environment of the *dōjō*, Japanese *karateka* can practice correct manners (礼儀作法 *reigi sahō*) beyond their usual social contexts like university, peer or family, with the intention of applying them in their work life later, where the hierarchies are much more complex and social behaviour errors are sanctioned gravely. Thus, the *dōjō* is seen as a closed experimental area to train social manners.

Another remarkable result deals with the so-called “*sensei* motive”. In Japanese culture, teachers, especially if they mastered an art, are highly respected. One indication is the addition of the suffix *sensei* to the teacher's name.

In the German sub-study, most of the interrogated teachers mentioned the *sensei* motive. They reported that *karateka* tend to melt their real-life *sensei* with an idealistic wise, strong father figure and that they themselves sometimes feel uncomfortable being pressured to match the expectations of their students. Several *karatedō* students confirmed the *sensei* motive, speaking of their need to bond with a person they can look up to. To counter these expectations, some German *sensei* pay extra attention to depict themselves as “regular” humans.

One might expect that the “*sensei* motive” would be even more important for Japanese *karateka*, but our data analysis pictured it as one of the least important motives of all (44 of 48). It is also noteworthy that older *karateka* (>41 years) perceived this motive more important than other groups. Maybe this effect can be explained due to the fact that *sensei* are commonly older people, so that they take a look at the *sensei* motive from an affected perspective. We conclude that the *sensei* motive is more important for German *karateka* because of the lack of high-regarded master/father figures in their social environment. The components of Asian martial arts—ritualised violence, philosophy,

and mystification—may increase *sensei* adoration even more. The data is lacking information about whether Japanese *sensei* also apply strategies to depict themselves as “regular” humans—which might be unnecessary, because the experiences from field work lead to the assumption that the *sensei* superevelation is a mere Western phenomenon.

### 3.1.2. Efficacy Motives

The efficacy branch is filled with profession-related motives, like learning martial arts for the job as a bouncer or taxi driver (as in the case of Germany). The protection motive is the prevalent motive for German *karateka* to start training.

Despite being one of the lowest-ranking crime rate nations, this motive is also relevant in Japan. However, Japanese *karateka* do not tend to prepare themselves for an ambush like their German fellows. Their protection competence is strongly intertwined with the key motive of Japanese *karatedō*: “to become stronger” (see below).

### 3.1.3. Spirit Motives

This branch inherits cognitive motives. An important motive here is the joy of concentrating mentally on the complex and sometimes difficult *karatedō* movements and patterns. Additionally, powerful is the knowledge motive, which covers two subcategories: Firstly, many *karateka* are interested in movement variety and technique (技 *waza*) amount. They seek to expand their overall *karatedō* knowledge and to enhance their insights into technique application. Secondly, they show interest in history, development, styles and masters of *karatedō*, too.

A more transcendent variation of the knowledge motive is the spirituality motive. A core characteristic of many Asian martial arts is the mixture with religious, philosophical or—at least—behavioural elements and codes (see Bittmann [28], Maliszewski [29], and Hamaguchi [30]). Despite long-time controversies about the exact impact and the genesis of spiritual paradigms, the majority of researchers recognise aspects from *shintō*, Confucianism, and *zen* in Asian martial arts. Thus, people in both countries see *karatedō* as a life-long way to spiritual maturity with regards to character perfection.

In addition, many German *karateka* experience their martial art as an account to Eastern philosophies and frequently got interested in Japanese/Asian culture as a whole due to *karatedō*. Accordingly, Japanese *karateka* consider their martial art as a traditional East Asian or indigenous Japanese heritage. Especially remarkable are statements from Japanese *karateka* like this: “Travelling to Asia and Africa I learned that people there share the stereotype of Japanese people practising *karatedō*. Therefore I thought for myself that I have to do it.” (「海外旅行でアジアやアフリカに行った際に、現地の人たちが日本人に対して空手のイメージを持っていることを知り、自分もやらねばと思いました。」).

The spirituality of *karatedō* is well connected to another important characteristic of many martial arts: They can be practised until a very old age. As a result, older *karateka* eventually shift their training emphasis from mastering *karatedō* as a movement system to master its spiritual implications, which are expressed by doing *karatedō* properly.

It is important to note that spirituality in *karatedō* is not always driven by friendly concepts like enlightenment and peace. A young Japanese club member and medical student explained the huge gap between his extremely calm behaviour outside the *dōjō* and his relentless, haunting fighting style, citing Nitobe’s [31] famous book about samurai ethics, “Bushido. The Soul of Japan”.

### 3.1.4. Body Motives

At most, this branch inherits typical sport motives like fitness, health, and catharsis.

Concerning health, especially older people stressed the fact that *karatedō* can be practised until an old age and has numerous health benefits.

While several *karateka* experience catharsis through exhausting training sessions, a few reported the need of contact fighting itself to achieve catharsis.

Body control is a motive which is unsurprising in sports and martial arts, but *karateka* have a much more intense perspective on it. More than all other athletes, they are intrigued to reach and surpass their individual body limits with a dedication nearing obsession for which there are two main reasons: On the one hand, this goal is attached to *zen*-Buddhist beliefs which request doing techniques naturally with flawless perfection (see Takuan [32]). On the other hand, excellent body control ensures the safety of the opponent and of oneself as inaccurately executed *karatedō* techniques can be extremely dangerous. Usually, this dual commitment is fuelled by supporting motives like spirituality and self-confidence.

The strength motive marks the connection point of mental and physical motives. Despite being under the radar of most German *karateka*, this motive encompasses the core of Japanese training spirit. Nearly all Japanese participants mentioned the desire to become stronger (強くなるため *tsuyoku naru tame*) through *karatedō* training. For Japanese beginners, it is the most important motive, which even surpasses the impetus of family and friends. Reminded of the extremely low criminal rate in Japan, participants stated that—unlike their German counterparts—the utilisation for self-defence is not the main goal (but for few it is apparently to be safe while visiting other countries). In general, Japanese define strength as combination of physical and mental power. Participants expressed the need of dual strength to assert themselves at school or in the job: They are practising *karatedō* to prepare themselves for the hardships of everyday life in Japan. Therefore, *karatedō* reinforces the resilience to endure the exhausting, sometimes dreadful working conditions in Japan. Accordingly, it is fair to conclude that *karatedō* is pragmatic preparation for work and family life.

Interestingly, one participant stated that Japanese are (still) fighting against the (Western) cliché of “weak” Japanese people, which drives him to get stronger. He was surprised to hear that this was not a common perception outside of Japan.

### 3.1.5. Emotion Motives

The emotion branch includes different feelings *karateka* experience during training and competition.

The thrill motive inherits two subcategories: On the one hand, people like the thrill which they are experiencing in hand to hand combat situations, where loss and victory are a split second away and severe pain has to be expected at any time. On the other hand, people try to overcome their personal anxieties through fighting which may be the living example of “fighting against yourself”.

The order motive covers the joy of discipline, structure and simplicity of the training environment, the training schedule and also the classical white clothing. In relation to typical social environments in Japan, *karatedō* training habitus does not differ very much except for ever increasing stages of seriousness. The military influence, visible in similarities of *kihon* (basics) practice and military drill, has its roots in pre-war Japan, when *karatedō* was also seen as combat preparation drill. It is hard to guess why Germans are so delighted of the order in *karatedō*. Factors may be the *zen* influence and the pseudo-military orientation, which has become almost extinct in modern day Germany.

Surprisingly, joy is equally important for both groups, even though the social pressure to participate (in *karatedō*) seems to be more obvious in Japanese culture (see above). Joy is experienced notably by executing *karatedō* techniques, whether in *kumite* (fighting), *kata* (form), or *kihon* (basics).

Joy is connected to the flow motive. As in other martial arts and sports, *karateka* sometimes experience flow (see Csikszentmihalyi [33]) while practising *karatedō*. German participants reported flow experiences in various situations, mainly *kumite* and *kata*. They describe these moments as beyond consciousness. It is unclear whether Japanese *karatedō* had similar incidents—as nobody reported such—and the quantitative analysis ranks the flow motive at a mere 36th place out of 48 in Japan.

The aesthetics motive is divided into two parts: The joy of viewing and the joy of doing *karatedō* movements. German *karateka* explicitly enjoy the dynamics, timing, speed, beauty and sophistication

of *karatedō* movements. Some emphasise the great feeling they experience while executing *kata* in synchronised large groups. On the other hand, Japanese *karateka* put emphasis on the style (格好よさ *kakkō yosa*), symmetry and the alternation of stillness and motion.

### 3.1.6. Preferences Motives

A couple of motives are strongly tied to individual preferences. The relative exoticism of *karatedō* in Germany frequently activated the curiosity of participants. However, Japanese participants also tended to choose *karatedō* out of curiosity—e.g., as trying something new. In both countries, choices were especially inspired by martial arts movie heroes/heroines. While Japanese people mentioned anime characters, notably Rachel Moore (original: 毛利蘭 *Mōri Ran*) from the “Case Closed” series, and Chinese actor Jackie Chan, Germans admire Hollywood stars like Jean-Claude van Damme, Daniel LaRusso and Bruce Lee.

As in other sports and martial arts, people continued *karatedō* practice because of the strong habit formed through on-going participation. Our results indicate that in Japanese culture, this habit is sometimes protected by parents (or friends) who insist on not giving up training. Additionally, many Japanese have access to *karatedō* through *budō* (ways of martial arts) courses and clubs in school, especially *kendō* and *jūdō*. As they planned to continue *budō*, they switched to *karatedō*.

The following Table 7 shows the twenty most important motives for each group. We have to point out that the German results are based on dedicated mentions in interviews, whereas the Japanese results are founded on quantitative data analysis.

**Table 7.** Ranking of the 20 most important motives, differentiated by each country.

Rank	Japan <sup>1</sup>	Germany <sup>2</sup>
1	Enjoyment of <i>karatedō</i> movements and techniques	To be proud of myself
2	To become stronger	To be able to defend myself
3	To have fun	To stay or to become more fit
4	To improve my <i>karatedō</i>	To have fun
5	Because <i>karatedō</i> fosters my health	To cultivate friendships
6	To improve my body control	To work with people
7	To acquire respectful manners	To learn a lot about <i>karatedō</i> generally
8	To strengthen my self confidence	To strengthen my self confidence
9	To develop a mental attitude for everyday life	My parents wish that I join training
10	Because I like the beauty of <i>karatedō</i> movements	Because I strive for the perfection of technique
11	Because I strive for the perfection of technique	To prove myself that I endure training
12	To learn a lot about <i>karatedō</i> generally	To experience fighting thrill
13	To be able to defend myself	To improve my body control
14	To stay or to become more fit	To let loose and work off
15	Because I like to concentrate myself mentally and physically	To feel community spirit
16	To strive for perfection of my character	Because there is much respect in <i>karatedō</i> training
17	To let loose and work off	To gain higher belt graduations
18	To feel community spirit	To gain the black belt
19	Because I am curious and I want to do something new	To participate in competitions
20	To be proud of myself	Because I like the beauty of <i>karatedō</i> movements

<sup>1</sup> Ranked by popularity. <sup>2</sup> Ranked by mentions.

### 3.2. Influence of Personal Factors

Unfortunately, in accordance to previous WMA studies, influences of personal factors on motive importance remain sketchy. Only a few correlations proved to be highly significant (error probability <0,1%), using a redundancy testing method of Fisher’s exact test, chi-squared test, g-test, and ANOVA. Due to the lack of quantitative data for the German sample, the following results relate to Japanese *karateka*:

- For females, the motive “to fight against my anxieties” is less important
- For older people, the motive “to become stronger” is less important

- With more training experience, the motives “to stay or to become more fit”, “to improve my body control”, “to become stronger” and “to improve my *karatedō*” become less important. The explanation for the first correlation is hard to guess. Maybe staying fit is a mandatory side effect practising *karatedō* and therefore not a goal itself anymore.
- Surprisingly, for highly experienced *karateka* the motives “to have fun” and “enjoyment of *karatedō* movements” are less important. We assume that either fun and joy in *karatedō* are surpassed by more “serious” motives like spirituality (for which there is a very significant (>1%) correlation) or they shifted entirely from practicing to teaching, for which there is a high significance to being more important for high level *karateka*. An overview about personal factors and their correlations to motive importance is shown in supplementary Table S1.

### 3.3. *Karatedō* Fascination

As stated above, “fascination” is difficult to employ as a scientific term as participants used it in different ways. Reduced to the descriptions of a strong motive, which is tied to an essential characteristic of *karatedō*, the results are shown in Table 8.

**Table 8.** Important fascination categories

Japanese <i>Karateka</i> are Fascinated about	German <i>Karateka</i> are Fascinated about
The unity of physical and mental aspects	The unity of physical and mental aspects
the interindividual dynamics in <i>karatedō</i> fights	How it can be utilised by smaller individuals to overcome stronger attackers/opponents (as seen in martial arts movies)
The respectful manners	The precision, variety and history of <i>karatedō</i> techniques
The effective simplicity of <i>karatedō</i> techniques	The ethical and philosophical paradigms
The style and aesthetics	

As we see, there are common features in the fascination categories of German and Japanese *karateka*, which are tied to various motives. It is noteworthy that the main parts of *karatedō* fascination deal with its visual and ethical valuation, rather than fight-related elements.

## 4. Conclusion

### 4.1. *Motives and Motive Structures*

The results demonstrate that many motivation categories of Japanese and German *karateka* share similarities in importance and content, although the specific characteristics of motives can be very different.

Overall, the cultural mindset has general effects on the balance and mechanics of individual and social motives. Several motives and/or their backgrounds are culturally unique and have strong impact on the manner how *karatedō* is practiced, like gaining respectful manners, getting stronger, learning self-defence. In these cases, different social patterns, environments, and histories influence motive characteristics as well as specific cultural interpretations, such as what kind of art, technique, or sport *karatedō* is perceived to be.

### 4.2. *Re-arrangement of Motive Structures*

Naturally, *karateka* do not pursue all the motives presented in the spectrum. The neglect of certain motives can be temporary (because they are unknown or not pursued) or permanent with respect to all the years of training (because they are rejected due to moral principles). Realisations and discontinuations of intentions, as well as initiations of intentions are structured in a parallel manner. For instance, one participant reported: “Well, I am learning new techniques and refresh others ( . . . ) and that wasn’t my intention beforehand, when I just wanted to have fun. But now there is more ambition in it, I want to make progress.” (“Es ist einfach nur, dass ich neue Techniken dazulerne und anderes

wieder aufarbeite (...) und das war vorher gar nicht so mein Ziel, da wollte ich einfach meinen Spaß haben. Aber jetzt ist natürlich mehr der Ehrgeiz dabei, auch wirklich weiterzukommen.“)

Based on the motives “to gain higher belt graduations” and “to be able to defend myself”, the German survey demonstrated that motives could be present in different stages of experience and practice. While the Japanese sub-study confirmed the general mechanics described, the most affected motives were different. Especially the Japanese signature motives “to get stronger” and “to acquire respectful manners” were reported to increase importance over time as well as “to participate/to win in competitions”. Japanese participants outlined the profundity (奥の深さ *oku no fukasa*), referring to the wide range of meanings, forms, and applications of *karatedō*, which they discovered over long-time training experience.

Therefore, the majority of motives are not structured in a strictly linear fashion. Rather, the decisive factors can be attributed to biographical elements influencing the choice, processing period, and processing time of motives. Horizons of meaning are broadened, and structures of meaning are modified. This means that motives of *karatedō* decrease and increase, overlap, interact, replace or strengthen other motives or bunches of motives.

In summary, we conclude that:

- motives can be saturated and replaced by others (for instance the competition motive may be replaced with spiritual motives)
- incidents in “real life” affect motives (for instance to be attacked may boost the self-defence motive)
- new impulses or insights through *karatedō* seminars, *sensei* talks, media (books/movies) may generate new motives or highlight petty motives.

Participant reports illustrate that the mechanics of ascending and descending motives are individually specific. Several participants started their *karatedō* training with the self-defence motive and eventually replaced it with more sophisticated motives, while others developed the opposite way from philosophy to self-defence. There is a trend that performance motives lose importance over time and spiritual motives rise, but this direction is not mandatory at all.

### 4.3. Motive Flexibility

The huge variety of motives which are tracked in *karatedō*—which may even contradict each other—enables a mechanism of constantly re-calibrating and re-arranging individual motive structures. The main factor of long-term *karatedō* biographies is the combination of recognising its profundity with the possibility to shift motive importance. This is a huge difference in comparison with the majority of sports like football, tennis or other Olympic disciplines, where performance goals dominate, tolerating other motives at best. If performance goals are dropped due to age or reduced training time, dropouts are very likely.

Thus, the core of the success of martial arts like *karatedō* is not only the diversity of motives, but also the flexibility to interchange them. According to our results, this flexibility is three-dimensional:

- *Personal dimension*: When a *karateka* states that he is not interested in a certain motive (e.g., competition or self-defence) any more, he can focus on other motives (e.g., perfection of technique, health, spirituality, etc.). Changing the individual training priority does not force the *karateka* to swap the club (this may be restricted due to training priorities set by *sensei*, *karatedō* clubs and styles).
- *Social dimension*: Doing this, he would not obstruct other training participants and their training, since most of the motives are socially accepted (this also may be restricted, especially in clubs dedicated to very competitive or very traditional *karatedō*, or in case the *karateka* is a leading figure/exponent of the club).
- *Temporal dimension*: He can switch between different motives and training emphasis at any time.

Therefore, the system of *karatedō* in its flexibility is similar to a ball, which as an instrument, enables different varieties of meaning and rules of play.

#### 4.4. Outcome Importance and Application

Most martial arts clubs seem to advertise with slogans like “learn how to defend yourself” and “become a better human through the Eastern philosophy”. Transferring the outcomes of this study, advertisements would probably benefit from highlighting the great flexibility of motives in martial arts. The possibility to switch between multiple motive priorities due to motive saturation, self-improvement or (age-related) physical performance reduction does not only facilitate life-time engagement, but also opens up new interesting perspectives and contents on a matter which was deemed to be already fully permeated.

Moreover, martial arts clubs could adjust to serve various motive layers sufficiently by inviting and employing martial arts experts with different specialisations like (mental) health, philosophy, self-defence, anger management, or pedagogics.

#### 4.5. Outlook

We expect to reproduce the described mechanics analysing our Japanese *jūdō* survey. Through comparison with the German *jūdō* survey of Liebl and Happ [21], we assume that we will isolate cultural-specific motive meanings in *jūdō*, too, and to confirm the cultural-specific meanings we found for *karatedō*. Furthermore, we expect to find cross-cultural motive differences of *karateka* and *jūdōka*.

We believe that follow-up research should take American and African *karatedō/jūdō* culture into account. Additionally, it is advisable to expand the international Why Martial Arts? (WMA) research project to further martial arts in a broader range of cultural contexts.

**Supplementary Materials:** The following are available online at <http://www.mdpi.com/2075-4698/8/4/128/s1>, Table S1: Correlations of personal factors and motive importances for the Japanese survey.

**Author Contributions:** Project administration, H.B.; Writing—original draft, M.M.; Writing—review & editing, H.B.

**Funding:** This research was funded by the Japanese Society for the Promotion of Science (JSPS, 日本学術振興会).

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Hannak, R.; Nabitz, U. Psychologische Aspekte im Judo. In *Praxis der Psychologie im Leistungssport*; Gabler, H., Eberspächer, H., Hahn, E., Kern, J., Schilling, G., Eds.; Bartels & Wernitz: Berlin, Germany, 1979; pp. 43–50.
- Gabler, H. *Motive im Sport. Motivationspsychologische Analysen und empirische Studien*; Hofmann: Schorndorf, Germany, 2002.
- Hartl, J.; Faber, U.; Bögle, R. *Taekwon-Do im Westen*; Interviews und Beiträge zum kulturellen Schlagabtausch; Mönchseulen-Verlag: München, Germany, 1989.
- Bitzer-Gavornik, G. Persönlichkeitsveränderungen durch Ausübung von Karate-Do. In *Karate-Do und Gewaltverhalten*; Liebrecht, E., Ed.; Verlag der Universität: Landau, Germany, 1993; Volume 2, pp. 75–94.
- Columbus, P.; Rice, D. Phenomenological meanings of martial arts participation. *J. Sport Behave.* **1998**, *1*, 16–29.
- Breese, H.P. Participation Motivation in ITFNZ Taekwon-Do. A Study of the Central Districts Region. Bachelor’s Thesis, Massey University, Palmerston North, New Zealand, 1998.
- Bogdal, D.R.; Syska, J.R. Wiek, wykształcenie i staz treningowy jako czynniki różnicujące główne motywy uprawiania karate. *Wychowanie fizyczne i sport* **2002**, *3*, 387–395.
- Zaggelidis, G.; Martinidis, K.; Zaggelidis, S. Comparative study of factors—motives in beginning practicing judo and karate. *Phys. Train. Fit. Combat.* **2004**, *5*, 1–8.
- Jones, G.; Mackay, K.; Peters, D. Participation Motivation in Martial Artists in the West Midlands Region of England. *J. Sports Sci. Med.* **2006**, *5*, pp. 28–34.
- Gill, D.L.; Gross, J.B.; Huddleston, S. Participation motivation in youth sports. *Int. J. Sport Psychol.* **1983**, *14*, 1–14.

11. Twemlow, S.W. An analysis of students' reasons for studying martial arts. *Percept. Mot. Skills* **1996**, *83*, 99–103. [[CrossRef](#)] [[PubMed](#)]
12. Rink, C. Motivationale Aspekte im Karate. In *Topics of Social and Behavioral Science in Sport. 6th German-Japanese Symposium 19.-21.09.2005 in Jena*; Teipel, D., Kemper, R., Okade, Y., Eds.; Sportverlag Strauß: Köln, Germany, 2007; pp. 157–163.
13. Ko, Y. Martial Arts Participation: Consumer Motivation. *Int. J. Sports Mark. Spons.* **2010**, *11*, 105–123. [[CrossRef](#)]
14. McDonald, M.A.; Miline, R.G.; Hong, J.B. Motivational factors for evaluating sport spectator and participant markets. *Sport Mark. Q.* **2002**, *11*, 100–113.
15. Patel, S.; Shukla, S.; Pandey, U. Participation Motives and Gender Difference in Taekwondo Players. *Int. J. Health Phys. Educ. Comput. Sci. Sports* **2012**, *6*, 29–32.
16. Meyer, M. *Motive im Shotokan-Karate: Eine qualitative Studie*; Verlag Dr. Kovac: Hamburg, Germany, 2012.
17. Kuhn, P.; Macht, S. Faszination Kampfsport—Erste Ergebnisse einer qualitativen Studie am Beispiel Karate. In *Menschen im Zweikampf—Kampfkunst und Kampfsport in Forschung und Lehre 2013*; Liebl, S., Kuhn, P., Eds.; Feldhaus: Hamburg, Germany, 2014; pp. 137–144.
18. Heckhausen, J.; Heckhausen, H. *Motivation und Handeln*; Springer Medizin Verlag: Heidelberg, Germany, 2006.
19. Gollwitzer, P.M. Goal achievement: The role of intentions. *Eur. Rev. Soc. Psychol.* **1993**, *4*, 141–185. [[CrossRef](#)]
20. Kuhn, P.; Ebner, T.; Mildner, T.; Münzel, S.; Potthoff, D.; Wackerbarth, H.-J. Taiji: Faszination und Motivation. Ergebnisse einer Online-Befragung. *Taijiquan Qigong J.* **2016**, *64*, 28–36.
21. Liebl, S.; Happ, S. Welches Trainingsangebot für wen? Motive im Judo aus der Geschlechterperspektive. In *Von Kämpfern und KämpferInnen—Kampfkunst und Kampfsport aus der Genderperspektive—Kampfkunst und Kampfsport in Forschung und Lehre 2014*; Marquardt, A., Kuhn, P., Eds.; Feldhaus: Hamburg, Germany, 2015; pp. 57–66.
22. Heil, V.; Körner, S.; Staller, M. Motive in der Selbstverteidigung—Eine qualitative und quantitative Studie am Beispiel Krav Maga und Wing Chun. In *Martial Arts and Society. Zur gesellschaftlichen Bedeutung von Kampfkunst, Kampfsport und Selbstverteidigung. 6. Jahrestagung der dvs-Kommission ‚Kampfkunst und Kampfsport‘ vom 6.-8. Oktober 2016 in Köln*; Körner, S., Ista, L., Eds.; Feldhaus: Hamburg, Germany, 2017; pp. 146–159.
23. Wacquant, L. *Body & Soul. Notebooks of an Apprentice Boxer*; Oxford University Press: Oxford, Great Britain, 2006.
24. Harzing, A.-W. Response Styles in Cross-national Survey Research: A 26-country Study. *Int. J. Cross Cult. Manag.* **2006**, *6*, 243–266. [[CrossRef](#)]
25. Takahashi, K.; Ohara, N.; Antonucci, T.C.; Akiyama, H. Commonalities and differences in close relationships among the Americans and Japanese: A comparison by the individualism/collectivism concept. *Int. J. Behav. Dev.* **2002**, *26*, 435–465. [[CrossRef](#)]
26. Mayring, P. *Qualitative Inhaltsanalyse: Grundlagen und Techniken*; Beltz: Weinheim, Germany, 2010.
27. Beets, M.W.; Cardinal, B.C.; Alderman, B.L. Parental Social Support and the Physical Activity-Related Behaviors of Youth: A Review. *Health Educ. Behav.* **2010**, *37*, 621–644. [[CrossRef](#)] [[PubMed](#)]
28. Bittmann, H. *Geschichte und Lehre des Karatedō*; Verlag Heiko Bittmann: Ludwigsburg, Germany, 2017.
29. Maliszewski, M. *Spiritual Dimensions of the Martial Arts*; Charles E. Tuttle Company: Tokyo, Japan, 1996.
30. Hamaguchi, Y. Innovation in martial arts. In *Japan, Sport and Society. Tradition and change in a globalizing world*; Maguire, J., Nakayama, M., Eds.; Routledge: New York, NY, USA, 2006; pp. 7–18.
31. Nitobe, I. *Bushido: The Soul of Japan*; Kodansha: Tokyo, Japan, 2002.
32. Takuan, S. *The Unfettered Mind: Writings from a Zen Master to a Master Swordsman*; Shambhala: Boulder, Colorado, 2010.
33. Csikszentmihalyi, M. *Flow: The Psychology of Optimal Experience*; Harper and Row: New York, NY, USA, 1990.

