Psychological dimension in the formation process of the Spanish Olympic wrestler

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Abstract: The aim of this study was to know how psychological work has been carried out in sports training process of Spanish Olympic wrestlers. From a qualitative perspective, the instrument used was a semi-structured interview, which was applied to 21 Olympic wrestlers. The results show that athletes attach great importance to psychological factors in their discipline, and that they are essential at the high competition stage to achieve excellence. They consider motivation and self-confidence as the most significant psychological variables in sports performance, and predictors of wrestling success. Also necessary aspects such as a capacity for self-sacrifice, constancy, discipline and perseverance are valued. They estimate that psychological aspects have not been properly trained, and only in recent times has the figure of the sports psychologist been incorporated into their training.

Keywords: Wrestling; Sports psychology; High performance; Sports training; Psychological training.

Introduction

Combat sports are followed and practiced by millions of fans around the world (Ko, Kim & Valacich, 2010), and they represent 25% of the total number of medals gained at the Olympic Games. Of these, Olympic Wrestling is one of the main disciplines, as it has been practiced since the Ancient Olympic Games. Wrestling has a total of 72 medals, being the most medal-winning combat sport in the Olympic program.

Wrestling is composed of Female Wrestling, Greco-Roman and Freestyle Wrestling, and is based on a weight category system that tries to balance the fitness potential between competitors, and thus increase the percentage of performance that depends on the technical-tactical and psychological skills that each wrestler demonstrates in the combat area (García-Pallarés, López-Gullón, Muriel, Díaz & Izquierdo, 2011).

As in many sports, the initiation of the sports development of the athlete depends on many aspects, and not only on genetics or the dedication of the athlete to training (Lorenzo & Calleja, 2010), sports performance is shown as an integrated process influenced by environmental, technical, tactical, physical and psychological aspects (Robles, Robles, Giménez & Abad, 2016). In Olympic wrestling, physical and technical-tactical factors have been the object of analysis and research, but the contributions that have investigated the relevant role of psychological factors in the training and performance of the wrestler have been much more limited, and most of them are distant in time (Berenguí, García de los Fayos, López-Gullón & Cuevas, 2015).

Among the studies that have attempted to verify which are the most important psychological variables in wrestling, we have tried to delimit which ones lead to greater performance. Gould, Eklund and Jackson (1992a, 1992b, 1993) conducted different evaluations with the US Olympic team members. The wrestlers reported which were the optimal skills and strategies for competition, resulting in four categories: a) mind control strategies (blocking distractions, decision making, positive thinking, and coping thoughts), b) task focus strategies (close concentration, immediate focus, and goal concentration), c) behavior-based strategies (changing or controlling the environment, following routines), and d) emotional control strategies (arousal and visualization). They also pointed out that their implementation was not limited to particular strategies, but rather to their combination in a complex dynamic process.

Many studies have also been conducted to compare wrestlers at higher and lower levels of performance. Rushall and Garvic (1977) found a number of characteristics that defined higher level wrestlers, such as faster learning, better tackling, concentration on training and competition, and perseverance in effort. Gould, Weiss and Weinberg (1981) also point out optimal levels of concentration, personal safety and attentional focus, as the main differentiators.
Highlen and Bennett (1983) found less competitive anxiety, greater optimism and use of positive self-instruction, comparing elite and non-elite athletes.

The psychological variable that has probably displayed the greatest effect in this field is self-confidence. It has sometimes been confirmed as the most decisive variable in the differences between successful and less successful wrestlers (Gould et al., 1981, 1992a; Highlen & Bennett, 1979). Russell and Cox (2002) also support a moderating effect of self-confidence on cognitive and somatic anxiety, while detecting the discriminatory ability of self-confidence to predict outcome (victory or defeat) in wrestlers. Likewise, Berengüí et al. (2012), Berengüí, García de Los Fayos et al. (2015) and López-Gullón et al. (2011, 2012) report statistically significant differences in self-confidence in elite wrestlers compared to amateur wrestlers.

Other variables that have demonstrated differences between wrestlers are stronger attitude control in elite male wrestlers (López-Gullón et al., 2011, 2012), concentration (Highlen & Bennett, 1979, 1983), and greater intrinsic motivation of elite wrestlers (Grushko et al., 2016). It is also stated that mental toughness is related positively to age and percentage of winning times, but not to sport experience or practice time, and that there are differences between young beginners and experienced seniors, as well as between wrestlers with winning and losing records (Drees & Mack, 2012). In addition, top performers report less anxiety both before and during competition (Highlen & Bennett, 1979, 1983), a state of anxiety before their worst bouts (Gould et al., 1992a), and wrestlers’ experience and personal characteristics are important in determining a low or high state of anxiety (Serhat & Yildiz, 2013).

Furthermore, in young wrestlers a greater focus of internal control is associated with success in competition (Rutkowska & Gierczuk, 2014). Furthermore, when it involves stress in competition, the more experienced and engaged elite wrestlers show a greater use of more adaptive approaches (problem- and emotion-focused strategies) (Kristiansen, Roberts & Abrahamsen, 2008). At the same time, gender differences have been found in certain psychological factors, such as a higher motivation of female wrestlers than male wrestlers (Berengüí et al., 2012; Berengüí, García de Los Fayos et al., 2015), a lower level of intrapersonal emotional intelligence in women, more task-oriented coping with stress in men, and a greater style of avoidance in female wrestlers (Rutkowska & Gierczuk, 2017).

In addition, some studies have revealed a series of possible psychopathological problems that affect the adequate psychological functioning of the athlete (Brewer, 2009). Depression, disadaptive levels of anxiety and the harmful effects of stress (Mellalieu, Hanton & Fletcher, 2009), or syndromes such as burnout (Berengüí, García de Los Fayos, Ortín, de la Vega & López-Gullón, 2013; Berengüí, Ortín, García de Los Fayos, López-Gullón & Pinto, 2015), may lead to negative consequences for the wrestler’s well-being and to the decrease of his performance.

Despite these findings, there is currently a very limited corpus of information on the role of the psychological variables that make up the training processes from the grassroots up to the elite in the Olympic Wrestling, and which can condition success in this discipline. Therefore, the objective of this research is to analyze at a qualitative level the magnitude and scope of the different components of sports training within the psychological preparation, in the process of formation of the Spanish Olympic wrestlers.

**Method**

**Participants**

The number of Spanish Olympic wrestlers total 36 throughout all the editions of the Olympic Games, 26 of them still alive. Table 1 shows the distribution of the athletes according to each edition of the Olympic Games and the discipline in which they participated (Greco-Roman, Female Wrestling and Freestyle Wrestling). The total sample of the study was 21 wrestlers, 19 men and two women. For different reasons, it was impossible to contact the remaining five wrestlers.

| Olympic Game       | Female Wrestling | Greco-Roman | Freestyle Wrestling | Total |
|--------------------|------------------|-------------|---------------------|-------|
| Rome 1960          | -                | 5           | -                   | 5     |
| Tokyo 1964         | -                | 1           | -                   | 1     |
| Moscow 1980        | -                | 1           | -                   | 1     |
| Los Ángeles 1984   | -                | -           | 3                   | 3     |
| Seúl 1988          | -                | 3           | 6                   | 9     |
| Barcelona 1992     | -                | 4           | 6                   | 10    |
| Athens 2004 (*)     | -                | 2           | -                   | 2     |
| Pekín 2008         | 2                | -           | 1                   | 3     |
| London 2012        | 1                | -           | -                   | 1     |
| Río 2016           | -                | 1           | -                   | 1     |
| Total              | 3                | 16          | 17                  | 36    |

*Note: Beginning of the Women's Olympic Wrestling.*
Instrument

Based on the qualitative approach of the study, the instrument used was a semi-structured interview for the collection of qualitative data from the wrestlers, with the aim of minimizing the effects of the interviewer by requesting the subjects to ask the same questions, in the same words and in the same order of presentation. The instrument is based on the interview designed and validated in judo by Robles et al. (2016), consisting of questions distributed in six dimensions to study the process of formation of elite judokas (sport context, social context, technical-tactical, physical condition, formation process and psychological dimension). For the current research, the questions constituting the psychological dimension were used. For its adaptation, four specialists in Sports Science, Psychology and Olympic Wrestling analyzed the content of the interview. Only one terminology adaptation was proposed, regarding the change of the term judoka for wrestler, existing agreement in the content of the questions. It was also recommended and agreed to group the questions in three main categories: i) importance of psychological factors (what value does the wrestler give to psychology in his sport, performance, and characteristics to reach the elite); ii) main psychological factors in competition (what are the most important psychological variables and aspects, with special attention to the role of stress, motivation, self-confidence and emotional control); and iii) psychological training (what strategies or techniques does the wrestler use to train, and who is responsible for working on the psychological dimension of the athlete).

Procedure and data analysis

Firstly, the search for Olympic wrestlers was carried out through the "Sportsmen Search Tool" of the Spanish Olympic Committee (COE; www.coe.es), verifying the number of Spanish wrestlers who have been Olympians over the history of the Olympic Games. Once the list of Olympic wrestlers was obtained, the heads of the Spanish Federation of Olympic Wrestling and Associated Sports (FELODA) were contacted in order to locate these sportsmen through the databases of the federation. Once the athletes were located, and with their consent, the interviews were carried out. Eleven interviews were carried out in different spaces that were suitably conditioned, so that each subject could perform the interview without interruptions and in the most comfortable way possible. The other ten subjects were interviewed by telephone. All the subjects had an in-depth interview without a time factor.

The data obtained from the interview were organized and manipulated, as proposed by Hernández-Sampieri, Fernández-Collado and Baptista (2014), recording each interview with two different recorders to avoid possible failures or loss of information. A WORK microphone with ATUBE sound recording software was used to increase the quality and security of the recording, as well as a digital recorder. Passing the transcript to a word processor later. Once the transcription of the in-depth interviews was made in a digital format, we analyzed it with the help of the ATLAS.ti software. Some authors express the advantages of using ATLAS.ti as a software-assisted qualitative analysis program, allowing the researcher to associate codes to be meaningfully analyzed with formal and statistical approaches (Hwang, 2007; Lewis, 2004). Once the coding of the interviews was completed, the researchers proceeded to their analysis.

Results

Table 2 shows the number of contributions (units of analysis) made by the wrestlers in each of the three categories. A total of 469 units of analysis were recorded.

| Categories                                  | Minimum | Maximum | M    | D.T. | Total |
|---------------------------------------------|---------|---------|------|------|-------|
| Importance of psychological factors         | 3       | 10      | 6.71 | 2.39 | 141   |
| Main psychological factors in competition   | 8       | 22      | 12.76| 3.33 | 268   |
| Psychological training                      | 1       | 6       | 2.86 | 1.35 | 60    |

The hermeneutic graph of the psychological dimension (Figure 1) shows the contributions of each participant. The extension points indicate greater contributions from participants 18 (P18) with 38 units of analysis, P19 with 29 units, P14 with 28 units. Participants 9 with 14 units of analysis, and P6 and P13 with 17 are the participants with the least contribution to the study.

![Figure 1. Hermeneutics of the psychological dimension.](image)

The qualitative analysis of the categories is presented below:

Importance of psychological factors

On the importance of psychological factors in wrestling and...
performance, 100 units of analysis were recorded. Eighty-five per cent of those interviewed considered them to be of great importance on a general level, and a priority in high performance. The remaining 15% believe that they are not fundamental. They considered the psychological dimension, in many cases, to be highly responsible for high performance in wrestling, over and above physical or technical aspects. Some of their quotes are:

"High competition today is more or less physical, and technically it is very even. The part that we might say drives you to one side or the other is the psychological aspect" (P1).

"I believe that, like all sports in high competition, the psychological factor is important. You can be very good on a technical and physical level, but if the competition comes and you get hung up on it, it's no good." (P6).

In the context of performance in their sport, most wrestlers said that managing stress and emotions was key and of critical importance, especially at the high level of competition. The fear of defeat and the insecurity that can appear during the competition is discussed, and that influences other psychological processes, as well as the importance of self-confidence and how this on many occasions decreases, because they consider superior wrestlers from other countries. Some examples are the bellow:

"The ability I've always had is one of adaptation. That I was doing well, perfect, that I was not doing well, well also" (P7).

"But I really think that the best wrestler is the one who can handle the pressure, because you go out there and play everything in six minutes, and in the end the fear that has appeared is the one you have to focus on" (P13).

"You're never sure. You're always unsure if you can handle this one. Half confident, you don't know exactly how the combat is going to turn out, you try to visualize it, but then the combat, what you have visualized, you really get into the combat and nothing comes out of what you have thought. Rarely does what you've visualized come out" (P21).

He also asked about the psychological aspects that wrestlers considered to have contributed to reaching the elite and high competition. Some participants point to more than one. The most significant aspects cited are motivation (eight wrestlers), ability for sacrifice (seven wrestlers), self-confidence or perseverance (six wrestlers), constancy or resistance to pain (five wrestlers) and discipline (four wrestlers).

"The desire that made me learn and leave Spain, a few years in Bulgaria, in Russia. In the end there is a background in training, in competitions, which is what makes you grow in the sport. Full motivation" (P2).

"I believe that the ability to sacrifice, to endure, the tenacity, the constancy. More than psychological abilities, I believe they are values. Psychologically, I've been fragile sometimes, even though I tried to appear to be the opposite" (P12).

"The patience I've had. He thinks I got the medal when I was 35. I think you have to know how to wait for the results" (P17).

"Motivation is the base line, perseverance is growth, and strength of spirit is sacrifice and daily work. All this consolidates your appearance" (P20).

Main psychological factors in competition

On the main psychological aspects in competition, at an overall level, the wrestlers contributed 32 units of analysis. On a general level, they considered that the main psychological characteristics that an Olympic wrestler should have were, mainly, the capacity of sacrifice, perseverance, and task motivation in the whole process, with an increase of it in competition and that generates a greater self-confidence. They also believe that positive thought processes were important.

"Improvement spirit. Constancy, knowing how to suffer or endure. An important aspect of our sport is to be hard to know how to suffer in order to reach the highest level" (P3).

"Self-esteem, to know how to control yourself, to be able to mentalize yourself to give a weight, a discipline. Everything is well regulated and well carried out, and this leads me to go out to the championships with a quite favourable serenity" (P11).

"Self-confidence and perseverance, although I'm a bit pessimistic. And also systematic, I always keep an eye on the clock, I like to arrive early to see what happens" (P6).

"Perseverance, motivation" (P21).

Motivation was the psychological variable most commented on by the interviewees, with 77 units of analysis. Ninety percent of the participants estimated that motivation is responsible for guidance to success, intrinsic motivation to overcome daily trainings (two to three times a day), as a catalyst for the hard and painful nature of their discipline, and for demonstrating to their environment the meaning of their sports practice. They considered that the most important reason for the competition was to see themselves as winners.

"The motivation was driving me more and I wanted more. You had the motivation that you could go to a European Championship. The wrestling gave me the culture I have, I thank my sport for everything I have" (P1).

"The motivation is that you believe in the work that you're doing. You do a daily work... competitions are won in training, let's say that's where you're starting to create the motivational and psychological bases to face the competition" (P2).

"You must have an intrinsic motivation that leads you to practice the activity, if that motivation doesn't exist... I knew sportsmen who were motivated by the sports prize, and if they didn't get paid for their activity they would stop, they weren't interested" (P8).

"Motivated mainly by the knowledge that you have, even
though they weren’t there, family... you could show something to make them proud, of what you’re doing because you had come out of there, and they could see that there were some results. For the fact that you represented your country, that you were mentally prepared to represent the national team, you were really responsible” (P11).

"If I didn’t have enough motivation, I’m sure I wouldn’t be competing” (P20).

When asked about their self-confidence and its influence on the achievement of results, the Olympic wrestlers provide 63 units of analysis. Up to 80% of athletes indicated that self-confidence was very high throughout the high competition process. One point on which many wrestlers agree is that it would increase their confidence with more preparation in other countries, so that they could better perform with top-level wrestlers.

"You have self-confidence and you know that in the end we are two of the same category, although we were aware that we were not at the same technical level as other opponents from other countries who had many years of experience behind them” (P4).

"They influence the emotions. But the illusion and the desire, they do influence you. By trial and error and by winning and earning self-confidence” (P15).

"No one trusts you like you trust yourself. Self-confidence must be very high, it’s clear” (P21).

Regarding the emotional state before, during and after the national, international or qualifying championships, a large number of fighters had feelings of high nervousness or uncertainty in competition, and worry and anxiety about giving weight, which after the first fight used to disappear. The correct flow of moods is a key factor in the outcome of the combat.

"Nerves are always present... you countered it with yourself by stating that you are ready, that you are well, that you are holding on, that you have trained well, that there have been no injuries. At first I was excited about being a champion and I worked for it, then there were incentives. When you get to international level you see that what you got to a level, now is another level and it is a new beginning, a new beginning that is quite hard because we at that time were not at the technical-tactical level of other countries like Bulgaria.” (P5).

Concerning stress, it was investigated how stress could affect wrestlers and if it is channeled in any way. For most, stress occurs mainly in international championships, although the toughness and discipline of their own sport was also a source of stress. However, no specific management strategies were described, and it is only mentioned that the wrestler’s experience plays a basic role in managing this process. They proposed that in order to reduce this stress, more competitions should be held outside, and at different levels, which would also contribute to increasing self-confidence.

"I knew that there were people who were not called to endure that pressure in competition, not even the toughness in training” (P2).

"I was very nervous, very thoughtful about the combats, about the opponents, how I could counteract their technical and tactical moves, how I could apply mine. I’d go to bed and dream about the combats. All that caused physical and psychological stress” (P7).

"When you are more experienced you change a lot and you don’t use so much energy, when you are younger it is the other way around because of the stress. Sometimes the wait for the competition was long, you wanted to compete. It’s like a commitment, it’s a responsibility” (P10).

Psychological training

The category of psychological training analyzed what techniques and strategies are used to work psychologically. It is deepened with Olympic wrestlers who had worked with psychologists, at what stage, how long, their influence and applicability of the work. They said that the work on the psychological level was not adequate in the past. They emphasized the importance of working together with the coach and the psychologist on a day-to-day base, because it establishes a common work program with the priority objective of facing competitions with a greater guarantee of success.

"A person who leads you and drives your aggressiveness to victory, to be able, at a given moment, where everything is against you, to be able to get back up... Maybe in a combat, how would I go back up? Well, through physical effort and great stress, a great psychological strain, this strain would not have existed if I had had a psychologist who had helped me” (P2).

"I think that at times they have helped me above all to control my anxiety, to make a philosophical analysis, to give importance to the most important things, to know how to value things, but I have not managed to make a plan and a work” (P3).

"I always learn from my defeats. I study my failures with him. This gives me feedback when very similar situations have occurred” (P13).

Regarding the person responsible for the psychological preparation, 13 wrestlers indicated that their coach was responsible for the psychological aspects, while eight wrestlers had worked with sports psychologists. They state that until the 1992 Barcelona Olympic Games, the lack of a multidisciplinary team was a major problem, and therefore the coach was a mentor who guided, advised and trained them with his experience. Since Sydney 2000, another stage has been opened in which wrestlers progressively integrate psychology into their preparation, and they understand the professionalism of the psychologist as a key element in their training at a cognitive, clinical and social level, and they ask for specialists who know their sport.
"Then there’s the work when you get to the top, when you have a psychologist. We’ve had psychologists for the last three Olympic cycles... I’ve learned a lot" (P9).

"It’s essential. One of the preparations that did not exist in my time was psychological preparation, and it is very important. In my time, the competitor would suffer the emptiness that came after the competition by himself, the stress that the competition had caused. And with psychological trainers today it is much better, I wish I had had one" (P7).

"When we went out that was one of the handicaps, not the teams. We had the coach, but there was no psychologist next door, no physiotherapist, no one to help you" (P12).

"I had a psychologist, who helped me a lot. Because when an athlete is only involved in sport, sometimes he feels that you get into a wheel and sometimes it’s a little hard, and you have to share your thoughts. I started going to the psychologist because I thought I was having a mental breakdown when I was competing" (P18).

Discussion

Psychological aspects were a decisive factor for the Olympic wrestler in terms of sports performance, during his formation, and in order to make the move to the elite with his national team. In high competition, athletes spent long periods of training, stays in other countries and competitions, putting into practice the intrinsic hardness of wrestling. Psychological factors were considered to be fundamental in the combat throughout the overall process (Rushall, 2006).

The analysis of the psychological skills that determine the functionality and performance of athletes was a traditional area within sports psychology (Berengüi & López-Walle, 2018; Cox, 2009; García de Los Fayos, Olmedilla & Jara, 2006; Weinberg & Gould, 2010; Williams, 2009), and its analysis was very limited within the specialty of Olympic wrestling (López-Gullón et al., 2011).

In the current research, the main findings included the fact that the large majority of wrestlers claimed that the psychological dimension is a key factor in Olympic Wrestling and essential in high performance. According to their opinion, the main psychological aspects that have helped them in their performance were very varied highlighting the capacity for sacrifice, perseverance, constancy in the work, task motivation, discipline, resistance to pain and more personal as self-confidence, self-control, concentration, commitment, domain, mental toughness, patience, and courage. In this sense, numerous studies supported these factors (Berengüi et al., 2012, Berengüi, García de los Fayos, et al., 2015; Gould et al., 1981, 1992a, 1992b, 1993; Highlen & Bennett, 1983; López-Gullón et al., 2011, 2012).

Among all elements examined, by the number of contributions made and the importance given to them, the wrestlers highlighted two main psychological variables: motivation and self-confidence.

Motivation was considered a key variable in sport. It involved personality factors, social variables and cognitions, implicated in the accomplishment of tasks in which the individual was evaluated, enters into competition with others or tries to reach a certain level of mastery (Roberts & Treasure, 2012). In the study, it was the psychological variable most commented on by the interviewees, and up to 90% state that motivation was responsible for their orientation to success, for keeping their focus on everyday training, and was essential to endure the suffering in the combat. In addition, they established its close relationship with self-confidence. Despite its clear impact on the athlete’s performance, it was a hardly studied variable in wrestling. Only in certain cases had wrestlers shown a predominance of intrinsic motivation over other non-self-determined types of motivation (Domuschieva-Rogleva, 2015), higher motivational levels of women than men (Berengüi et al., 2012), and intrinsic motivation in female wrestlers (Domuschieva-Rogleva, 2015), and in US Olympic wrestlers a low use of motivational strategies as part of preparation for their best performance was cited (Gould et al., 1992a).

Concerning self-confidence, the significant relationship between self-confidence and high-level sports performance was one of the strongest conclusions in sports psychology research (Feltz, 2007). It can be assumed as the degree of certainty regarding one’s own abilities in achieving success in a given task, and that it was determined by experience, physiological and emotional states (Guillén & Martínez-Alvarado, 2018). In this study, wrestlers did indeed attach great importance to it, and 80% of them point out that self-confidence was basic and must be very high in elite competition. Self-confidence was precisely the psychological variable that had shown the most results in its relationship with fighting performance, with significant differences between successful or elite fighters and lesser performers or amateurs (Berengüi et al., 2012; Berengüi, García de los Fayos et al., 2015; Gould et al., 1981, 1992a; Highlen and Bennett, 1979; López-Gullón et al., 2011, 2012), and its role as a moderator of cognitive and somatic anxiety (Russell and Cox, 2002).

Other psychological aspects highlighted during the interviews are the emotional processes that appear in competition, mainly anxiety, fear and different moods. Emotions and moods undoubtedly played a determining role in any sport. In wrestling, as in other combat disciplines, to the stress generated by the competition itself, previous elements such as the weighing and the draw were added, which could produce in the wrestler anxiety, tension, anger or fatigue, among others (Martínez-Abellán et al., 2015), and therefore the correct channelling of emotions and moods was a determining factor in the preparation and the result of the combat. With respect to stress, wrestlers raised the stress generated by their sport and having experienced stress during competitions. However, no coping strategies used in tournaments are cited. The debilitating effect of stress on performance had been observed for decades (Mellalieu et al., 2009), as has the use of multiple well-learned or automated
coping strategies by top performers (Gould et al., 1993).

Psychological training had been limited on a broad level, despite the importance of mental training programs in the Olympic Wrestling (Rushall, 2006). The wrestlers attached great importance to the work of their coaches and psychologists in order to face the competitions with the greatest possible guarantees of success, but there were hardly any multidisciplinary teams that integrated specialists in sports psychology. The coach was the figure that the wrestlers claimed the psychologist’s job. Over the years, and in recent times, there had been a progressive incorporation of specialists, considering the psychologist a basic element in their preparation.

A remarkable aspect of the present study had been the representativeness of the sample, since 21 wrestlers have been interviewed, more than half of the Spanish Olympic wrestlers, and taking into account the enormous range of years that have passed since the first Spanish presence in an Olympic Games in wrestling. But at the same time, we must point out the existing limitations. The main one was the retrospective nature of the research, which makes it impossible to control possible influences during the process and forgetting relevant aspects. In relation to the previous, we must also mention that the period of participation of the Spanish wrestlers went from the Olympic Games of Rome 1960 to Rio de Janeiro 2016, which had made the analysis of the variables difficult in its precise context, since the nature and competition in the Olympic Wrestling had been changing and developing over the years. This implies that each athlete interviewed has competed under different times, and therefore with very different sports and social conditions.

Finally, it should be emphasized that there is currently little information on the psychological variables that might be at the base of success in the wrestling (López-Gullón et al., 2011). We should note that some studies (Nagle, Morgan, Hellickson, Sersfass, & Alexander, 1975; Silva, Shultz, Haslam, & Murray, 1981) found that physiological variables explained between 45%-48% of fighting performance, and that adding psychological variables explained 79%-85%. Hence the importance of continuing to deepen their analysis and psychological training in sport and wrestling.

Conclusions

Most Spanish Olympic wrestlers claim that psychological factors are of great importance, and responsible for high performance.

Motivation and self-confidence are considered the most important psychological variables, being assumed as conditional and important in sports performance, and predictors of success in Olympic wrestling. In addition, other skills have played an important role in the success and maintenance of their sports careers, such as the ability for sacrifice, perseverance, discipline and perseverance. Emotions, negative moods and stress have a basic effect on performance. However, effective strategies to deal with them adequately are not available.

Olympic wrestlers feel that the psychological aspects of their sport have not been adequately addressed, furthermore they consider it essential address this issue in order to achieve excellence in decisive championships. It is only in recent years that sports psychologists have been incorporated into wrestlers’ teams and their regular training.

References

Berengüí, R., García de Los Fayos, E. J., Ortíz, F. J., de la Vega, R., & López-Gullón, J. M. (2013). Optimism and burnout in competitive sport. *Psychology*, 4, 13-18. https://doi.org/10.4256/psych.2013.49A2003

Berengüí, R., García de Los Fayos, E. J., López-Gullón, J. M., & Cuevas, E. (2015). Psychological skills and burnout in sports performance - An analysis of olympic wrestling. *Archives of Basic Science of Martial Arts and Extreme Sports*, 11, 81-87.

Berengüí, R., García-Pallarés, J., López-Gullón, J. M., García, E. J., Cuevas, E., & Martínez-Abellán, A. (2012). Habilidades psicológicas fundamentales en las Luchas Olímpicas [Fundamental psychological skills in Olympic Fight]. *Cuadernos de Psicología del Deporte*, 12(29), 19-22.

Berengüí, R., & López-Walle, J. M. (2018). *Introducción a la Psicología del Deporte: [Introduction to the psychology of sport]*. Madrid: EOS Editorial.

Berengüí, R., Ortín, F. J., García de Los Fayos, E. J., López-Gullón, J. M., & Pinto, A. (2015). Otimismo, burnout e estados de humor em desportos de competição. *Análise Psicológica*, 33(2), 221-233. https://doi.org/10.14417/ap.1019

Brewer, B. W. (2009). Clinical issues. In B. W. Brewer (Ed.), *Sport Psychology: Handbook of Sports Medicine and Science* (pp. 87-96). Chichester, UK: John Wiley & Sons.

Cox, R. H. (2009). *Psicología del deporte: Conceptos y sus aplicaciones [Sports psychology: Concepts and their applications]*. Madrid: Médica Panamericana.

Domaschieva-Rogleva, G. (2015). Determinant of sport motivation with wrestling athletes. *Research in Kinезiology*, 43(1), 94-98.

Drees, M. J., & Mack, M. G. (2012). An examination of mental toughness over the course of a competitive season. *Journal of Sport Behavior*, 35(4), 377-386.

Feltz, D. L. (2007). Self-confidence and sports performance. In D. Smith D & M. Bar-Eli (Eds), *Essential readings in sport and exercise psychology* (pp. 278-294). Champaign: Human Kinetics.

Garcés de Los Fayos, E. J., Olmedilla, A. y Jara, P. (2006). *Psicología y deporte [Psychology and sport]*. Murcia: Diego Marín.

García-Pallarés, J., López-Gullón, J. M., Muriel, X., Díaz, A., & Izquierdo, M. (2011). Physical fitness factors to predict male Olympic wrestling performance. *European Journal of Applied Physiology*, 111(8), 1747-1758. https://doi.org/10.1007/s00421-010-1809-8

Gould, D., Eklund, R. C., & Jackson, S. A. (1992a). 1988 U.S. Olympic wrestling excellence: I. Mental preparation, precompetitive cognition, and affect. *The Sport Psychologist*, 6(4), 358-382. https://doi.org/10.1123/esp.6.4.358

Gould, D., Eklund, R. C., & Jackson, S. A. (1992b). 1988 U.S. Olympic wrestling excellence: II. Toughts and affect occurring during competition. *The Sport Psychologist*, 6(4), 383-402. https://doi.org/10.1123/esp.6.4.383

Gould, D., Eklund, R. C., & Jackson, S. A. (1993). Coping strategies used by U.S. Olympic wrestlers. *Research Quarterly for Exercise and Sport*, 64(1), 83-
