

Psychological Training in Sailing: Performance Improvement for the Olympic Classification Phase

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Abstract This paper presents a case study, with the objective of demonstrating the psychological training of a 23 year-old sailing athlete, during the athletic preparation of the classification phase for the 2012 Olympic Games in London. The psychological training programme that was implemented demonstrates efficacy in the improvement of the athlete's psychological skills; the psychological programme was assessed by the athlete as very positive, both from the viewpoint of satisfaction as well as efficacy; case studies seem to be ideal for the analysis of the relationships between psychological training programmes and the athletic performance of the athlete.

Keywords Case Study, Psychological Training, Sailing, Olympic Games

1. Introduction

Psychological training is one more facet of sport training that, little by little, has been included in the work of many athletes and athletic teams. The Olympic Games are undoubtedly a special competition for those who achieve the right to participate. Although the athletes have years of experience from national and international competitions, the Olympic context is quite different and has important implications regarding psychological adaptation [1-4]. The international literature reports on the type of athletes' demands as well as psychologists interventions regarding the Olympic participation [5-9]. They also concluded that the psychological skills identified as related to good performance were different than the skills provided to those who performed poorly [10-12].

Carrying out a psychological intervention in any athletic discipline requires an exhaustive study of the characteristics of the sport first, especially if it involves a discipline with which the professional is not very familiar. The sport of

sailing is complex, and it requires a learning process that involves a wide repertoire of skills. Traditionally, the best learning method was considered to be practice and sailing. This is indisputable, but there are many conditioning factors that interfere and slow the learning process [13]. Regarding sailing, the scientific and applied literature has primarily emphasised cognitive processes such as memorisation and the understanding of nautical charts, navigation terminology, or concentration on technical tasks [14] and decision making [15]. There is even an attempt to establish relationships between the psychological profile and its importance in sailing performance [16].

Sailing has been an Olympic sport since the Paris Games of 1900, and in the London Games of 2012, the Laser Radial single-handed discipline (women's individual) became an Olympic event. For the individual classes, the competitions last six days, the points from the classification are made according to the positions that athletes reach in the various regattas, such that the first ranked gets one point, the second gets two points, and it continues successively as such. In the end, the winner is the one with the fewest points. The first three days, the classification phases are contended and there are two daily regattas. The fourth and fifth days constitute the final phase in which the participants are divided into two fleets. The gold fleet consists of the highest positioned (50%) for the classification and the silver fleet consists of the other 50%. After the fifth day, there are 10 trials in which the participants can discard their worst position. On the last day of competition, the 10 best compete in the "medal regatta" for which all scores are kept and are worth twice as many points.

Taking into consideration the Laser Radial class, we can consider that the most important psychological requirements are: concentration (75-minute regattas in which there are many external factors, such as wind, waves, other boats, route, etc., that have to be analysed constantly); motivation (a lot of time spent away from home, training and competitions at various sites around the world, sometimes

very far from home); stress management (situations of sailboat against sailboat in which nervousness has to be controlled and you must keep a cool head to make good decisions); the capacity to suffer (sailing is a nautical sport that depends on nature, has occasional adverse meteorological conditions, and requires continued effort for 6 days); and level of activation (since it depends on natural factors, there is a lot of waiting time, where you have to keep analysing data that may be valuable, but there has to be a level of activation that does not "tire the mind" for the moment in which the regatta begins).

The emphasis that the researchers in sport psychology have given to the idealness of the utilisation of case study designs [17] should be highlighted, even with innovative design proposals for this type of study [18], and especially to analyse the relationship between psychological training and athletic performances in elite athletes [19], which is an environment in which there are few studies that utilise case study research designs. On the other hand, the utilisation of research studies that are case studies can improve the services of the professionals of sport psychology, integrating in its analysis the contributions of coaches and family. As Harwood and Steptoe [20] state, this type of study facilitates, demonstrating significant improvements in their behavioral, cognitive, and affective repertoire.

This study presents a case study, utilising a research methodology that, as Barker et al. [21] indicate, has begun to be highly valued, since it can provide a reference framework for researchers and professionals, especially in the area of applied sport psychology. Thus, the objective of this study is to describe the psychological training plan utilised for the athletic preparation of the classification phase for the 2012 London Olympics. Further, there was an attempt to assess the efficacy of the psychological programme and analyse the perception of the athlete's psychological improvement and the athlete's assessment of the programme that was implemented.

2. Method

Participant

The intervention programme was carried out with a 23 year-old sailor who had practised sailing since 9 years of age. She participated in the various European championships. Later, she went to Laser Radial, since this was included as an Olympic event, and she was part of the pre-Olympic team from 2005 to 2012. Also she participated in World Championships.

Instruments

Cuestionario de Características Psicológicas para el Rendimiento Deportivo (CPRD) [Questionnaire of Sports Performance-related Psychological Characteristics] by Gimeno et al. [22]. This Spanish-language questionnaire consists of 55 items distributed into five factors: Stress Control, Effect of Performance Assessment, Motivation,

Mental Ability, and Team Cohesion. This questionnaire is one of the instruments that currently demonstrate greater utility in the assessment of the psychological characteristics involved in athletic performance, in continuing in competitive sport, and in athletic success [23-24]. CPRD Questionnaire to Spanish of the Psychological Skills Inventory for Sports (PSIS) of Mahoney [25-26]. (Mahoney, Gabriel & Perkins, 1987; Mahoney, 1989), very used in the evaluation of American athletes. CPRD questionnaire is one the most useful instruments that is showing in evaluating the psychological characteristics involved in athletic performance, continuity in competition sport and sporting success, as indicated Gimeno et al. [22]. Was analyzed, from CPRD questionnaire, psychological skills of athlete, her strengths and weaknesses, for, from here to design the psychological intervention plan that would improve the detected gaps, and optimize the athlete's strengths. The CPRD was completed in two sessions, because some of the items, in addition to being responded to on a Likert scale, were looked at more in depth by the athlete. This was to obtain further information regarding what she really thought, felt, or acted on concerning the question posed in the item. This information helped in the creation of self-observation registries and psychological training programme follow-up.

Assessment of the programme that was implemented. For the final assessment, in addition to the CPRD, another questionnaire was completed ad hoc. This was an attempt to obtain a reflection on the psychological training that was carried out by qualitatively and quantitatively evaluating different aspects of it, which can help to better assess the efficacy of techniques, strategies, and procedures. In the Procedure subsection, the instrument that was utilised is presented.

Procedure

A psychological training programme was carried out for 6 months, from January to July of 2011, in preparation of the classificatory phases for the 2012 London Olympics.

The objectives to be achieved were established, both with regard to result and to performance. With the athlete's input, there was an analysis of what was expected from the psychological training. From this, the following sequence was carried out:

- a. Initial psychological assessment.
 - Determining the psychological profile.
- b. Designing the study, which consisted of:
 - Goal setting (performance and result) for the athletic season.
 - Learning the technique for establishing objectives, especially for the competition and specific training sessions.
 - Learning how to develop the Competition Plan, which is directly related to the objectives that are proposed for each competition.
 - Learning to assess the cognitive style utilised in each competition and in each phase of the

competition and consequently being able to modify it, if necessary.

- c. Final psychological assessment: assessment and future recommendations.

a. Initial psychological assessment

To determine the psychological profile, the CPRD was utilised (see figure 1). Given that the athletic specialty of the sailor is an individual event, it was decided to not use the Team Cohesion factor when evaluating the psychological profile, as it has little bearing on the relevant variables.

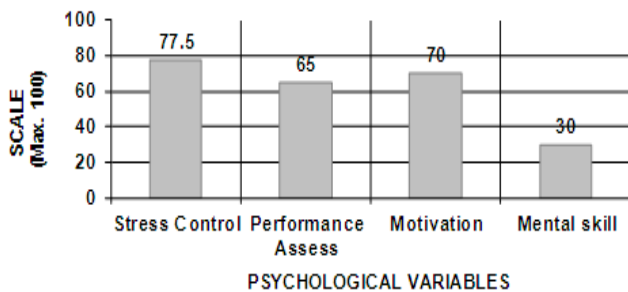


Figure 1. The athlete's scores (percentiles) for the CPRD factors in the initial assessment

The scores for the CPRD indicate that there is a margin of psychological improvement that is very interesting. For the Stress Control factor, the score for this scale is moderately high (77.5), but the analysis of the items and their assessment by the athlete indicate that there are certain doubts regarding her confidence and aspects that should be improved:

- Related to self-confidence.
 - In general, her self-confidence is not very strong, and this sometimes leads her to not completely trust in what she will do well in competitions.
- Related to concentration.
 - Especially when committing an error during competition, it is very hard for her to forget about it and quickly return to concentrating on what she has to do.
- Related to anxiety and tension.
 - Although not consistently, it seems that every once in a while, in the moments before a competition, she has a certain level of anxiety.
 - Also, she does not effectively control her stress, and the result is the somatic manifestation of anxiety.

As basic aspects to work on, general self-confidence is highlighted, since it does not seem to be very strong; likewise, utilising strategies to control anxiety and tension, which undoubtedly will help improve concentration.

For the Effect of Performance Assessment factor, the score (65) is average, which means that in certain situations or circumstances the assessments about her performance affect her negatively. The most important aspects to keep in mind are:

- Related to concentration.
 - She tends to lose concentration when she does something poorly; further, the coach's comments and instructions can affect her concentration (although it seems to be only momentarily).
- Related to anxiety and confidence.
 - When committing errors in competition, there are two manifestations of anxiety, one related to worrying about what others think (cognitive) and another more general and more intense (state anxiety).
 - Further, confidence in competition is subject, in large part, to the successes and failures of previous competitions.
 - Sometimes she does not accept criticism very well, nor does she learn from it all that she should.

As basic aspects to work on, the effect of the opinions of others regarding the sailor's performance and its effect on her concentration and self-confidence are highlighted. The use of strategies for greater cognitive control of her athletic practice and the environment would benefit her psychological disposition and her performance.

For the Motivation factor, the score was moderately high (70), although for peak performance athletes, it should be very high. The analysis of the items indicates that she should pay attention to the fact that sometimes she is not motivated to practise, as well as the objectives and the vital priority of her athletic practice.

Finally, for the Mental Ability factor, the score was very low (30), which indicates a scarce use of psychological strategies and techniques; thus, the learning and use of them could improve her training and athletic performance. The analysis of the items from this factor indicate that it would be recommendable to utilise goal establishment as a "motivational" technique and essential behavior guide, accompanied by the use of specific plans for competition. It would also be helpful for her to learn and use some technique to improve self-confidence and control of anxiety.

b. Designing the psychological work

From the initial evaluation, a study was designed that consisted of: learning the technique of goal establishment; learning to elaborate a Competition Plan, directly related to the goals that are proposed for each competition; and learning to assess the cognitive style utilised in each competition, and in each phase of it, thereby being able to modify it, if necessary. Further, a guide for general rules for competition and the learning and utilisation of specific techniques, such as thought interruption, relaxation, and visualisation was utilised. These techniques and strategies were implemented in two stages: a first stage for knowledge of the technique in which it should be utilised in less important competitions and training sessions, and a second in which, after having learned to utilise the technique perfectly, she could put it into practice in the more important competitions.

To establish goals for the season, the athletic calendar that was previously established by the official competitions (Spanish Sailing Federation) and the coach's and athlete's proposals were utilised. The psychological training programme was carried out for 6 months, through the use of individualised work during 11 sessions, and the aid of a calendar in which periods of training, rest, exams, and competitions were all displayed.

Once the calendar of action was established, the goals to achieve during the season were discussed. Following other existing models [27-28], the protocol was designed, with an emphasis on result goals (athletic results to achieve) and performance goals (performance gains to be able to achieve results) (see table 1).

The following types of goals were set: short-term goals that facilitated the beginning of psychological training and its compatibility with the rest of the athletic and personal facets; intermediate goals that sought long-term motivation toward a level of permanence, directing her personal responsibility; and long-term goals that maintained focus on the results to be obtained and on the required goals

(achieving the minimum goal to reach the Olympics).

The psychological training for the competition was based on three aspects: establishing goals for competition, the competition plan, and the cognitive style during competition. An example of each of them in the same competition is presented to help understand the process.

Goals for the competition

Through this technique, there was an attempt to increase concentration in the key aspects to be achieved. In table 2, an example is demonstrated.

Plan for Competition

Through this technique, there is an attempt to increase the perception of control over the competition. The plans for the possible difficulties and the alternate plan for each one help the athlete control the situation. At the same time, it increases her confidence in her possibilities. Table 3 demonstrates an example.

Table 1. Goal establishment for the season

| | Result Goals | Performance Goals |
|---|--|--|
| Long-term goals (December 2011 – World Championship in Australia) | - In the first 10 - Get Spain's classification for the Olympics | - Physically 100% - 100% for boat work (execute good work in the water) - Mentally calm and think that it is possible to complete goals. |
| Intermediate goals (June/July 2011 – Sail for Gold & European Champ.) | - Get on the team (among the first 2 or 3 Spaniards) - Be among the first 10 classified | - Physically 100%. - Optimise the training in the water. - Analyse the errors of previous championships. |
| Short-term goals (April 2011 – Hyeres Regatta) | - Test myself against others, start to see if winter training went well. | - Improve other seasons' weak points - Execute a strong preparation for the important regattas - Get into peak shape - Eliminate errors from previous years |

Table 2. Example of data registry to establish goals for the regatta

| | |
|--|---|
| Competition: European Championship Position: 5, 38 and 16 | Date: June 2011 |
| Assessment (General shape): Physically strong | Assessment (General state of mind): Mentally tired because it is the 6th consecutive day of regatta; a little nervous because the most important regattas are still remaining |
| OBJECTIVE 1 | Continue finishing regattas between the first 10-15 - Keep an eye on my rivals in the general classification |
| Degree or level of achievement (0-10): 5 | |
| What aspects have benefited me most in achieving this goal?: | |
| I really wanted to finish the championship well, although this goal was not achieved completely. | |
| What aspects have been most detrimental for me in achieving this goal?: | |
| OBJECTIVE 2 | Sail calmly and enjoy it - Try to control the pressure |
| Degree or level of achievement (0-10): 8 | |
| What aspects have benefited me most in achieving this goal?: | |
| On the one hand, I sailed calmly, I knew that I could do it well. It was a really difficult day and anything could have happened. | |
| What aspects have been most detrimental for me in achieving this goal?: | |
| In the last round, I was nervous and I wasn't sure what plan I wanted to follow. | |

Table 3. Example of preparation for the Plan for Competition

| | | | |
|--|---|---------------------------|------------|
| Sport /Athletic specialty: SAILING | Category: LASER RADIAL | Date: June 2011 | Athlete: X |
| Competition: EUROPEAN CHAMP | Importance of the competition in the season (0-10): 9 | | |
| Indicate the strategy (tactics) to be followed in the regatta: How have I prepared for the regatta? How am I going to carry out the regatta? How do I want to sail? | | | |
| FOURTH DAY, again there is little wind. The strategy for today has to be to commit the fewest possible mistakes and to finish between the first 10 finishers. | | | |
| What possible difficulties might I find during the regatta? | | | |
| 1. Not finding a spot at the start | | | |
| 2. Getting to the first buoy late | | | |
| 3. Feeling slow (speed) | | | |
| For each of these difficulties, what alternate plan do I have ready? | | | |
| 1. Getting ahead to the positioning of the majority of the people for the start. | | | |
| 2. Passing other boats one by one | | | |
| 3. Concentrating on my boat and not obsessing | | | |
| General assessment of the regatta | | | |
| Did any of the foreseeable difficulties come up? | YES | Which one? | |
| Was I able to resolve the situation with the alternate plan? | | 1-3 | |
| Did any non-foreseeable difficulty come up? | YES | Was I able to resolve it? | 8-9 |
| Indicate how I tried to resolve difficulties that came up (if any came up) | | | |
| OBSERVATIONS | | | |
| I only made one mistake in the second race, but I quickly found a free space to get back to the head of the fleet. It was a difficult day, it seemed like the same as the second day but it was completely different; right in the close hauled sailing was much better. | | | |

Table 4. Example of registry to work on the cognitive style during the regatta

| | | | |
|--|-----------------------|--------|---|
| Date | June 2011 | Name | X |
| Regatta | European Championship | Result | |
| It is very important that you provide all the information, with as much detail as possible, regarding what you were thinking during the regatta. To make this easier, we are going to divide the information into different stages: | | | |
| 1. Try to remember with as much detail as possible what you were thinking during the regatta | | | |
| a. Just before the start | | | |
| I knew that it wasn't exactly the same as the 2nd day, although the wind was the same; I wasn't sure that I was going to go on the left, so I considered going more toward the centre of the close hauled sailing to avoid any strange or unforeseen change in direction by the wind. I was a little nervous because I wasn't very sure. | | | |
| b. Just before passing the first buoy | | | |
| I got to the buoy in the lead group. The close hauled sailing was very difficult and I was thinking that I had saved myself, and I don't know how things turned out well. Once I got to the first buoy, all I thought about was keeping my position. | | | |
| c. Just before passing the second buoy | | | |
| I did a good tailwind run, I was happy and concentrating well. | | | |
| d. Just before passing the third buoy | | | |
| The close hauled sailing was very difficult, but calmer than the previous one. I was pretty conservative and my only objective was to hang onto the position. I didn't want to risk. I was happy because I was making good decisions. | | | |
| e. Just before passing the fourth buoy | | | |
| I was in the group that was ahead, but I had 2 or 3 that were behind me that are really quick with a tailwind and I couldn't trust that they wouldn't pass me. | | | |
| f. Just before passing the fifth buoy | | | |
| Going with the tailwind, luckily, no one passed me. They were all very aggressive but I was able to hold onto the position. They got really close and the end closely contested. I didn't let up and I was a little nervous. | | | |
| g. Just before reaching the finish | | | |
| The Finnish competitor passed me in the last reach, I know her, and I knew that she was going to be aggressive in the reach, but in the end I "let" her pass me because I wasn't going to fight for that position and risk them whistling at me or having the other two that were also very close pass me. I was a little angry or annoyed because I went overboard, and I knew at this point in the competition every point is important, but in general, I was calm and happy going into the following regatta. | | | |
| 2. Other observations regarding the regatta that you just finished | | | |
| Before the European Championship, I wasn't very confident, and the previous week I was always wondering why I had put as a goal to finish within the first 10 and [thinking] that I wasn't going to be able to achieve it. Things went well in the water, and outside of the water I also had a great time. We were always joking with the Italian and Israeli competitors. Conclusion: I have to be more attentive and concentrate harder the first few days of the championships because when I analyse the previous ones, it's always the first regatta or the first day of regatta when I make the mistakes, and later I have to try to get ahead in the classification. | | | |

Cognitive style during the competition

The sailor was provided with a structured self-completed registry in which she must indicate what type of thoughts she had during the different stages of the regatta. Through this technique, there was an attempt to have the athlete reflect on the competition carried out and on the types of thoughts associated with each moment of it, with the goal of becoming aware of the thoughts that are associated with the difficulties encountered and the good manoeuvres done. This reflection and its behavioral derivation help the athlete plan strategies for each of the competitions, increasing confidence and the perception of control. An example is demonstrated in table 4.

c. Final psychological evaluation: assessment and recommendations for the future. At the end of the sailor’s psychological training programme, the CPRD was administered again (see figure 2) and the progress was assessed through the analysis of the items. Both this evaluation as well as the one carried out on the psychological training programme are described and analysed in the Results section.

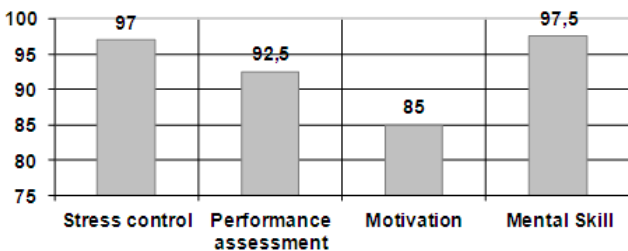


Figure 2. The athlete’s scores (percentiles) for the factors of the CPRD in the final assessment

3. Results

In figure 3, the scores for the CPRD at the beginning and end of the programme are shown.

As observed in Figure 3, the scores after finalising the psychological training were higher for all the factors when compared with the initial assessment; thus, we can reason that the sailor’s psychological disposition improved with the psychological training programme.

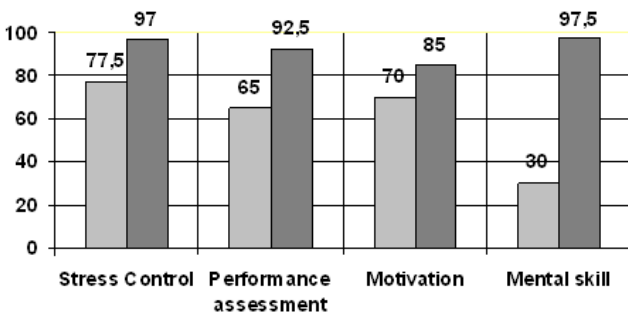


Figure 3. The athlete’s scores (percentiles) for the factors of the CPRD for the initial and final assessments

Specifically, with regard to the Stress Control factor,

which includes questions related to self-confidence, anxiety, and competition, the most important aspects for improvement in this factor were:

- Related to self-confidence. A significant improvement in her self-confidence was observed, both in general (items 10 and 26), regarding technique (item 3), and related to competition (items 21 and 54).
- Related to concentration. A significant improvement in managing the ability to concentrate during competition (items 1 and 43); without getting distracted by errors (item 13), as well as a large improvement in the ability to not think about the final result of the competition, but to focus on the most important part of the competition is observed (item 41; in this case, there would still need to be improvement, but she went from a score of 0 to a 3, which is a very large improvement).
- Related to anxiety and tension. In general, it is considered that she is effective in controlling her tension (item 30).

Recommendations for future work could be summarised as the following:

- Continue working on self-confidence, addressing any kind of competition and facing the situations, however adverse they may be; even when things do not turn out well, it is very important to trust in one’s own possibilities.
- It would be very important to look deeper at the learning of specific techniques for controlling tension and anxiety, such as some type of relaxation (to use systematically) and visualisation.

The Effect of Performance Assessment factor specifically evaluates a stressful situation that is characteristic of athletic competition: Does the assessment by other people or one’s self negatively affect the athlete’s athletic performance?, and Is she able to correctly face an unfavourable result or performance in such a way that it does not affect later performances?. The most important aspects of improvement in this factor are:

- Related to concentration. A significant improvement in managing the ability to concentrate although she believes that she is doing "poorly" (item 9) was found, although in this case, there could be more improvement; and also in situations where the assessment of judges could be detrimental to her (item 34).
- Related to anxiety and motivation/confidence. A very significant improvement was observed regarding the interpretation of the errors and avoiding getting nervous (item 28). Also, it seems that her motivation for competition does not depend at all on others, rather on herself (item 52).

The recommendation for future work could be summarised in the following:

- In spite of the improvement observed in this scale, there are still aspects in which work needs to be done, such as greater autonomy, both competitive autonomy as well as in the context of athletic preparation, since in both cases the "assessment" of her coach seems to be excessively influential, such as for example regarding errors (item 35), other teammates/rivals (item 44), or with instructions or other comments (item 53).
- A step forward in the work regarding self-confidence will facilitate a belief in "doing it well" in spite of the fact that things have not gone well up to this point (item 51).
- It is very important to learn some specific techniques such as those previously mentioned (relaxation, visualisation) and to work on establishing goals, self-registration of cognitive style, and competition plans.

The Motivation factor provides information referring to basic, stable motivation for the athletic activity, which is to say, the place that the athletic activity occupies in the athlete's scale of values: her interest, the importance that she gives to the sport and her disposition to dedicate the costs that its practice requires. Her motivation and her degree of involvement in the physical activity will depend on the balance between costs (hours of training, giving up other activities, effort, etc.) and benefits (satisfaction, performance, pay, etc.). Further, this scale provides information concerning the most day-to-day motivation, reflecting her disposition and the way she confronts her daily work. For this factor, there are two aspects that appear as most important:

- She has shifted to a consideration of the training sessions that is not as negative as it was, and now the fact that sometimes she is not motivated to train, she does not perceive it as intensely (item 4; she went from a 0 to a 2); regardless, she should keep working on this aspect, which is, on the other hand, necessary for performance in competition. Maybe the use of goals, in addition to helping in the concentration on the work to be done, has affected her thoughts regarding training.
- The second aspect makes reference to lower scores in items 29 and 31. For both cases, the score is lower, and it refers to the role of sport in her life. It could be considered that it is very good to have gone down in these items, accompanied by improvement in the rest of the scales, since it seems to indicate a much more mature development of the person. It definitely

seems that she has "matured" with regard to her role in life and in sport, and this could be very positive, both for improving in competition and in her enjoyment as well as in lowering added and maximalist "pressures".

The recommendations for work for the future could be summarised in the following: Everything related to better preparation of the training sessions and a better disposition toward them, although it has improved, can still be further strengthened.

- It is therefore very important to work on establishing goals, specific self-recording for training situations, and other motivational techniques.

The Mental ability factor explores the use of a set of mental abilities that can affect the athlete's functioning in benefit to her performance. This factor should be jointly interpreted with the Stress Control factor, since many of these skills are directed toward this goal.

From the initial assessment, it was decided to utilise some techniques to improve the mental ability, such as establishing goals, the competition plan, and techniques for improving self-confidence and anxiety control. As can be observed, both for the CPRD as well as in the assessment carried out by the athlete with regard to the psychological training, a very significant improvement in the psychological resources for competition was found.

The recommendations to work on in the future could be summarised as the following:

- Continue utilising the techniques used in the programme, which can be of great use.
- Also, it would be very useful to incorporate specific techniques to control tension and anxiety, such as relaxation and visualisation, which would help to improve self-confidence as well as the perception of control in athletic situations.
- Finally, the learning of skills of self-awareness and of interpersonal skills (managing situations with others) can be very interesting, and it would help reach a better perception of self-esteem and, therefore, personal growth.

Regarding the athlete's assessment of the programme, the questionnaire that was utilised for the evaluation and the responses given are presented in table 5. It stresses aspects of satisfaction and perception of efficacy, with both a quantitative and qualitative analysis, which can help to better evaluate the efficacy of techniques, strategies, and procedures.

Table 5. Questionnaire of evaluation of the psychological training

| | | | | | | | | | | | |
|---|--|---|---|---|---|---|---|---|---|---|----|
| This questionnaire attempts to be a reflection on the psychological training carried out, evaluating different aspects of the training. A quantitative and qualitative evaluation is done, which can help to better assess the efficacy of techniques, strategies, and procedures. | | | | | | | | | | | |
| In general (0=not at all/nothing; 10=a lot/much) | | | | | | | | | | | |
| 1. Are you satisfied with the psychological training carried out? 8 | | | | | | | | | | | |
| Indicate which aspects you liked most and why: | | | | | | | | | | | |
| For aspects that are not within sport, I learned to control my mind in some situations in which I previously reacted poorly. For aspects within sport, I can control myself more in stressful situations or when I am in a bad situation. Further, the sheets that I have to fill out make me concentrate more on the things that I have to pay attention to and to be more attentive in general. | | | | | | | | | | | |
| Indicate which aspects you liked least and why: | | | | | | | | | | | |
| Filling out all the sheets, I get a little lazy; before I would do it mentally, but I know that they're good for me and so I end up doing them. | | | | | | | | | | | |
| 2. How do you think it has helped you for your overall athletic training? 9 | | | | | | | | | | | |
| Indicate the aspects that helped you the most and why: | | | | | | | | | | | |
| I think that I have learned which aspects I do not need to pay attention to or I don't need to waste energy thinking about them. This is also regarding life in general, but I mention it with regards to sports, because in my normal life, I don't tend to spend time with people that I don't like. I have learned to set goals to "motivate" me. It hasn't been a good year with regards to the classification of the "team", but I am happy in general because I have learned to be more independent in competition and to know how to plan the timing. | | | | | | | | | | | |
| Indicate the aspects that helped you the least and why: | | | | | | | | | | | |
| I wasn't able to fill out the sheets for the best regatta of my life or for the relaxation and anxiety control. I don't know why, but I am not able to see my feelings clearly enough to put them down on paper, I don't know how to express it. | | | | | | | | | | | |
| 3. How do you think it helped you for the athletic competition? 10 | | | | | | | | | | | |
| Indicate the aspects that helped you the most and why: | | | | | | | | | | | |
| I learned to be more independent and to make my own decisions about what I am doing well with at each moment. I have seen the figure of the coach in another way, as a person that accompanies me and helps me, but I can't pretend that he treats me like a perfect coach. Within the competition, I have learned to see the timing of the championship, I mean the moments in which you have to attack, the moments in which you have to be conservative and the moments when you need to defend; later, when re-reading the registers from each regatta, you see things that you were thinking at each step that served to see if you did it well or not, it's like a self-critique. | | | | | | | | | | | |
| Indicate the aspects that helped you the least and why: | | | | | | | | | | | |
| 4. Did the psychological training help you in areas outside of sport? 6- | | | | | | | | | | | |
| Indicate and explain in which areas the psychological training has helped you: | | | | | | | | | | | |
| I think that in general I have matured; I have learned to confront people without saying everything that comes to mind, which is to say, measuring my words to not offend others. I am less embarrassed to talk to the "bosses" to explain my situation and talk about my future. I can control myself more in certain moments of anger. | | | | | | | | | | | |
| 5. Assess the satisfaction and the efficacy of the techniques and strategies that were utilised | | | | | | | | | | | |
| Quantitative assessment SATISFACTION | | | | | | | | | | | |
| Strategies | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Goal establishment | | | | | | | | | | x | |
| Competition Plan | | | | | | | | | | x | |
| Cognitive Style Registry | | | | | | | | | | | x |
| Quantitative assessment EFFICACY | | | | | | | | | | | |
| Strategies | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Goal establishment | | | | | | | | | x | | |
| Competition Plan | | | | | | | | | | | x |
| Cognitive Style Registry | | | | | | | | | | | x |
| Qualitative assessment GENERAL | | | | | | | | | | | |
| Strategies | (indicate what you believe to be most representative of each technique or strategy; whether you have utilised it much or not, whether it was simple or not, and any other aspect you believe to be important) | | | | | | | | | | |
| Goal establishment | I have always used it in the morning just after breakfast and before going to the club. It helps me to start to think about the regatta and to concentrate. | | | | | | | | | | |
| Competition Plan | I would also fill it out before going to the club and it helped me to concentrate and think about the plan I was going to follow before I would get into the water. | | | | | | | | | | |
| Cognitive Style Registry | It was more difficult to fill out because it took longer and after the regatta, if I am really tired, I would get lazy. I always read it before going to the next competition and I realize my errors and the good things I've done. It helps to remember what happened in previous competitions and to try to not have it happen again. | | | | | | | | | | |

4. Discussion and Conclusions

The objective of this study was to present the psychological training plan of a sailing athlete which was utilised for the athletic preparation of the classification phase for the 2012 London Olympics. As indicated by Manzanares et al. [29], this is one of the sports in which the psychological factors have been least researched (3%), in comparison with other decisive factors of athletic performance, such as physical characteristics (54%), technique (22%), decision making (14%), and tactics (5%).

When analysing the items of the CPRD, it is observed that the athlete improved considerably in her mental ability, optimising her psychological resources for competition and directing many of them toward the goal of controlling the stress derived from this situation. She improved in the management of the ability to concentrate during the regattas, even when facing errors that she committed and when accepting a negative assessment (from others or herself) about her athletic performances. She improved a lot in the aspects related to anxiety, as well as in the development of her self-confidence. Along these lines, we can find recent studies that demonstrate the importance of these psychological variables in the performances of the athletes that practise nautical sports, such as that by Modroño and Guillén [30], whose results demonstrate lower levels of somatic anxiety for windsurfers with better performance in competition and better levels of self-confidence for the first five classified athletes. Further, is the study by Gunnarsson et al. [31], where, after analysing the biological markers of stress in crewmembers of a round-the-world regatta (long duration), they observed a decrease in these markers (corresponding to a decrease in mental stress) at the end of the race when the team dominated the competitive situation. Moreover, there is the case study by Hagin et al. [32] about the behavior of an expert sailor that was able to minimise anxiety and perceived fatigue by strategically managing his hours of sleep to optimise his performance, safety, and to achieve his objective of crossing the Pacific Ocean in a small vessel. Also, there is a literature review by Manzanares et al. [29] that reveals the importance of the capacity of stimulus perception and decision making as decisive factors in performance for athletic sailing, and that, we should remember, can be benefited by the development of the athlete's mental ability to control stress and manage one's emotions in competition.

On the other hand, the athlete's assessment was also utilised as an evaluation instrument in the programme that was implemented. As Page and Thelwell [33] indicate, the use of this type of information, generally through semi-structured interviews, such as what was used in this study, can be very useful for assessing the efficacy and influence of psychological training programmes. Along these lines, the proposals for intervention cited in other studies about optimising athletic performance [34-38], were followed. Thus, the athlete quantitatively and qualitatively evaluated her psychological training programme in general,

and also specifically (each of the techniques and strategies utilised), with regard to the criteria of satisfaction and efficacy. Quantitatively, the following should be highlighted: both the sailor's high level of satisfaction with the psychological training programme and her perception of maximum efficacy with regard to the athletic competition. The athlete recognises having learned skills to control stress, having a clearer idea when making decisions during the regattas, as well as the usefulness of the self-registries to optimise her attentional ability and direct it toward the pertinent stimuli and the establishment of goals to increase her motivation. The athlete informs that the Registry of Cognitive Style (which helps her to reflect on things, to not make the same mistakes, and to concentrate on the competition) and the Competition Plan (because of being a guide for her attention) are the techniques that are most highly scored (with a maximum value in satisfaction and efficacy) after her training and application.

Conclusions

- The psychological training programme implemented demonstrates efficacy in the improvement of the psychological skills of the athlete as evaluated by the CPRD.
- The sailor assessed the psychological programme very positively in the categories of satisfaction and efficacy.
- Case studies seem to be ideal for the analysis of the relationships between the programmes of psychological training and the athletic performance of the athletes.

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