



**Track and Field Athletes' Experiences
and Perceived Effects of Flotation-
REST: An Interpretative
Phenomenological Analysis**

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Abstract

Aim: The aim of this study was to examine junior and first year senior athletes' experiences and perceived effects of flotation-REST, including both the immediate response and experiences over time.

Method: Semi-structured interviews were conducted with six elite track and field athletes (five female and one male), aged 17-23 years, who were purposefully sampled and had used flotation-REST two to six times. They were each interviewed on two occasions; once directly following a floating session and later a second interview concerning the overall experience. The interview transcripts were analyzed using Interpretative Phenomenological Analysis (Smith, 1996).

Results: From the analysis four themes emerged: Meaning of Flotation-REST, Experiences during Flotation-REST, Perceived Effects of Flotation-REST, and Views on Flotation-REST. Flotation-REST became a learning opportunity concerning relaxation for all athletes and three of them reported that it raised their awareness of the importance of relaxation and psychological skills training. For five athletes the floating sessions also became a breather in the daily life. The floating sessions were perceived as pleasant and relaxing. Three athletes experienced a lot of thoughts in the tank and five of them fell asleep at least twice. After flotation-REST five athletes reported experiencing less stress and an overall increase in well-being as well as feeling calmer and more energized for one or two days, although they were physically tired at practice immediately following a floating session. Being in a better mood and placing fewer demands on themselves as well as feeling more optimistic and present were also mentioned as perceived effects. The results showed more and longer-lasting psychological effects than physiological. The sixth athlete did not experience any special effects, nor did he experience stress in his daily life and sport performance, as opposed to the others.

Conclusions: The study shows the potential of flotation-REST as a technique for health promotion and also as a method for stress management. Further, as the results revealed raised awareness, flotation-REST could be valuable together with other psychological skills training techniques, mindfulness and the physical training. However, considering the differences in the athletes' perceived effects of flotation-REST, it indicates the importance of further research on the topic.

1. Introduction	4
2. Method	6
2.1. Participants	6
2.2. Design	7
2.3. Procedures	7
2.4. Interview Guides	8
2.5. Data Analyses	8
2.6. Credibility	9
3. Results	9
3.1. Meaning of Flotation-REST	10
3.1.1. Relaxation	10
3.1.2. A breather in the daily life	11
3.2. Experiences during Flotation-REST	13
3.2.1. The overall experience	13
3.2.2. How time was spent in the tank	13
3.2.3. The physical experience	14
3.2.4. Thoughts in the tank	15
3.3. Perceived Effects of Flotation-REST	16
3.3.1. Physiological effects	17
3.3.2. Psychological effects	18
3.4. Views on Flotation-REST	21
3.5. Summary	22
4. Discussion	23
4.1. Limitations	26
4.2. Conclusion and Practical Implications	26
References	28
Appendix A – Informed Consent	
Appendix B – Interview Guide: The First Interview	
Appendix C – Interview Guide: The Second Interview	
Appendix D – Information Retrieval	

1. Introduction

Successful athletes need to be not only physically fit but also mentally ready to meet the demands of tough training schedules and competitions (Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999b). Having to handle both setbacks and success while balancing sports with other domains in life are reported sources of stress (Noblet & Gifford, 2002). In addition, when it comes to teenagers and young adults in sports, there is the added pressure of the transition between junior and senior level; they start competing at a higher level with greater opponents, and often also deal with school and moving away from home (Bruner, Munroe-Chandler, & Spink, 2008). Due to these demands this transition and period in an athlete's life can be crucial, and strategies to meet these challenges are therefore important (Pearson & Petitpas, 1990; Samuel & Tenenbaum, 2011).

There are many different sources of stress related to for instance the environment, financial problems, personal issues or health, and there can be large individual differences in the responses to these stressors (Lazarus, 1990). In sports, athletes have reported straining factors both external, such as lack of social support, poor communication, or pressure to succeed, and internal, such as fear of failure or injury, relaxation problems, or self-esteem issues (McKay, Niven, Lavalley, & White, 2008). Studies have also shown a great correlation between increased cortisol levels and tasks that include performing in front of an audience and uncontrollable aspects such as other people and the environment (Dickerson & Kemeny, 2004), which are common circumstances in sports. Experiencing stress is often an antecedent to burnout, and noticing early signs, for instance mood disturbance, decreased motivation, and lack of results, is therefore of importance (Gustafsson, Kenttä, & Hassmén, 2011).

How we interpret and cope with a situation can change our emotions; if we see something as a challenge and a learning opportunity or as a harmful treat may affect the outcome (Lazarus, 2000). Hope (Gustafsson, Hassmén, & Podlog, 2010) and optimism (Gustafsson & Skoog, in press) have also been connected to increased well-being and prevention of stress and burnout among athletes. Different coping strategies, for instance focusing on controllable aspects, the good in the situation or personal growth, can further turn a stressful situation to positive and decrease stress (Folkman & Moskowitz, 2000; Tugade & Fredrickson, 2004). Research has also shown that it is important to savour and maintain positive emotional experiences, and so developing different coping strategies and building psychological resources is therefore valuable when handling stress (Tugade & Fredrickson, 2007).

To promote a favourable environment in sports for health, well-being and prolonged engagement, it is important to consider the individual not only as an athlete but as a whole person (Gustafsson et al., 2011; Henriksen, Stambulova, & Roessler, 2010). To perform well appropriate recovery strategies are important, for instance getting enough sleep (Halson, 2008) and having a balanced nutritious diet (Ray & Fowler, 2004). Indeed, being aware of the whole, the individual, training and recovery as well as the environment is significant for health and optimal performance (Lazarus, 1990).

Further, to reduce stress and improve performance psychological skills are essential and characteristic for successful athletes (Gould et al., 1999b; Greenleaf, Gould, & Dieffenbach, 2001). Psychological skills training (PST) is used to enhance both performance and personal well-being, and includes different methods, for instance mental preparation, arousal regulation, imagery, and relaxation (Hardy, Jones, & Gould, 1996; Vealey, 2007). In relaxation there are several techniques that focus on physical and psychological relaxation, one being flotation-REST (restricted environmental stimulation technique) (Vealey, 2007), where an individual floats inside a dark tank that is partly filled with skin temperature high concentrated saltwater, all to reduce external stimuli (Bood et al., 2006).

Previous research on flotation-REST have mostly focused on the effects of flotation-REST concerning individuals with health problems, for instance burnout syndrome, depression and muscle pain (Bood et al., 2006; Bood, Sundequist, Kjellgren, Nordström, & Norlander, 2007; Kjellgren, Sundequist, Norlander, & Archer, 2001). Studies have shown a decrease in muscle pain, anxiety, and depression with individuals after flotation-REST as well as an increase in sleep quality and optimism (Bood et al., 2006; Kjellgren et al., 2001). However, improvements of peoples' well-being have been documented after 12 floating sessions whereas additional sessions have not resulted in more improvements (Bood et al., 2007). Positive effects have been reported on stress management where individuals, after flotation-REST, have experienced increases in both physical and psychological well-being (van Dierendonck & Nijenhuis, 2005), even though some studies, on flotation-REST, have not been able to prove any significant changes (Norlander, Bergman, & Archer, 1998, 1999). Individuals have also shown an increase in creativity and originality in written tests after flotation-REST (Norlander, Kjellgren, & Archer, 2003). One of few sport studies, which have been conducted on flotation-REST, showed that elite archers performed better and experienced a decreased exertion directly after flotation-REST whereas non elite athletes did not improve noticeably (Norlander et al., 1999), but further research in sport is needed.

Even though studies have shown positive effects on both performance and well-being after flotation-REST (van Dierendonck & Nijenhuis, 2005), the knowledge is limited on how the individuals experience the time in the tank and what effects they themselves perceive. One study have reported that individuals have experienced floating sessions as pleasant and that they have felt relaxed and a bit tired afterward (Kjellgren, Lyden, & Norlander, 2008). Research on other relaxation techniques, for instance progressive muscle relaxation and imaginative relaxation, have shown positive short-term effects on individuals' moods and physiological conditions (Lohaus & Klein-Heßling, 2000). Progressive muscle relaxation has also resulted in enhanced sleep, increased motivation, and pain reduction, and like any other skill relaxation needs to be practised (McCallie, Blum, & Hood, 2006). Relaxation in nature has lead to stress reduction and feelings of increased energy levels (Kjellgren & Buhrkall, 2010). These positive results also make it interesting for further research on flotation-REST.

To summarize, positive effects, both physiological and psychological, have been shown after flotation-REST as well as after other relaxation techniques. However, the knowledge of how individuals experience flotation-REST and perceived effects is limited. There is also a lack of research focusing on athletes using flotation-REST. Therefore, the aim of this study was to explore athletes' experiences and perceived effects of flotation-REST, including both the immediate response and experiences over time, particularly focusing on juniors and first year seniors, as relaxation, at this time, could be especially valuable for the athletes. In order to gain in-dept understanding of the athletes' experiences a qualitative approach was deemed appropriate and Interpretative Phenomenological Analysis (IPA; Smith, 1996) was chosen. IPA is often used with health issues and is especially suitable for novel research areas as it focuses on the participants' understanding and sense-making of a shared experience (Brocki & Wearden, 2006).

2. Method

2.1. Participants

Six junior and first year senior elite athletes who used flotation-REST were purposefully sampled (Smith & Osborn, 2003), and asked to participate in this study. Through purposive sampling participants are selected on the basis that they hold information on the particular subject and for whom the research question is significant (Smith & Osborn, 2003). A purposive fairly homogeneous sampling is preferable for IPA studies to enable interpretation and analysis of the actual subject without too many variables (Smith, Flowers, & Larkin, 2010). A small sample size enables researchers to explore the subject in detail and focus on the participants' experiences and perceptions, all in line with IPA (Smith et al., 2010). The

athletes, five female and one male, were between 17 and 23 years old and were all competing in track and field at a national level in Sweden mainly in sprint, long jump or triple jump (see Table 1). They had competed in track and field for at least 5 years. Alongside being elite athletes they were also full time students in high school or at university. During the time of the study the athletes participated, through their sports club, in a flotation-REST project at a university in Sweden, and they were all new to flotation-REST before the project. The athletes were offered floating sessions once a week during a time period of two months. A floating session lasted 50 minutes, music was played in the beginning to help them relax and at the end to notify that the session was coming to an end. They themselves decided how frequently they wanted to partake and so the number of floating sessions differs, between two and six times, among the athletes. The main reason for the different numbers of floating sessions was due to scheduling conflicts for the athletes. Previous to this study the participants had little or no experience of other relaxation techniques and were not regularly or systematically working with PST. To protect the participants' identities their names have been changed.

Table 1

Demographic details of participants

Respondent	Sex	Age	Event	Total number of floating sessions/ Session-number for the first interview
Ashley	Female	23	Long jump, sprint	3
David	Male	17	Long jump, triple jump	4
Ella	Female	19	Heptathlon	6
Jennie	Female	18	Hurdles, sprint	2
Kate	Female	19	Hurdles, long jump, sprint	4
Lauren	Female	22	Long jump, triple jump	3

2.2. Design

By using IPA, it enables the researcher to focus on each individual's experiences and openly and in detail explore the subject (Smith et al., 2010). Following IPA guidelines, semi-structured interviews were used to give the respondents a chance to talk freely about their experiences and they also allow the interviewer to be flexible and approach new relevant matters that arise during the interviews (Smith et al., 2010).

2.3. Procedures

The participants were contacted in person before a floating session. At the time of the study, the interviewer was an assistant at the flotation-REST tanks and thereby met all

participants before the interviews in connection with floating sessions which enabled the interviewer to build rapport with the respondents and also prepare for the interviews. The respondents were informed of the study and that participation was voluntary. Each respondent was interviewed on two different occasions. The first interview, lasting between 15 and 20 minutes, was conducted directly following one of their floating sessions. The purpose of the first interview was to get the respondent's immediate response to flotation-REST. At the time of the present study the flotation-REST project had already started and due to the athletes' individual floating schedules the first interviews occurred after each participant's final floating session (see Table 1). The only criterion was that it was not their first session in the flotation-REST project so that they were familiar with the procedures. An initial analysis was conducted where an overview of the first interview was made, making it possible for follow-up questions at the second interview. A second interview was then conducted with each participant and it focused on the respondent's overall experience and perceived effects of flotation-REST. Time and place could be of their choosing and the interview lasted about 30 minutes. The second interview was conducted a few months after the last floating session. All interviews were recorded, with the participants' permission. An informed consent (appendix A) was signed by all participants and by a guardian when a participant was a minor, i.e. under 18 years of age.

2.4. Interview Guides

Two interview guides were developed, one for the first interview (appendix B) and one for the second interview (appendix C), consisting mainly of open-ended questions of the topic and possible probes and prompts (Smith et al., 2010). At the first interview the respondents were asked about their experiences from the floating session, how they felt directly afterward and in the end to reflect on possible differences to earlier floating sessions. The longer second interview started with an informal conversation to again establish rapport (Smith et al., 2010). The interview guide then focused on the participants' experiences of flotation-REST and the effects afterward from an overall perspective. They were also asked about previous experiences of other relaxation techniques, what flotation-REST had meant to them and if they wanted changes in the flotation-REST procedures. In the end they could voice any additional comments or concerns.

2.5. Data Analyses

Interviews were transcribed verbatim and an IPA analysis was conducted (Smith et al., 2010). Transcripts were read and reread to enhance the understanding of the data. Notes were then taken of everything interesting, looking at content, context and language use. After this,

different themes were developed in an inductive manner and grouped together based on similarities and connections. This procedure was performed for each interview and then the themes from each participant's first and second interview were combined. Next, patterns across cases and significant findings were looked for. Throughout the analysis the original transcripts were regularly consulted. Finally, four themes emerged with categories, and representative quotations were selected.

2.6. Credibility

To improve the study's credibility member checking was performed with each participant (Flick, 2007). Through member checking the collected data is checked for accuracy and verified (Cho & Trent, 2006). The second interview was also an opportunity to ensure the credibility of the results from the first interview and clarifications could be made. Further, transcripts extracts are provided in the results section to support the argument being made, allowing readers to examine the interpretations (Smith et al., 2010). Throughout the study memoing was practised where the researcher recorded reflective ideas and thoughts of the data collection and analysis as well as observations from interviews, adding to the trustworthiness of the study (Groenewald, 2008). The interviewer has previous experience in conducting IPA studies using semi-structured interviews.

3. Results

From the analysis four themes emerged related to the athletes' experiences and perceived effects of flotation-REST: Meaning of Flotation-REST, Experiences during Flotation-REST, Perceived Effects of Flotation-REST, and Views on Flotation-REST (see Table 2). These themes are presented together with categories with the exception of the shorter theme Views on Flotation-REST. Last a summary of the main results is presented.

Table 2

Master table of the themes

Themes	Categories
Meaning of flotation-REST	Relaxation A breather in the daily life
Experiences during flotation-REST	The overall experience How time was spent in the tank The physical experience Thoughts in the tank
Perceived effects of flotation-REST	Physiological effects Psychological effects
Views on flotation-REST	

3.1. Meaning of Flotation-REST

For the athletes the floating sessions and how often they floated was voluntary. With the exception of a brief introduction of flotation-REST the athletes had not been given any specific tasks in connection with the floating sessions or for the actual time in the tank. How they made use of flotation-REST and spent their time in the tank was up to them. Two main categories emerged regarding what the floating sessions meant to the athletes: Relaxation and A breather in the daily life.

3.1.1. Relaxation. Before the athletes started with flotation-REST they were only told to try to relax as much as possible, while floating, and were given some tips to help them relax (e.g., focusing and breathing exercises). And for all athletes the floating sessions became just that, time for relaxation and rest as Ashley stated: “I saw it as an opportunity to just relax and try to fall asleep almost [...] that was very enjoyable.” Even though the athletes had not been given a specific purpose or task concerning the floating sessions, all athletes linked their floating experiences to their practise in track and field and had positive expectations coming there. Kate explained:

I think a lot about practice when I’m lying there. Since you’re there for a training purpose, kind of. [...] I have thought that, you know, it’s for relaxation and recovery. So I have really felt that “how nice, today I will recover”, and I have always thought that “in the long run, it will be really good”

Even though all athletes saw flotation-REST as a part of their whole training regime it was something they had just started trying in connection with their sport and therefore, at the time, also explored what effects there might be and how it could help them individually.

None of the athletes had a lot of experience from other relaxation techniques, or PST on the whole, and so for everyone flotation-REST was an opportunity to practise and learn more about relaxation. Kate and Ella even stated that they were not used to taking it easy or relaxing and they did not really know how. When Ella was asked whether she had experiences from other relaxation techniques she answered: “Well, I try a little myself, like ‘yes, now I’m going to rest’ or something. Overall, I don’t think I’m really that good at resting, so, I don’t know.” All athletes were interested in learning more about relaxation and the five female athletes expressed a great need for more, as described by Kate in the following: “There’s a great desire to work more with psychological skills training or relaxation or something. But you don’t really know how.” Jennie also articulated the need for more PST with a special

focus on relaxation both for herself and her team-mates as she had observed negative effects on sport performances linked to anxiety and focusing problems. She said:

There are several in my group who are a bit, well, a bit tense, or they are a little bit stressed. And then it affects their performances at competitions and they get stuck. So I think we would need relaxation, more regularly. [...] [At competitions] that's where everything goes wrong. Because I'm fast and I'm strong, but at competitions I start to think too much, so I need help to not think about those things.

But now with the flotation-REST Jennie had experienced real relaxation. "I've experienced what it's like to be truly relaxed" she said, referring to her floating sessions. Kate also remembered how the floating sessions made her relax, she realized how tense she actually was and how good it felt to relax for a while:

It felt good in my body. You do feel quite tired when you actually relax like that. Other times you don't think so much, you just go on, you work-out. So when you take the time to relax you notice that "oh, how nice this was, to take some quiet time"

Kate, Jennie and Lauren also talked about how flotation-REST had made them more aware of the importance of relaxation, how different factors affect their performance as well as their well-being. During and after their flotation-REST experiences they had reflected more on how relaxation and sport performance are connected, and it raised their awareness of how psychological skills play an important part in their sport performance and lives. Kate described it in the following way: "I've become more aware of what it all means, the full picture with recovery, practice and the psychological aspects. So it feels like I've gotten better at taking it seriously, that it is actually important."

3.1.2. A breather in the daily life. Besides relaxation, flotation-REST became a longed-for and much appreciated break in an otherwise hectic life for the five female athletes. They described themselves as being very busy and at times feeling stressed about managing a schedule full of activities, dealing with both school and track and field practice, as well as performing well. Jennie described her daily life as follows:

I'm not so relaxed, or I'm like. I always have something to do. So I sleep, then I'm relaxed I guess, then I get up and I have practice, and school, and after that I have

practice, and then I make dinner, and then I sleep. I don't have time to just sit down and relax. Or, when I watch *Desperate Housewives*, then I unwind. Yes, that's about it.

With busy schedules the floating sessions became a breather in the female athletes' everyday life and had a relaxing effect on them and enabled them to take a step back and slow down. Lauren expressed:

As a person I'm pretty stressed, like "now I need to get home and study and do this and that, and this thing and that" When I get out [of the tank] I'm just not bothered by it, I'm more relaxed. I'll take it as it comes. I'm not as stressed.

In her sports, Lauren had also struggled with performance anxiety: "I've experienced some, what do you call it, performance anxiety." And so being able to let go of some stressful thoughts became especially important to her.

For these five athletes unwinding and taking time for themselves was unusual on a daily basis. The floating sessions became a time when they could think, reflect, disconnect from stressful situations and just have some free time alone. When looking back on the floating sessions Kate said: "It has been a nice experience. I've had some time for myself. It's not so common for me to take a break in everyday life." The floating sessions became a time when it was okay to do nothing and when they were supposed to relax, which Ella especially pointed out as an important and pleasant aspect:

I'm the type of person who does a lot of things and has a lot going on around me. So because of that, I find it to be very nice when I, like this, actually have decided that I will relax.

When talking about how she felt after a floating session Ella continued: "Oh, how nice. Now I have in some way made an effort to rest. [...] It's like you start fresh." David, the sixth athlete, on the other hand described himself as not feeling stressed in his daily life or about his sport performance. He said: "I'm pretty calm usually. So before a competition I probably try to get psyched up instead of relaxed." and this category was also not found in his case.

3.2. Experiences during Flotation-REST

When the athletes talked about their experiences during flotation-REST the following four categories emerged: The overall experience, How time was spent in the tank, The physical experience, and Thoughts in the tank.

3.2.1. The overall experience. Five athletes experienced the time in the tank as positive and very enjoyable overall. They liked the feeling of lying down in the warm water and considered it to be relaxing and cosy. It was generally a great experience for them. Ashley said: “I thought it was very nice during all sessions. It feels so pleasant to lie there.” The five athletes looked forward to the floating sessions, and Jennie remembered almost feeling sad when they were over: “It was a bit sad to get up, I thought, because it was nice lying there.”

The sixth athlete, Lauren, was not as fond of lying in the tank as the other athletes, due to feelings of claustrophobia, but still thought it was okay and quite nice. She explained: “I don’t like it when there are very cramped spaces and when it gets dark [...] otherwise it felt good. The feeling has been quite nice, you’re relaxed.” Even Kate, who really enjoyed the floating experience, had some problems in the beginning getting comfortable in the tank as she was afraid of water. She described it: “Overall, I’m pretty uncomfortable in water. So the first times it has really been ‘Oh! I’m lying in water. Oh, oh, oh!’ And then you’re supposed to relax mentally. And it feels like the water really comes on you.”

But after Kate had gotten used to the water she felt safe. All athletes, except for Lauren, reported feeling safe and secure in the tank and they enjoyed the environment of flotation-REST where they were isolated from the outer world and not affected by different temperatures, lights etc. Ella expressed: “I think it has been really nice. And especially that it shuts out a lot from outside, it’s dark and there are not a lot of things around you.”

3.2.2. How time was spent in the tank. While floating in the tank five athletes reported falling asleep. To doze off at times was considered relaxing and pleasant by the athletes. But Kate, who slept through most of her first floating sessions, had expected and hoped for a more active relaxation where she would still be conscious. During her last floating sessions she was more awake, but at first she was somewhat disappointed:

The first times I just fell asleep directly [...] and snored loudly, and that didn’t feel so amusing. [...] Sleep, that you can do anywhere. So I felt a bit sad that I didn’t really make use of that I was lying in this tank, floating with the right temperature and everything. I had all these possibilities, and I just slept.

The five athletes also described how they kept falling in and out of consciousness. Ashley said: “I sank very deep. I almost dozed off at times. [...] I’m more awake and then I disappear again, and then that repeats.” How often they dozed off was hard for them to tell. Ella recalled the feeling of not really knowing if she had been sleeping or not: “I woke up even though I thought I wasn’t sleeping.”

David, on the other hand, did not sleep during his floating sessions but remembered being very relaxed:

I never reached the point where I fell asleep like some have said that they have. I just became very relaxed. But it felt like the time passed a lot quicker than it did. So I don’t know if I was away for a little while, maybe. But it was very nice.

At times, David struggled with relaxation in the tank as he sometimes experienced the temperature to be too warm after a while and also found himself having difficulties relaxing that long a period of time. He said that he often was relaxed physically while floating, but it was harder psychologically to not think about the drops of sweat on his forehead. He enjoyed flotation-REST to one extent but not fully, he explained:

It is nice to lie there. [...] You do look forward to it a bit. But it’s just that it has been a little too long time, for me at least, and I’ve gotten warm. That’s the only thing that has made the last 20 minutes not so enjoyable.

Still, David worked hard to relax but it did not get any better and he said that he maybe tried too much:

The first times, I felt heavier and it was more pleasant [...] But then, the last times, I’ve started to feel and think too much maybe, because I wanted to become more and more relaxed, but it just didn’t get any better.

3.2.3. The physical experience. All athletes experienced flotation-REST as positive physically. They quickly became relaxed physically and felt comfortable lying in the water, even though it took some time for Lauren and Kate to get adjusted. Depending on how they put their arms for example, over their head or not, they moved around a little in the tank. Floating in itself was a new experience for the athletes and they enjoyed the feeling of

weightlessness. It was a special experience not feeling the line between water and air. Jennie expressed: “The contours are not there, so that was a very cool feeling too, that you sort of. There was no water or air, it was just very, floating.”

Ella and Kate experienced twitches, or “discharges” like Ella called them, in their legs on some occasions while floating in the tank. They did not know the reason, if it was related to physical training or not, but believed that it might be because they were very relaxed physically. The twitches often came as a surprise and stirred up the water. Kate told of her twitches: “I still remember it like it was yesterday. I jerked awake, and I just ‘slosh’ and then a big hurricane, storm. It was a little bit scary, but still quite nice.”

3.2.4. Thoughts in the tank. The amount of thoughts the athletes had while floating differed widely. Kate, Ashley and Lauren did not experience a lot of thoughts whereas David, Ella and Jennie reported thinking a lot in the tank. Still, all of them had the same experience that it was hard to control their thoughts and that they suddenly and unexpectedly could come to think about practically anything. Lauren described this: “Some songs have just popped up and I’ve realised ‘Oh, I’m lying here singing.’” However, many thoughts were related to recent experiences in the athletes’ everyday life, the actual floating experience, relaxation or their sport as Jennie expressed: “You can’t control what you think about. It just comes a lot of thoughts. [...] It was all sorts of things. But it was a lot of track and field and learning how to relax.” She further told about how the thoughts shifted and that she used imagery:

At first I was just lying there, thinking about how cool it was that I was floating. And then I started to think about track and field and that I should be as relaxed as I was in the tank. And then I tried to picture a successful competition and that I was relaxed like that. Then I just floated away in my mind. [...] I woke up by the music in the end. And then I was thinking that I was out in the middle of the ocean, floating. That was very nice [...] it was like freedom.

The athletes experienced it to be relaxing and enjoyable not having to think about anything special. Before they started with flotation-REST they had been told to try to let go of thoughts that came which everyone attempted. Ashley described how her thoughts just came and went again: “You do have thoughts, but they just float away, so I don’t think about that, that I’m lying there thinking. Instead I relax and let the thoughts come and go. [...] That was very relaxing.” But it was not always easy to just let go of the thoughts that came and

sometimes having a lot of thoughts became stressful. After a very relaxing first floating session Jennie looked back on her second and told of what she had learned:

I realised that it's very easy to fall back to feeling stressed even while I was in the tank. Because, the second time, I thought about the lights being on and I got saltwater in my eyes. So I was thinking a lot and then I became a bit stressed.

Besides the tip on how to deal with a lot of thoughts, the athletes received breathing and counting exercises at the beginning to help them focus and relax. They tried the exercises and for most parts it helped as Lauren expressed: "I've tried to count [...] one and then breath, and two. I've tried that most of the times and that has worked [...] It's easier when I do that, I think, than just lying down, wondering when I'll relax." Focusing on the breathing was also helpful for Kate, even though she had forgotten the actual exercise:

The first times we received that, like tips on how we could think about breathing and so [...] but I didn't remember how you were suppose to do, so I made something up myself and thought "this is good". And it worked, so I guess it was fine.

Some thoughts, while floating, were also connected to internal or external sounds. Jennie and Lauren especially talked about how the sounds of their own heartbeat and breathing became very strong. Lauren even got a bit annoyed at one point: "It pulsates. It's scary when you hear just how. I think that can be quite disturbing when you lie there, trying to relax, and you hear." The external sounds, which four athletes particularly mentioned, were from the corridor outside or the rooms nearby. They registered the sounds but did not get disturbed by it, as Ella explained:

It sounded like they were doing something on the floor above and I thought "I wonder what they are doing?" But it wasn't like, I didn't get irritated or anything. It was more "oh, well" [...] and then I was able to relax again.

3.3. Perceived Effects of Flotation-REST

After the floating sessions all athletes experienced some effects during the following hours or days, though the extent varied. Two categories emerged: Physiological effects, and Psychological effects.

3.3.1. Physiological effects. The first hours after flotation-REST all athletes experienced a positive and more relaxed feeling physically. They felt loose in their muscles and rested. Ashley said:

The feeling in my body was very nice [...] I felt just more relaxed. And very pleasant physically, light and relaxed sort of. More alert in some way, directly afterward [...] like I'd been sleeping for a long time and just starting to wake up. Very very nice.

But it was also often a mixed feeling with being a little tired and feeling heavy in their bodies, but still a good sensation as Lauren expressed: "I'm tired in my body. Or tired, you're relaxed [...] like you've just woken up, a bit tired. No, but I don't know how to explain it. It's a nice feeling." Jennie also said: "I experienced a tired feeling in my body, in the muscles in particular. It wasn't like I felt energized and alert physically. It was more, you know, tired and heavy." Further, the perceived physical effects differed from time to time and the athletes also believed that surrounding circumstances affected the experience, for instance depending on whether they had practice prior to flotation-REST or how they had slept the night before.

For the most part the athletes had their floating sessions in the morning and then track and field practice in the afternoon. Five athletes reported often feeling tired at the beginning of their work-out and that their bodies did not respond as they were used to. David was the only one who did not experience any effects during the rest of the day. He stated: "The first times I felt a bit heavy physically when I got out of the tank. But that passed pretty quickly. [...] It hasn't affected me the rest of the day, after any of the sessions really." But the five female athletes described feeling tired and drowsy several hours after flotation-REST. Ashley described it:

I was tired the whole day. I was a wreck when I got home. I was really tired and just had to lie down and sleep for a while. And then we had practice [...] I woke up more at the end of the practice [...] but at first, then I was really tired [...] mentally but also physically. I think it was because I had a hard time getting my energy up like usual, because I was rather relaxed.

Lauren also recalled feeling very tired at practice once after a floating session, but at other times she did not feel anything special:

I was completely exhausted the first time. The whole day was ruined. I was suppose to go to practice later but “no, it won’t work”. But then it has gotten better and better, I feel. The last time I wasn’t at all as tired. Then it worked, then I was. Yes, then everything went fine. So I think it was only a shock for the body to relax.

The female athletes all experienced that the perceived physiological effects of flotation-REST lasted at most a day. The tired feeling usually went away during practice or later the same day. Ella said: “One day after I could feel a bit tired in the muscles sort of, or that they didn’t really respond the way I wanted to.”

Besides external factors, from their everyday life, the five female athletes also believed that expectations and raised awareness affected the perceived physiological effects. After flotation-REST they reflected more on how they felt physically, as described by Kate: “When I get to practice I’ve really checked how I’m feeling and the coach has asked: ‘Well, how do you feel in your body now?’ And then you’re like ‘how do I actually feel?’” Ella also talked about how she afterward gave it a lot more thought, but still tried to perform as usual at practice: “I’ve certainly analyzed it, quite a bit, like ‘Am I more alert? Am I more tired?’ [...] But when I had practice, I still tried not to think about it and let it affect me.” But it was not only the athletes themselves that had expectations of possible physical effects. Jennie described how their coach had spoken to them after flotation-REST: “We had intervals the day after and then our coach said to us ‘You might feel a little tired now during the intervals.’ But I don’t think I felt anything.” At track and field practice all athletes told that they had sometimes mentioned or discussed flotation-REST with their coach as well as compared experiences with the other athletes. At times they were also just curious, as expressed by Lauren: “We’ve just asked each other if it went fine. That’s about it. We asked if someone had experienced any strange thoughts or what you were wearing or if you were not wearing anything.”

3.3.2. Psychological effects. Directly after flotation-REST all athletes perceived positive effects psychologically. They felt great and experienced a pleasant relaxed feeling overall. At times they were so relaxed afterward that they felt tired, but mostly they felt rested and alert. Lauren explained the feeling after her floating sessions: “I’ve been pretty vigorous. For once, I was about to say. No, but mentally it feels so much better then before I go into the tank. I feel more vital.” Ella also described this: “I become calmer. It just feels better. That’s probably the biggest difference I’d think.” And Ashley felt she was: “pretty clear in my head.

Very easy, you're just mmm...relaxed in a good way. It's hard to explain. Very content sort of, and really relaxed."

Four of the athletes, Ella, Lauren, Kate and Ashley, perceived psychological effects for two days after flotation-REST. Jennie experienced effects for one day after the floating sessions and David only for a few hours. When comparing the tired physiological feeling and the relaxed psychological effect Lauren said: "The tired feeling disappeared pretty quickly. But the relaxed feeling was there for at least two days." David described the effects as relatively minor compared to the other five athletes. These five athletes reported feeling considerably calmer and less stressed after flotation-REST, and with a hectic daily life this was much appreciated. After a floating session one early Monday morning before school Kate said:

It feels good. It feels like I've slept for like 12 hours and have a peaceful day ahead of me, a Saturday or something. And it feels pretty slow. I wonder if you get into a different frame of mind all day [...] it does feel hard to rush afterward. [...] It feels nice. It's not exactly usual for me to just chill out and take my time.

The five athletes further experienced reaching a tranquil state after flotation-REST as illustrated by Ella: "You just 'Yes, now I've entered the calm'" While feeling less stressed and worried Lauren perceived fewer demands in her daily life:

I don't have the same demands on myself as I did before I went into the tank. Somehow I've managed to disconnect from that. [...] You just don't have the energy, no, to stress. So that's really good. [...] For me it's different actually. You become calmer. I at least become calmer. [...] I don't think about everything I have to do, or, things I in fact don't have to do but. [...] I'll deal with it when I need to. I don't know how to explain it otherwise. More in harmony.

Further, Kate and Lauren reported feeling more content on the whole after flotation-REST. They were more focused and present in their lives and Kate explained how she also became more attentive:

When I walked out of there I just felt very calm [...] I was more aware, and I really saw things. Before, well, then I was just walking by. But I think I get a bit more attentive

[...] like, Carpe Diem, and really try to live the day fully. [...] I've probably not been as stressed as I usually am.

Kate also noticed a change in her mood after the floating sessions. She felt more joyful and optimistic. She stated that she was:

Feeling happier. That's probably it. And that's related to the fact that I feel that I'm more attentive to things, and I enjoy everything a little bit more also [...] I become more positive towards just everyday things [...] yes, a little happier and more positive.

Ella also felt more energized after the floating sessions and as if she had more resources to take on the day:

I have this calm feeling. And well, I do believe that you have some more strength to handle the things you need to do later. At the same time I don't feel so ready for practice [...] I just want to continue taking it easy.

Directly after flotation-REST Kate also reported that she experienced time differently. She explained:

It feels like I'm living in slow motion, kind of. Because I feel like I do everything as usual, but still time passes very quickly. For example, when I showered [...] 15 minutes, just like that. Felt like five minutes. [...] That was the same after every session, I think. I felt like I didn't keep up with time.

Further, the five female athletes believed that the perceived psychological effects, as for the physiological effects, also were affected by other circumstances and their own expectations. After a floating session they felt pleased by the thought of having invested time in relaxation as they believed it to have positive effects on their lives as well as their sport performance. Kate described this:

When you've actually taken the time, you feel "now I've done something positive, now everything will be good" and then it gets good and it builds on and becomes this wonderful spiral of it all. That's what I think.

These positive thoughts about flotation-REST were believed to be an influential factor. And Kate continued: “I think it’s more mentally. That you believe that you’ve actually restored the energy, and then your outlook is ‘now I’m rested, now it’s all good’. And that helps you perform better later at practice.” On the whole, the five athletes experienced more psychological effects of flotation-REST and longer-lasting than physiological effects. Ella said: “It’s more that you become rested mentally, than rested physically.”

3.4. Views on Flotation-REST

Unanimously the athletes considered flotation-REST to be most suitable during preparatory training when the training load was high, the muscles needed relaxation and they could afford feeling a bit tired physically after the floating sessions. They all linked flotation-REST with needing physical relaxation and recovery. During competition season they did not want to risk anything. Ashley said:

It’s probably during very hard training that it would be a good complement, to be able to relax and recover. Because it is when you’re resting that you get the full benefits of hard training, so that’s when I think it would be most effective.

All athletes were satisfied with how the flotation-REST had been conducted, but would welcome more guidelines on how to relax further. David, who sometimes had a hard time relaxing in the tank, said: “It’s sort of hard to relax generally. Maybe it had been nice to get some even better tricks.” The athletes were also interested in combining other psychological skills training techniques, e.g., imagery and mental preparation, in connection with flotation-REST in order to evolve and develop psychological skills.

In the end, all athletes appreciated the flotation-REST experience and were glad to have been given the chance to try it. Even though the experiences and effects differed among the athletes all of them had a positive attitude towards flotation-REST and believed that it could have positive effects on people. With the exception of David, who was unsure whether flotation-REST suited him, the other five athletes directly said that they were interested in and open to using flotation-REST again in the future. Kate ended her second interview with the positive statement: “It’s been a fun time. I’ve actually appreciated it.”

3.5. Summary

In the summary (see Table 3), the themes and categories are listed together with the main sub-categories, and for each respondent it is shown whether that sub-category was found in their case. The results of Views on Flotation-REST are directly presented as sub-categories.

Table 3

Summary of main results

Themes	Categories	Sub-categories	Ashley	David	Ella	Jennie	Kate	Lauren
Meaning of fl.-REST	Relaxation	Fl.-REST meant relaxation	X	X	X	X	X	X
	A breather in the daily life	Fl.-REST meant a breather in an otherwise hectic life	X		X	X	X	X
Experiences during fl.-REST	The overall experience	Felt safe and enjoyed the experience	X	X	X	X	X	
	How time was spent in the tank	Fell asleep in the tank	X		X	X	X	X
	The physical experience	Positive and relaxing experience	X	X	X	X	X	X
	Thoughts in the tank	A lot of thoughts		X	X	X		
Perceived effects of fl.-REST	Physiological effects	Physically tired at practice	X		X	X	X	X
		Psychological effects	Felt less stressed and more calm	X		X	X	X
		Increased well-being	X		X	X	X	X
		Effects for one or two days	X		X	X	X	X
Views on fl.-REST		Positive attitude toward fl.-REST	X	X	X	X	X	X
		Interested in having more floating sessions	X		X	X	X	X

Note: Fl.-REST = Flotation-REST. "X" means that the result was found in that respondent's case.

4. Discussion

The present study examined junior and first year senior track and field athletes' experiences and perceived effects of flotation-REST. All six athletes considered the floating sessions to be relaxing and pleasant, similar to previous research in flotation-REST (Kjellgren et al., 2008). During the floating sessions the athletes used counting and breathing exercises to help them relax, and five athletes reported feeling so relaxed that they fell asleep. Three athletes described having a lot of thoughts during the time in the tank. Circumstances, in the athletes' everyday life, affected the content and amount of thoughts as well as how relaxed they felt. Previous research has also shown that the surrounding situation affects the experience (Kjellgren et al., 2008). Further, the findings revealed that when thoughts were distracting, all athletes tried to accept them and let go of them in order to relax again. An important method for performance enhancement and reduced anxiety and stress is mindfulness, which means being present to and non-judgemental for one's own experiences in order to end worrying about negative thoughts and feelings (Gardner & Moore, 2004). Flotation-REST could therefore be a way of becoming more aware of one's thoughts and with that be a method of practising mindfulness. Practising mindfulness has also shown to be important for better goal attainment (Brown, Ryan, & Creswell, 2007), which in turn is valuable for sport performance and reduces the risk of burnout (Gustafsson et al., 2010).

Moreover, research has shown increased awareness and well-being through mindfulness (Brown et al., 2007). Similarly, three athletes reported feeling more vigorous and attentive the following days after flotation-REST. They enjoyed little things in their everyday life more and experienced raised awareness and appreciation of their surroundings. Placing positive meanings and emotions into ordinary everyday events is a successful coping strategy for stress (Folkman & Moskowitz, 2000), and for these athletes flotation-REST seemed to have this effect on them. These results further confirm flotation-REST as a method for stress management which supports findings in previous studies (Bood et al., 2006; van Dierendonck & Nijenhuis, 2005).

During the following day after flotation-REST five athletes felt relaxed and tired physically, which is consistent with previous research (Kjellgren et al., 2008). The five athletes further described that they felt slow during track and field practice, and sometimes performed below standard. The athletes also reported that they reflected more on how they felt at practice after flotation-REST. Flotation-REST had raised their awareness, not only for their perceived health but also in general about physical training and recovery as well as PST. Greater awareness and focus have shown to be essential for well-being (Brown et al., 2007)

and are important skills among successful athletes (Gould et al., 1999b). Further, the findings revealed that their coach at one point had said that they might feel a bit tired physically. So if these results are caused by the actual flotation-REST experience or expectations is hard to tell, even so for the athletes, and further research on the topic is required.

The results revealed that the psychological effects were perceived as more positive than the physiological, according to five of the athletes. Positive psychological effects were consistent throughout the experiences of the five athletes and also more long-lasting than the physical. For up to two days after flotation-REST, the five athletes experienced increased well-being. They felt less stressed and less likely to become stressed. Placing fewer demands on themselves, being in a better mood, and becoming more optimistic and present were also mentioned by the athletes. These are all important factors for preventing emotional and physical exhaustion in sports and flotation-REST could therefore be a valuable method for reducing stress and with that the risk of burnout (Gustafsson et al., 2011). Burnout is often also due to inadequate recovery (Meeusen et al., 2006), and through less stress, as an effect of flotation-REST, the recovery could be more effective and sufficient which enables endurance of high training loads. The five athletes also felt more energized, calm and relaxed in their everyday life. Positive effects on well-being have similarly been reported in previous studies on flotation-REST (Bood et al., 2007; Bood et al., 2006; Kjellgren et al., 2001; van Dierendonck & Nijenhuis, 2005) as well as concerning other relaxation techniques (Kjellgren & Buhrkall, 2010; McCallie et al., 2006). Experiencing positive emotions and happiness is directly related to psychological well-being and important not only to health (Diener, 2000), but to successful performance in sports (McCarthy, 2011).

In the summary, table 3, it is clear that the five athletes that experienced long-lasting effects of flotation-REST, also reported that they at times felt stressed in their daily lives. For these athletes the floating sessions became a well appreciated break in an otherwise hectic life. In the summary we can further see that the one athlete who did not experience any particular effects, physical or psychological, also did not feel as relaxed in the tank as the other athletes. In addition, he described himself as calm and not stressed as opposed to the other five. Whether these results depend on circumstances in his everyday life, his already calm personality, or that flotation-REST just did not suit him is hard to tell. Although, as he and the interviewer discussed, minor adjustments, for instance lower temperature in the tank, might affect his flotation-REST experience. The different results among the athletes are however of interest and further research is needed in order to learn more about possible connections and when flotation-REST is most effective.

Although all athletes for the most part enjoyed flotation-REST and felt relaxed during the time in the tank, three athletes reported experiencing negative emotions on some occasions. They described for instance feelings of claustrophobia and fear of water. The qualitative approach used in this study made it possible for these results to surface, and these findings might indicate why flotation-REST does not always yield a significant positive effect (Norlander et al., 1999).

When the athletes talked about when they would prefer flotation-REST they all discussed it in connection with physical training and physical relaxation during preparatory training, this despite the fact that five athletes experienced more psychological effects than physiological. PST is often integrated with physical training, and much work is preferably also done during preparatory training to receive the best effects (Holliday et al., 2008). This means that the athletes' suggestion could work well also for PST, for instance relaxation, mental preparation, and anxiety management. But considering that the athletes did not work systematically or regularly with PST and primarily worked with physical training, they probably did not consider the psychological effects as much and therefore mainly thought about physical relaxation, when they answered the question.

Furthermore, all athletes showed an interest in relaxation and other psychological skills training techniques. The five female athletes wanted to work more with PST and they described a great need for it. In order to perform at one's highest potential and get the full benefits from high physical training load, PST has shown to be important (Gould et al., 1999b). In previous research, athletes in physical non-contact sports like track and field have also expressed a positive attitude towards PST (Martin, 2005). But as expressed by the athletes in this study they had limited knowledge of PST and also experienced little support from coaches, though a reason for this was hard to pinpoint. However, coaches in previous studies have reported a lack of sport psychology training but an interest in learning more about it (Gould, Damarjian, & Medbery, 1999a; Klockare, Gustafsson, & Nordin-Bates, 2011; Williams & Kendall, 2007). Further, the female athletes were well aware of their performance anxiety or lack of focus at competitions, for example, but did not have the tools to work with it. They expressed that they at times were stressed and nervous both at competitions and in their daily life, and did not perform to satisfaction. Experiencing school demands, anxiety, lack of recovery as well as poor results are all factors related to exhaustion that eventually could lead to burnout (Gustafsson, Hassmén, Kenttä, & Johansson, 2008), which would make relaxation and PST in general, an essential intervention (Hollander & Meyers, 1995), not only

valuable to these athletes regarding their sport performance but also important for their well-being.

4.1. Limitations

For this study there are some limitations to consider. The respondents were all elite track and field athletes with minimal experience of other relaxation techniques, and so athletes from other sports with other experiences might have given different answers. Several of the results were however consistent with previous research in the field of flotation-REST. The number of floating sessions differed among the athletes, but it was deemed relevant and important to also include athletes who had only used flotation-REST a few times as they too held information on the subject. There did not seem to be any significant differences depending on the number of sessions, but more sessions might affect the outcome. Conducting additional “first interviews” with each respondent after different sessions might also add to the understanding of the flotation-REST experience and could be of interest for future research. With interviews there is also the risk that respondents want to give overly positive answers, especially in studies like this where the interviewer was connected to the project in which they used flotation-REST. But considering that one athlete clearly stated that he did not experience any special effects as well as the open, straightforward and spontaneous answers they all gave indicates that they were sincere. Further, since they did not have much previous experience from other relaxation techniques or of flotation-REST, they had no clear expectations of the flotation-REST experience and its effects.

4.2. Conclusion and Practical Implications

In conclusion, the present study has retrieved in-depth information on athletes' experiences and perceived effects of flotation-REST. IPA made it possible to explore the respondents' experiences and understandings in detail. As previous research on flotation-REST, mainly on individuals with health problems, has shown, the respondents felt increased well-being and less stress after flotation-REST. The present study then shows the potential of flotation-REST as a technique for health promotion and also as a method for stress management in order to prevent burnout among athletes. The findings also point toward flotation-REST being a useful way to practising mindfulness. Further, the results showed a raised awareness of the significance of relaxation and psychological skills in sport performance and daily life which therefore could make flotation-REST valuable together with other psychological skills training techniques and the physical training. However, the results revealed considerable differences in the athletes' perceived effects of flotation-REST which

indicate the importance of individualized training and recovery programs, and also further research on the topic.

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Appendix A – Informed Consent

Consent to participate in a study concerning experiences of flotation-REST

Research group: The study is conducted by Ellinor Klockare (ellinor.klockare@gmail.com), project leader, who is currently pursuing a MSc in Sport Science at The Swedish School of Sport and Health Sciences in Stockholm. During the spring of 2011 she is doing her Master thesis. The study is conducted at Karlstad University with Henrik Gustafsson (henrik.gustafsson@kau.se) as supervisor. Connected to the project is also Henrik Bergman (henrik.bergman@kau.se) at Karlstad University, who is in charge of the flotation-REST tanks.

Purpose: The purpose of the study is to examine junior and first year senior athletes' experiences and perceived effects of flotation-REST, including both the immediate response and experiences over time.

Procedure: Two interviews are conducted with each track and field athlete concerning experiences as well as immediate and long-lasting effects of flotation-REST. The first interview is conducted directly following a floating session, focusing on the immediate responses to flotation-REST. The approximate time for the first interview is 15-20 minutes. The second interview, which does not have to be in connection to a floating session, lasts for about 30 minutes and focuses on the overall experiences and perceived effects of flotation-REST. Both interviews are recorded. Participation is voluntary and you can withdraw from the study at any time.

Process concerning the results: All data will be decoded and presented anonymously in the thesis. The main focus of the results will be on how a group of track and field athletes experience flotation-REST and the perceived effects. Transcript extracts may be used to support the argument being made in the results section. Member checking will be performed where each respondent receives a copy of his or her transcripts and has the opportunity to make corrections, clarifications and additions.

With my signature I consent to participate in the study, but I am aware of my right to withdraw at any time. I have read the above information, received a copy of the informed consent, as well as had the opportunity to ask questions.

Signature

Date

Clarification of signature

(Filled out by the project leader) With my signature I certify that I have explained the process of the study and its purpose for the participant.

Signature of project leader

Date

If you have further questions please contact:

Ellinor Klockare (project leader): e-mail: ellinor.klockare@gmail.com, tel: 076-7812244

Appendix B – Interview Guide: The First Interview

Interview guide: The first interview

How do you feel right now, directly afterward? (Physically, psychologically)

How did you experience today's floating session? (Physically, psychologically)

What kind of thoughts did you have?

How did you experience today's floating session in comparison to previous floating sessions?

Afterward, how long do you usually experience effects?

Appendix C – Interview Guide: The Second Interview

Interview guide: The second interview

During flotation-REST

- How have you experienced flotation-REST? (Physically, psychologically)
- What kind of thoughts have you had?
- Did you receive any exercises to do during flotation-REST?
If not, how did you use the time?

Directly after flotation-REST

- How have you felt directly after flotation-REST? (Physically, psychologically)
- Did you experience any differences right before and after the floating sessions? (E.g., more or less relaxed?)
- What feelings did you have afterward?
- Thoughts afterward?

Long-term effects

- How did you feel during the day, after flotation-REST?
- Did you have practice the same day?
- How did you feel at practice?
- Have you noticed any differences in the experiences depending on the type of practice?
- Do you perceive that flotation-REST has affected your well-being? (How?)
- How long afterward do you usually perceive the effects?
- Have you noticed any changes in the effects after more floating sessions?

Have your experiences of flotation-REST changed, if you compare the different floating sessions? (The experience in the tank, experiences afterward)

Previous experiences of other relaxation techniques

- Have you previously worked with other relaxation techniques?
- Do you work with any other relaxation techniques today?
- Do you work with any other psychological skills training techniques?

What has flotation-REST meant to you? (Have you seen it as a part of your training regime?)

Have you talked about your experiences of flotation-REST with anyone? (E.g., coach, other athletes)

When would you prefer flotation-REST?

What do you think you have gained from flotation-REST?

Would you like any changes in the flotation-REST procedure?

Would you like more tips and exercises in connection with flotation-REST?

Any additional comments or concerns?

Appendix D – Information Retrieval

KÄLL- OCH LITTERATURSÖKNING

Syfte och frågeställningar: Syftet med den här studien var att undersöka junior- och första års senioridrottarens upplevelser och upplevda effekter av flotation-REST, inkluderat både deras omedelbara respons och upplevelser över tid.

Vilka sökord har du använt?

Ämnesord ex.: Flotation-REST, restricted environmental stimulation technique, relaxation, well-being, sport, junior, youth, senior, transition, IPA, interpretative phenomenological analysis, health, psychological skills training, mental training, mindfulness, performance
Författare ex.: Smith, J. A., Gould, D., Benson, H., Gardner, F., Moore, Z.

Var har du sökt?

SportDiscus, PsycINFO, ERIC, PubMed, Karlstads universitets biblioteksdatabas, Gymnastik- och idrottshögskolans biblioteksdatabas, samt i ex. Taylor & Francis Online och Human Kinetics Journals och direkt på hemsidor för tidskrifter som ex. Journal of Applied Sport Psychology, Anxiety, Stress & Coping, Journal of Sports Sciences och The Sport Psychologist.

Sökningar som gav relevant resultat

Ex.
SportDiscus: flotation-REST
PubMed: flotation-REST
SportDiscus: IPA and health
Journal of Applied Sport Psychology: Gould
The Sport Psychologist: junior transition

Kommentarer

Har även hittat en del artiklar genom referenslistor i artiklar, läst tidskrifter och kapitel i böcker, samt fått artiklar av min handledare och avhandlingar av en doktorand inom ett flotation-REST-projekt.