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RESEARCH ARTICLE

THE FRAMING AND GENDER DIFFERENCES IN THE RELEVANT COMPETITIVE EMOTIONS OF YOUNG SWIMMERS

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ABSTRACT

The aim of the study was to identify the intensity and influence of emotions that occur during the competitive period of National Children's Championships and verifying the gender differences in the observed emotions. Eighty-nine young swimmers of both sexes participated, and were evaluated by the Questionnaire on Emotions in Sports Performance (EQSP – Portuguese version). Pearson's correlation revealed mutual dependenciesin Intensity and Influence of Anger, Anxiety, Fear, Sadness, Pride and Love emotions ($p \leq 0.05$). In the gender analysis there were no significant differences in swimmers. It was concluded that emotions are an important factor in sports performance, which are happening throughout the competition and depending on each individual and each sport context. There should be an intervention to apply emotional control strategies to young athletes, and thus benefit their daily practice.

INTRODUCTION

Psychological factors and processes are identified as predictors of performance (Ali, 2010; Hanin, 2000; Holthausen, 2016; Lane, 2005; Martinent, 2015; Maxwel, 2004; Nideffer, 1991; Ponnelle, 2012; Robazza, 2004; Robazza, 2007; Yeh, 2016). Emotions are psychophysiological reactions, which represent effective ways of adapting to environmental, contextual and / or situational changes. Emotions induce behaviors and are expressed in different ways according to social experiences, cultural and their own personal experiences. The relationship of emotion to sport is evident and striking, any occurrence will have consequences on the behavior and actions of the sportsman. Emotions arise when situations that occur or that are about to happen are considered important to individuals (Woodman, 2014). Uncontrolled emotions can transform any act at an inopportune and forgettable moment. They allow a person to establish his / her position regarding the surrounding context. Emotions arise and operate in a complex and multifaceted context, sport performance can be improved if we understand that emotions integrate a system of multiple interdependent variables in a combined and / or simultaneous (Dias, 2010). The idea that individuals can respond with different emotions to the same situation depending on how the event is assessed is one of the central features of much of the theories of cognitive evaluation of emotions (Woodman, 2014).

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That's why, probably, emotions receive great attention from our society, from scientific research and in particular from Sports Psychology (Latinjak, 2014). We should consider emotions as positive or negative or, in another perspective, as debilitative or facilitative of performance depending on the individual, gender, the context in which the action unfolds, and that emotion has a distinct influence on performance (Yeh, 2016).

The Intensity and Influence of Emotions

The Intensity of emotion is difficult to code due to its nature. However, the calibration of emotional experiences becomes more challenging as emotions become more intense (Yeh, 2016). There are several fields in which familiarity of events increases emotional intensity regardless of the valence of emotions (Ali, 2010). In the competitive context, the athlete's emotional intensity must have a functional effect on his or her sporting performance in order to create the appropriate emotional intensity to obtain the best sports performance (Martins, 2012). Influence of emotions will be the effect it exerts on the individual and that may or may not change the development of their behavior. In a cross-country study, emotions explained fifty-three percent of performance subjectivity and may still explain the negative influence on sports performance (Moen, 2015). Given the great influence of emotions on performance, one should seek to develop strategies that allow a meaningful analysis of emotion / performance relationships (Campo, 2016). It´s important to realize the impact of emotions on performance, to provide a

theoretical and practical basis of knowledge and development for a new performance (Séve, 2006), however what works for most individuals can be harmful or even dangerous and neglected in an individualized way (Dias, 2011). Athletes express more their emotions after the events than during them (Tamminen, 2014). If emotions influence performance and play such an important role, it is imperative for athletes to identify and know which emotions are beneficial or harmful to them, increasing or decreasing their influence, controlling emotions to improve performance. Cognitive functioning seems to be predictive of performance quality, it was found in a study of the best ultra-rail corridors that they have a better ability to inhibit motor responses and irrelevant distractions and are less influenced by emotional motivation (Cona, 2015). Thereby, the individual initially needs to know how to act according to the situation, the perception and understanding of the "sporting moment" will help him in the accomplishment of the task.

Gender differences

Men and women over the ages have tried to blur the differences between them. The evolution of society and civic movements has reinforced the role of equality, but certain differences will remain and are determinant in various contexts. The research reports differences in sport performance, revealing that they occur due to physiological differences (Zing, 2013), however in certain studies there are minor differences between genders in certain sports modalities and segments (Cejuela, 2012 and Etter, 2013), or with increasing sports distances (Etter, 2013), with increasing sports age there are no differences in the ages of the best sports performances (Fladung, 2015), Coordination is similar among individuals of different gender, the maximum strength up to 12 years old is equivalent for both sexes, increasing in men by about 2/3. Women have greater flexibility; their resilience is lower because of their lower cardio-respiratory capacity as well as their speed given to a lower testosterone rate. Gender differences in factors such as emotions are due to socialization that tends to develop the attention of the understanding of feelings in others (Reina, 2015), in certain performances can be modeled and dependent on emotional regulation and in the performance of comprehension, speed and recognition of emotions (Holthausen, 2016). Women benefit more from social emotional regulation because they seek more social support than athletes of the opposite gender (Tamminen, 2013). In a study carried out with teenagers, there were differences in the relations of emotions, these differences could be due to educational and social aspects, at the family and cultural level (Reina, 2015). In another study, individuals of the female gender would have greater perception, being more sensitive to recognize the emotions than the male subjects, but at younger ages the differences would be lower (Molinero, 2015). In certain emotions such as Anxiety, women presented higher values than men, but at younger ages, there were not great differences between genders (Gomez, 2016). however in a study with young swimmers (Spanish club) there were differences in values of Anxiety (Ponseti, 2016). If we are able to notice in some cases the differences between genders, in others, the differences between men and women are not clear. Understanding emotions in sports performance is inconclusive. Emotions are present throughout our lives, and with special importance in adolescence, a greater knowledge of relationships, understanding and regulation of emotions will be positive for the development of teenagers (Reina, 2015). The aim of this study is to identify the emotions that appear most frequently in a national sporting event of young swimmers and to verify the differences that exist between the genders.

MATERIALS AND METHODS

Sample: Eighty-nine swimmers from the National Children's Championship, aged between eleven and fourteen, with more than two years of competitive experience participated in this study. Of these, fifty-eight female swimmers with a mean age of 11.83 years (SD = 0.67) and thirty-one male swimmers with a mean age of 13.10 years (SD = 0.66).

Instrument: The Emotional Questionnaire on Sports Performance (EQSP - Portuguese version) [23] was used to evaluate the Intensity and Influence of emotions. The questionnaire has 15 items (15 emotions - 8 negative emotions and 7 positive emotions) with two scales that evaluate the intensity of the emotion (score with a minimum of 0 that corresponds to the absence of the emotion and the maximum of 9 corresponding to the maximum intensity of the emotion. (The score ranges from -4 to +4, the negative values correspond to a negative influence and the positive values to a positive influence). The athlete identifies the intensity of the emotions and their influence on the sport performance during the competitive context. The fifteen emotions under analysis are anger, anxiety, fear, guilt, shame, sadness, envy, jealousy, joy, pride, relief, hope, love, gratitude and compassion.

Procedures: The questionnaire was distributed at the beginning of the National Children's Championship, with the authorization of the parents and coaches so that the young people could respond, as was ensured the confidentiality and anonymity of all data collected. All subjects gave their consent prior to participation.

Statistical Procedures: Observations of values were expressed as means and standard deviation. Pearson's Correlation was used to examine the interrelationship between Intensity of emotions and Influence of emotions. The Anova One-way test was used to test gender differences in Intensity and Influence of emotions.

RESULTS

The emotions' analysis that are considered most important for swimmers, in this National Championship, presented in table 1, allows us to identify the following emotions, such as those that have the most correlations in Intensity of emotions: Anxiety, Sadness, Pride and Love. Anxiety can monopolize psychic activities and compromise, from attention to memory, to a faithful interpretation of reality. The Emotion Sadness occurs when the person has a dislike, when he fails to achieve a certain goal, when he expresses discouragement or frustration before something or someone. The Pride emotion tends to refer to the appreciation of oneself or someone close to them, feeling good about themselves or their social value. The emotion Love can be considered as a set of behaviors and attitudes, unconditional, disinterested and the desire of the reciprocal affection for another person. It is verified (Table 1) that in Intensity, negative emotions are related mainly to negative emotions. Just as positive emotions relate to positive

emotions, with the exception of the Love emotion that relates to both positive and negative emotions. In Table 2, in the Influence of emotions, emotions correlate positively with all of nature (So, 2016). It is verified (Tables 1 and 2) that the emotions in Intensity and Influence follow a guideline of uncertainty and perception in the importance of the moment.

Table 1. Pearson's Correlation in Intensity of Emotions

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1-Anger	1													
2-Anxiety	,321**													
3-Fear	,393**	,385**												
4-Guilt	,418**	,378**	,563**											
5-Shame	,355**	,210*	,461**	,555**										
6-Sadness	,597**	,335**	,517**	,690**	,639**									
7-Envy	,177	,226*	,539**	,463**	,522**	,405**								
8-Jealousy	,205	,097	,397**	,493**	,395**	,467**	,524**							
9-Joy	,120	,134	,022	,115	,074	,162	-,002	,113						
10-Pride	,120	,129	,053	,114	,115	,194	-,024	,167	,666**					
11-Relief	,253*	,313**	,164	,190	,111	,217*	,082	,285**	,486**	,449**				
12-Hope	-,020	,304**	,099	,038	-,115	-,008	-,025	-,023	,348**	,265*	,332**			
13-Love	,057	,341**	,399**	,261*	,276*	,251*	,228*	,233*	,435**	,456**	,293**	,288**		
14-Gratitude	,145	,279**	,233*	,154	,100	,288**	,091	,160	,432**	,487**	,415**	,326**	,581**	
15-Compassion	,060	,261*	,212	,194	,125	,216*	,131	,124	,333**	,391**	,350**	,283**	,665**	,659**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 2. Pearson's Correlation in Intensity of Emotions

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1-Anger	1													
2-Anxiety	,588**													
3-Fear	,522**	,474**												
4-Guilt	,329**	,382**	,538**											
5-Shame	,391**	,380**	,522**	,442**										
6-Sadness	,432**	,442**	,429**	,598**	,558**									
7-Envy	,421**	,204	,373**	,485**	,621**	,431**								
8-Jealousy	,383**	,239*	,419**	,562**	,573**	,522**	,741**							
9-Joy	,272**	,183	,234*	,171	,301**	-,013	,238*	,216*						
10-Pride	,241*	,270*	,280*	,168	,141	-,029	,108	,107	,754**					
11-Relief	,237*	,194	,295**	,277*	,300**	,041	,278*	,233*	,547**	,511**				
12-Hope	,315**	,177	,272*	,125	,151	,028	,224*	,114	,455**	,313**	,348**			
13-Love	,216*	,242*	,227*	,117	,333**	,069	,340**	,312**	,505**	,460**	,475**	,288**		
14-Gratitude	,279*	,308**	,218*	,172	,384**	,078	,371**	,277*	,595**	,462**	,586**	,462**	,715**	
15-Compassion	,245*	,307**	,238*	,133	,323**	,214*	,339**	,345**	,313**	,328**	,327**	,187	,535**	,543**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 3. Gender Differences in Emotions in Intensity and Influence of Emotions

	Intensity	Influence
1-Anger	,479	,336
2-Anxiety	,501	,938
3-Fear	,678	,170
4-Guilt	,925	,901
5-Shame	,867	,742
6-Sadness	,960	,783
7-Envy	,787	,313
8-Jealousy	,724	,708
9-Joy	,093	,806
10-Pride	,879	,992
11-Relief	,861	,973
12-Hope	,243	,988
13-Love	,774	,483
14-Gratitude	,436	,427
15-Compassion	,094	,843

$p \leq 0,05$

emotions, standing out the emotions of Anger, Fear, Love among others. The emotion Anger is very close to the emotion rage, as was described with the emotion Anxiety as being associated with performance (Campo, 2016). Anger is an emotion of annoyance, complaining and personal dissatisfaction. The Fear emotion refers to a person's fear or apprehension that something will happen that is contrary to what he or she intends and which arises from a serious threat

Athletes experience different emotions, whether positive and / or negative, facilitating and / or harmful, reflecting the importance of the emotional phenomenon in sport, and how the stress experience should be considered as a whole, including not only the sports aspect as the slope (Dias, 2013). We emphasize the Intensity and Influence of Emotions as Anger, Anxiety, Fear, Sadness, Pride and Love as the emotions present in the sports performance of these young people,

adding more emotions to the competition unlike other studies (Campo, 2016). The emotions observed in table 3 do not reveal statistically significant results in the Influence and Intensity of the emotions between the genders. Apparently the difference between genders occurring in other contexts (Tamminen, 2013 and Woodman, 2014), in these ages and in these individuals will not be significant, we must have in mind the personal and situational variables that can moderate the emotional experiences, thus affecting the relationship between emotions and sports performance (Dias, 2013).

DISCUSSION

The present study identified the emotions present in the sport context, in young people of an individual sporting modality. The following approach is justified by the need to know the psychological factors that influence sports performance beyond the emotion Anxiety (Dias, 2010). The results presented are the evaluation of the emotions based on the perceptions of the swimmers and their influence on their sports performance. It was possible to verify that swimmers also experience a wide range of emotions during the sporting context. The study of emotions can help us to know better and achieve the goals that have been fixed (Barata, 2012). As Robazza et al. (Campo, 2016), referred, a good performance is expected when the Intensity of the emotions is very close to the best. Anxiety is a state of agitation, worry or anguish, arises from a perception of uncertainty about the threat (So, 2016), and in individual modalities the pressure is supported by the individual which intensifies the symptoms of Somatic Anxiety (Ramis, 2015).

Of all the emotions, Anxiety and Anger are the most studied emotions and as such are associated with performance (Campo, 2016), and often with their deterioration. Competition and sports practice are dependent on Anxiety but this does not predict performance, since its cause is related to the intensity of its response (Woodman, 2001), at the moment. Emotions occur as a consequence of the dynamic relationships between the individual and the context (Ramis, 2015). Unlike other studies (Molinero, 2015 and Reina, 2015) and with other emotional variables there were no significant differences between the genders, remember that the global society is changing at great speed and many social and cultural aspects, influence on the performance of individuals in their daily lives. This confirms the emotional importance of sport. Restricting the sport to an emotion (Anxiety) is insufficient to explain the subjective responses of the athletes to the competition that encompasses more than one emotion (Dias, 2013), in which so many emotions are related to each other, both in Intensity as in the Influence of emotions (Tables 1 and 2).

Creating routines promotes positive emotions that have an impact and an influence on performance, leading to fostering success in teams and individuals. Routines facilitate adaptation, coordination and are a great component of the organization of any practice (Hâkonsson, 2015), the work of psychological techniques has to be seen as a daily routine of sports practice. Since the increase in information and the technological development of the equipment have a direct influence on the performance of the athletes (Carmo, 2003). Individuals, knowing their strengths and weaknesses, can stimulate their skills by developing a program to overcome their weaknesses or to compensate for them (Nideffer, 1991). For emotions to have a strategic goal, it has to be the object of emotional work (Barata, 2012). Emotions are deeply rooted in how genders understand emotions, have implications for individuals, and differences in emotion processing (Grysman, 2016). The importance of knowing in depth the personal variables that distinguish the sportsman, will allow the investigator to consider the personal factors that can improve the quality of the intervention (Latinjak, 2014), but always taking into account that the intensity of an emotion is a discrete event (Matus, 2016). Working emotions is much more than controlling them, but rather automating them to face the decisive moment (Moen, 2015), stabilizing the environment and the context so that there are fewer emotional changes signifying less stress for the athlete. It is relevant to continue with this line of research in order to find the emotions that hold up the achievement of results and sports performances in young people.

Conclusions and implications

The results of the study highlight the importance of each emotion in the individual, in the sporting context. It is concluded that emotions happen as consequences of the dynamic relations between the individual and context, generating a whole panoply of events. It highlights the amount of emotions that may arise during a sporting event and the relationship that exists between them. The emotions that emerged with greater emphasis were Anger, Anxiety, Fear, Sadness, Pride and Love. Regarding gender differences in the observed emotions, there were no statistically significant differences in this group of swimmers, given the age of the youngsters in the sample. Being the main goal of the athlete the attainment of the sports performance is urgent to understand the role of the emotions in the sport performance.
It would be important to conduct a longitudinal study in order to establish a relationship between emotions during the swimmers' sports career, which critical moments and what strategies they use to maximize or minimize such sports performance factors.

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