PERCEPTIONS OF ORGANIZATIONAL CLIMATE AND COMPETITIVE ANXIETY IN THE CASE OF SWIMMING COACHES

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Abstract
Coaches are given an essential role in a process that can enhance youth engagement and increase the chance to obtain top level performances in sport. The scope of the research was to investigate the relationship between organizational climate and competitive anxiety in swimming coaches. Also, the current study wants to emphasize differences in perceived organizational climate and competitive anxiety among coaches according to sports performances, experience and gender. Thirty Romanian swimming coaches (M = 28.93), 15 male and 15 female participated in the study. The Competitive Anxiety in Sport Questionnaire and The ECO System - investigating different components of the organizational climate were used. The results showed that female swim coaches perceived the tasks to be clearer within the sports organization in which they work, felt that there was more support from the organization's management, that relationships with colleagues and, also, the reward/ motivational system were better, compared to the male swim coaches. The Mann-Whitney (U) test was used to investigate the differences between swimming coaches taking into account coaches’ experience level, gender and obtained sports performances (competitive anxiety and perceived organizational climate were approached). Furthermore, using the Spearman correlation, the associations between different dimensions of organizational climate and competitive anxiety of swimming coaches (separately for male and female coaches) were discussed. The findings of the current study provide valuable information to sports managers (and sports psychologists), which can intervene to increase the quality of life of employees (in this case, swimming coaches).

Keywords: trait anxiety, organizational climate, coaches, swimming.

Introduction
Swimming is considered as one of the best means of physical exercise because it ensures a harmonious development of those who practice it, strengthening the muscular system and the cardio-respiratory system, and because it does not put pressure on the joints it is recommended for both children and the elderly, research underlying that „there is no ideal or optimal coordination pattern that youth, learners and less-skilled swimmers should imitate” (Silva et al., 2022). Literature mentions the importance of the mental sphere in swimming, water polo (Ticală, 2019), the sports performance being influenced by internal and external factors (see Badea, 2016), which can positively or negatively impact performance (certain characteristics of the environment or of the persons involved in the preparation process can facilitate or block performance).

Over time the personalities of coaches (from different branches of sport) have been investigated - for example, after a careful analysis of successful coaches (having performances at Olympic and World level), certain predominant personality traits have emerged. The authors state: orientation
towards change (successful coaches look for new solutions to everyday problems), decision-making capacity (the decision is not postponed), the ability to delegate and develop others (a good coach has the ability to direct his athletes and assign them tasks according to their level of development), leadership (top coaches lead and guide athletes or teams), internal locus of control (they assume successes and failures and do not attribute them to external factors), and independence in their work - top coaches are able to carry out their work without the need for supervision from another person (Predoiu et al., 2018; Predoiu et al., 2020). Specialized literature mentions the need for efficient behaviors when working with performance athletes (Pelin et al., 2018), the authoritative style (considering the coach-young athlete interaction) being the preferred one, generating a higher psychological flexibility, well-being, and an increased level of children’s self-esteem (see Șițoiu and Pânișoară, 2022).

Investigating Olympic swimmers' perceptions of their coaches, Cook et al. (2021) pointed out that the personality of elite coaches exerts a fundamental impact on athletes' performance, conveying confidence that the training plan they are following is the right one. According to the authors’ results (specified above), coaches who won Olympic medals were perceived to have a higher level of conscientiousness and openness to experiences, and were also less narcissistic compared to coaches who did not win Olympic medals. In another study of 48 coaches and 30 junior swimmers, the successful coach was defined as follows: an open, dominant, stable, highly intelligent and conscientious individual, realistic, practical, confident, self-assured, a man willing to break tradition, make his own decisions and self-sufficient; he is the kind of man, from the swimmers' point of view, that they could lean on in moments of crisis in competition, and from the coaches' point of view, able to mount and control the swimmer in decisive moments (Hendry, 2013).

Regarding coaches’ anxiety (a topic less addressed in the literature compared to athletes’ anxiety as a psychological indicator on success - see, for example, Slăcanac et al., 2021), Predoiu et al. (2021) underlined that separation anxiety is likely to differentiate between successful coaches and novice coaches - top coaches registered a significantly lower level of separation anxiety comparing to novice coaches (it is worth mentioning that some of the successful coaches investigated occupy important managerial positions in different sports organizations).

Because anxiety can affect motor skills differently as performance/competence increases, it is important to be aware of the effect of anxiety as a trait on athletic performance (Raglin, 1992). In 2001, Raglin discusses The Mental Health Model (MHM) of sport performance, emphasizing that „an inverse relationship exists between psychopathology and sport performance” - as an athlete's mental health improves or worsens (we include here generalized anxiety) results should rise or fall accordingly. There is a considerable inter-individual variability in the intensity of anxiety responses and, more importantly, its impact on performance varies from athlete to athlete (see, also, Pelin et al., 2020, for different mental characteristics of top-level athletes). We also point out that anxiety (e.g. during moderate or high intensity) can be interpreted by athletes and coaches in different ways.

Coaches' personalities (inevitably) have an impact on the climate of the sports organization in which they work. Organizational climate is influenced by dimensions such as tasks clarity, organizational fairness and evaluation, employee motivation and satisfaction, attitudes, values, beliefs and the way members of the organization understand each other. Intrinsic job factors, group factors, relationships at work and individual characteristics are emphasized since almost thirty years ago, being important aspects which influence innovation in organizations (West & Farr, 1989). An innovative organizational climate is linked to the innovative behaviour of the employee and the existence of a certain independence in
carrying out tasks - which generates a positive impact in the workplace (You et al., 2022). Researchers are paying attention to the organizational climate from sports clubs, formal socialization having an essential role in enhancing club members’ feelings of attachment; therefore, „clubs with high social inclusionary tactics reported significantly greater member attachment” (Lower-Hoppe et al., 2020). Also, the existence of an ethical work climate attracts better employees in terms of intentions and ethical thinking. It seems that behavioral intentions and employees’ attitudes are better predicted by an ethical climate of friendship; taking into account organizational life, commitment and organizational identification represent key factors (Teresi et al., 2019). „Due to the pandemic period that washed the world since 2021, the challenges faced to reorganize coach training programs are included” (Morais et al., 2021). There is a gap in the literature considering the link between the organizational climate (within sports organizations) and coach anxiety.

The aim of the paper is to investigate the relationship between organizational climate and competitive anxiety in swimming coaches. At the same time, the current study wants to highlight differences in perceived organizational climate and competitive anxiety among coaches according to sports performances, experience and gender.

**Objectives**
- Identifying the link between perceived organizational climate and competitive anxiety in coaches;
- Highlighting the differences between coaches (considering their sports performances, experience and gender) in terms of perceived organizational climate and competitive anxiety.

**Research questions**
1) What are the differences between swimming coaches (taking into account variables such as gender, experience and registered sports performances) in terms of perceived organizational climate?
2) What are the differences considering the competitive anxiety among swimming coaches - by experience, gender and sport performance?
3) Which are the links between different dimensions of organizational climate (clarity of tasks, relationships with colleagues, the motivational system, perceived organizational support) and competitive anxiety of swimming coaches (separately for male and female coaches)?

**Materials and method**

**Participants**
Thirty Romanian swimming coaches working at different sports clubs in Bucharest, aged 21-53 years ($M = 28.93$), 15 male and 15 female participated in the study. Five coaches had experience between 0 and 2 years, nine coaches had experience between 2 and 5 years, and sixteen coaches had more than 5 years experience. Also, 11 of the swimming coaches have national level sports performances (train athletes ranked in the top three at national competitions), 6 coaches obtained performances at regional level, 10 at local level, while 3 coaches have internal performances (at the sports club level).

**Instruments**
The following instruments were used in the research:

**ECO System** (Constantin, 2009) investigating different aspects of organizational climate. In the present study, the following four dimensions were addressed: clarity of tasks, relationships with colleagues, the motivational system and perceived organizational support.

On a 5-step Likert scale, where 1 = To a very small extent and 5 = To a very large extent, participants were asked to respond to the extent to which they considered a series of statements to be true - six statements were used, for each investigated dimension of the organizational climate, and then the coaches' responses were summed (separately, for each dimension). Example of items: "My tasks are clear, well defined“ (Clarity of tasks); "My co-workers are like a second family to me" (Relationships with colleagues); "In this organization I feel stimulated to try harder..."
professionally” (Motivational system); "Whoever has valuable professional initiatives gets the resources to realise their ideas" (Organizational support). Scores (for each organizational climate dimension) range from 6 to 30.

**Competitive Anxiety in Sport Questionnaire** (developed by Rainer Mertens - in Bull, 2011)

The swimming coaches answered the 10 items used in the current research, on how they feel during the competitions, by choosing one of 3 options: Rarely = 1 point, Sometimes = 2 points, and Often = 3 points. Example of items: "Before the competition I feel nervous", "I get nervous while waiting for the competition to start" - the final score varies between 10 and 30. The higher the score, the more prone the coach is to experience competitive anxiety.

**Procedure**

The study was conducted between December 2021 and April 2022 by applying the two questionnaires via Google Forms (online), in order to investigate the perceived organizational climate and the competitive anxiety level in coaches. Ethical principles were ensured by obtaining the informed consent from participants (they had the option to withdraw from the study at any time) and treating the responses confidentially.

**Quasi-experimental model**

The dependent variables are represented by the values obtained by the swimming coaches (according to experience, gender and sports performances achieved) in terms of perceived organizational climate.

**Results**

In a first step we investigated the results of swimming coaches (according to experience, gender and sports performances achieved) in terms of perceived organizational climate.

![Figure 1. Perceived organizational climate by gender (blue - men, red - women coaches)](image)

The female swim coaches perceived the tasks to be clearer within the sports organization in which they work, felt that there was more support from the organization's management, that relationships with colleagues and, also, the reward/motivational system was better, compared to the male swim coaches.

To test for significant differences between male and female swimming coaches in terms of perceived organizational climate, we used the Mann-Whitney test for two independent samples (Table 1).
Table 1. U test - organizational climate

<table>
<thead>
<tr>
<th>Organizational climate</th>
<th>Women coaches vs. Men coaches</th>
<th>Mann-Whitney U</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity of tasks</td>
<td></td>
<td>62</td>
<td>-2.073</td>
<td>0.038*</td>
</tr>
<tr>
<td>Relationships with colleagues</td>
<td></td>
<td>58</td>
<td>-2.239</td>
<td>0.025*</td>
</tr>
<tr>
<td>Motivational system</td>
<td></td>
<td>67</td>
<td>-1.866</td>
<td>0.061</td>
</tr>
<tr>
<td>Perceived organizational support</td>
<td></td>
<td>78.5</td>
<td>-1.389</td>
<td>0.164</td>
</tr>
</tbody>
</table>

Note: * p < 0.05

The Mann-Whitney test value for Clarity of tasks is 62. Since p = 0.038, we can conclude that female swimming coaches perceive tasks, within the sport organization, being significantly clearer, compared to male coaches. The effect size is r = 0.37 - moderate to strong differences between the results are noted (for effect sizes interpretations, see, for example, Predoiu, 2020).

At the same time, significant differences between coaches in the case of relationships with others (p = 0.025) and marginally significant differences (p = 0.061) in the case of perception of the motivational system were observed. Female swimming coaches are more satisfied with these components of the organizational climate (compared to male coaches).

Table 2. Descriptive statistics - coach results by experience

<table>
<thead>
<tr>
<th>Organizational climate</th>
<th>Min</th>
<th>Max</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity of tasks</td>
<td>&lt; 5: 18</td>
<td>&gt; 5: 14</td>
<td>&lt; 5: 30</td>
<td>&gt; 5: 30</td>
<td>&lt; 5: 25.28</td>
<td>&gt; 5: 30.18</td>
</tr>
<tr>
<td>Relationships with colleagues</td>
<td>&lt; 5: 11</td>
<td>&gt; 5: 12</td>
<td>&lt; 5: 29</td>
<td>&gt; 5: 29</td>
<td>&lt; 5: 22.78</td>
<td>&gt; 5: 22.56</td>
</tr>
<tr>
<td>Motivational system</td>
<td>&lt; 5: 16</td>
<td>&gt; 5: 12</td>
<td>&lt; 5: 30</td>
<td>&gt; 5: 30</td>
<td>&lt; 5: 23</td>
<td>&gt; 5: 23.06</td>
</tr>
<tr>
<td>Perceived organizational support</td>
<td>&lt; 5: 15</td>
<td>&gt; 5: 13</td>
<td>&lt; 5: 26</td>
<td>&gt; 5: 30</td>
<td>&lt; 5: 22.21</td>
<td>&gt; 5: 21.68</td>
</tr>
</tbody>
</table>

Note. <5: less than 5 years' experience; >5: more than 5 years' experience.

Swim coaches with less than 5 years' experience felt more organizational support (Table 2) as opposed to coaches with more than 5 years' experience. No significant differences were found between the two groups in terms of the investigated dimensions of organizational climate (p > 0.05).

Table 3. Descriptive statistics - coaches’ results by performance

<table>
<thead>
<tr>
<th>Organizational climate</th>
<th>Min</th>
<th>Max</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity of tasks</td>
<td>N: 14</td>
<td>L: 18</td>
<td>N: 30</td>
<td>L: 30</td>
<td>N: 25.35</td>
<td>L: 25.07</td>
</tr>
<tr>
<td>Relationships with colleagues</td>
<td>N: 12</td>
<td>L: 11</td>
<td>N: 29</td>
<td>L: 29</td>
<td>N: 22.82</td>
<td>L: 22.46</td>
</tr>
<tr>
<td>Motivational system</td>
<td>N: 12</td>
<td>L: 16</td>
<td>N: 30</td>
<td>L: 30</td>
<td>N: 23.11</td>
<td>L: 22.92</td>
</tr>
<tr>
<td>Perceived organizational support</td>
<td>N: 13</td>
<td>L: 15</td>
<td>N: 29</td>
<td>L: 30</td>
<td>N: 21.64</td>
<td>L: 22.30</td>
</tr>
</tbody>
</table>

Note. N: National and regional level performance; L: Local and internal (at the sports club level) performance.

Swimming coaches with national or regional level performance perceived tasks to be slightly clearer, felt the motivational system and relationships with colleagues being slightly better, compared to coaches with local or internal level sports performances (Table 3). There are no
significant differences between coaches (p > 0.05), according to the sports performances obtained, in terms of the perception of organizational climate.

Next, the differences in competitive anxiety among swimming coaches were examined - by experience, gender and sport performance.

Considering gender and experience, no significant differences between swimming coaches (p > 0.05) were found (competitive anxiety was studied). However, female swim coaches reported higher levels of competitive anxiety compared to male coaches ($M_{\text{Female coaches}} = 17.33; M_{\text{Male coaches}} = 16.46$). When talking about experience, swim coaches with more experience reported slightly lower levels of competitive anxiety, as opposed to coaches with less/ lower experience. ($M_{\text{More experienced coaches}} = 16.87; M_{\text{Less experienced coaches}} = 16.92$).

Table 4. U test - Anxiety by sport performance

<table>
<thead>
<tr>
<th>Competitive anxiety</th>
<th>National and regional performances vs. Local and internal performances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mann-Whitney U</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Competitive anxiety</td>
<td>59.5</td>
</tr>
</tbody>
</table>

Note: * p < 0.05

The results in Table 4 show that there are significant differences between coaches (p = 0.034) in terms of anxiety experienced in competition. Swimming coaches with national or regional level performances experienced (significantly) less anxiety during competitions, compared to swimming coaches having local or internal level performances.

In the next stage of the research, the relationship between different dimensions of organizational climate and competitive anxiety of swimming coaches (separately for male and female coaches) was investigated.

Table 5. Correlation - Anxiety and perception of organizational climate (male swimming coaches)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Anxiety (A)</th>
<th>Clarity of tasks (B)</th>
<th>Relationships with colleagues (C)</th>
<th>Motivational system (D)</th>
<th>Perceived organizational support (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spearman's rho</td>
<td>p-value</td>
<td>Spearman's rho</td>
<td>p-value</td>
<td>Spearman's rho</td>
</tr>
<tr>
<td>Competitive anxiety</td>
<td>-</td>
<td>-</td>
<td>-267</td>
<td>0.337</td>
<td>-295</td>
</tr>
</tbody>
</table>

In Table 5 no significant relationship is emphasized between competitive anxiety of swimming coaches and the investigated dimensions of organizational climate. However, there are a number of significant correlations as follows:

- a significant positive correlation ($r = 0.681, p = 0.005$) between Clarity of tasks and Relationships with Colleagues;
- a significant positive correlation ($r = 0.725, p = 0.002$) between Clarity of tasks and Perceived motivational system (as dimensions of organisational climate);
- a significant positive correlation ($r = 0.582, p = 0.023$) between Clarity of tasks and Perceived organizational support;
- a significant positive correlation ($r = 0.832, p < 0.001$) between Relationships with colleagues and Perceived motivational system;
- a significant positive correlation \((r = 0.716, p = 0.003)\) between Relationships with colleagues and Perceived organizational support;
- a significant positive correlation \((r = 0.748, p = 0.001)\) between Perceived motivational system and Organizational support.

Table 6. Correlation - Anxiety and perceived organizational climate (female swimming coaches)

<table>
<thead>
<tr>
<th>Variables</th>
<th>A</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety (A)</td>
<td>Spearman's rho</td>
<td></td>
</tr>
<tr>
<td>Clarity of tasks (B)</td>
<td>Spearman's rho</td>
<td>0.356</td>
</tr>
<tr>
<td>Relationships with colleagues (C)</td>
<td>Spearman's rho</td>
<td>0.078</td>
</tr>
<tr>
<td>Motivational system (D)</td>
<td>Spearman's rho</td>
<td>0.039</td>
</tr>
<tr>
<td>Perceived organizational support (E)</td>
<td>Spearman's rho</td>
<td>0.249</td>
</tr>
</tbody>
</table>

In Table 6 - there is no significant association between competitive anxiety of female swim coaches and the investigated dimensions of organizational climate. We highlight, however, a number of significant correlations between the results obtained for various dimensions of organizational climate, as follows:
- a significant positive correlation \((r = 0.525, p = 0.045)\) between Clarity of tasks and Relationships with Colleagues;
- a significant positive correlation \((r = 0.750, p = 0.001)\) between Clarity of tasks and Perceived motivational system (specific to the sport organization in which they work);
- a significant positive correlation \((r = 0.515, p = 0.050)\) between Clarity of tasks and Perceived organizational support;
- a significant positive correlation \((r = 0.635, p = 0.011)\) between Relationships with colleagues and Perceived motivational system.

**Conclusion**
The environment in which swimming coaches (and not only) work, as well as the emotions they feel in the competitive environment, have a direct influence on sports performance. The current paper aimed to capture differences in perceived organizational climate and competitive anxiety in the case of swimming coaches according to experience, gender and sports performances. At the same time, we wanted to investigate the relationship between organizational climate and competitive anxiety of male and female swimming coaches.

Data analysis revealed that female swimming coaches perceive their tasks as clearer, within the sport organization in which they work, they feel more consistent support from the organization's management, that relationships with colleagues are better, and that the reward/ motivational system is a high-performance one, compared to male swimming coaches. Following the application of the Mann-Whitney test one could observe that female swim coaches perceive the tasks within the sport organization as clearer (significantly) compared to male coaches (moderate to strong differences between the results are noted). Also, female coaches are
significantly more satisfied considering the relationships with others and the existing motivational system within the organization (compared to male coaches).

Swim coaches with less than 5 years of experience felt more organizational support as opposed to coaches with more than 5 years of experience. However, the results did not reveal significant differences between specialists, according to their experience, in terms of the perception of different dimensions of organizational climate. When talking about the performance level, swimming coaches with national or regional level results perceived the tasks as slightly clearer, felt that relationships with colleagues were slightly better, as well as the motivational system, compared to coaches with local or internal (sport club level) performances. Statistical processing of data revealed that the differences observed between coaches were not, however, significant.

The next step was to examine the differences between swimming coaches (by experience, gender and sport performance) in terms of perceived competitive anxiety. It was found that female swimming coaches reported higher levels of competitive anxiety compared to male coaches (but the differences were not statistically significant). Male and female swimming coaches with more experience reported a slightly lower level of competitive anxiety compared to male and female coaches with less experience (differences between specialists were not significant). Also, male and female swimming coaches having national or regional sports performances reported lower levels of competitive anxiety compared to specialists with local or internal results. Data analysis revealed that these differences between specialists, depending on the sports performances achieved, were significant.

In the next stage of the research, the relationship between different dimensions of organizational climate and competitive anxiety of swimming coaches (separately for male and female coaches) was examined. In the case of male swim coaches, no significant links between the two variables were found. However, a number of significant correlations are worth addressing:

- a positive correlation between Clarity of tasks and: Relationships with colleagues, perceived Motivational system and Organizational support (as dimensions of organizational climate);
- a positive correlation between Relationships with colleagues and: perceived Motivational system and Organizational support;
- a positive correlation between perceived Motivational system within the sport organization and perceived Organizational support.

In the case of female swim coaches there is (also) no significant association between competitive anxiety and the perception of different dimensions of organizational climate. We highlight, however, a number of significant correlations, as follows:

- a positive correlation between Clarity of tasks and: Relationships with colleagues, perceived Motivational system and Organizational support;
- a positive correlation between Relationships with colleagues and perceived Motivational system.

The findings of the current study provide valuable information to sports managers considering the dynamics of the emotional lives of competitive swimming coaches and on coaches’ perceptions of different dimensions of organizational climate. Knowing the level of competitive anxiety in swimming coaches (separately by gender, experience and sport performance), sport psychologists, in collaboration with sport managers, can intervene in the invaluable process of coaches' personal and professional development. At the same time, knowing coaches' perceptions regarding clarity of tasks, quality of relationships with colleagues, motivation (how they perceive the motivational system within the sport organization) and organizational support (how they perceive they are supported in their work within the sport organization), sports managers can intervene to increase coaches' satisfaction within their sport organization. Such intervention by sports managers will result in an increase in the quality of life of
employees (coaches in this case) - which can positively influence their productivity. The limitations of the research mainly relate to the relatively small sample of swimming coaches investigated (taking into account gender, experience and obtained sports performances). Future studies are needed to investigate the perception related to organizational climate and competitive anxiety of internationally successful coaches (also, from various sports branches), results that can serve as a model for future coaches, aspiring on the road to performance.

Authors’ Contribution

All authors have equally contributed to this study.

References


