Original research article

GOAL ORIENTATION AND PERCEPTION OF MOTIVATIONAL CLIMATE INITIATED BY PARENTS OF FEMALE HANDBALL PLAYERS OF DIFFERENT COMPETITION LEVELS

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Ana Vesković, Zoran Valdevit, Marina Đorđević-Nikić

University of Belgrade, Faculty of Sport and Physical Education, Belgrade, Serbia

Abstract. The study meant to examine the differences in goal orientation and perception of the motivational climate created by parents between handball players of different competitive levels, and the relationship between the motivational climate created by the parents and athletes' goal orientation. The sample consisted of female handball players (N=42), average age of 17.31 years, divided into two sub-samples: players who are not national team members (n=24) and national team members (n=18). The Goal Orientation Questionnaire (TESQ) and the Perceived Motivational Climate Questionnaire (PIMCQ-2) were administered. Players of both competition levels are more focused on learning than on achieving results, which complies with other researchers' findings. They believe that mothers create a Learning/Enjoyment Climate considerably more than fathers, while fathers create a Success Without Effort Climate to a greater degree. Only non-national team members perceive that their mothers to a greater degree emphasize the Learning/Enjoyment Climate and Worry-Conducive Climate while their fathers to a greater degree emphasize Worry-Conducive Climate and Success Without Effort Climate. The results confirm the theoretical assumption that the perceived motivational Learning/Enjoyment Climate created by the parents is a predictor of the learning-oriented goal. A climate focused on achieving results is not a predictor of the achievement-oriented goal, which has already been confirmed by various authors.

Key words: female handball players who are not national team members, female handball players who are national team members, goal orientation, perceived motivational climate.
INTRODUCTION

Orientation of sports activities at competitions and the realization of goals that are most often objectively measurable encourage athletes to continuously improve the performance of sports skills. It is not unusual that achievement-oriented motivation which is crucial in situations where an athlete competes with others, or when he or she tries to reach some of the standards of excellence, is one of the most frequently studied concepts in the last thirty years (Roberts, 2001; Roberts, Teasure, & Cornoy, 2007). The majority of these studies are based on the Achievement Goal Theory - AGT\(^1\) (Duda & Ntoumanis, 2005, Roberts, et al., 2007).

**Goal orientation** is a cognitive pattern - an organized pattern of beliefs, attributions, and feelings that are the basis of individual differences among athletes in evaluating success. It reflects beliefs about the activity, about how one can achieve success and avoid failure (Duda, 2001). It occurs through specific experiences during socialization in sports and is relatively stable over time (Roberts, 2001). There is a difference between task and ego goal orientation (Duda & Nicholls, 1992; Duda & Hall, 2001, Roberts et al., 2007). Athletes with predominantly **task goal orientation** believe that their efforts can improve their competence. They immerse themselves into an activity, trying to find strategies to successfully meet the demands of the activity. The main criterion of success is the subjective feeling of improvement of sport performance. These athletes are to a lesser degree focused on proving their own competence to others. For athletes who are mostly **ego goal oriented**, advancement in performance skills alone is not enough for them to feel successful. They are more oriented towards the demonstration of competence to others rather than towards its own development. 'To be successful', means to them 'to be better than others'. It is only when they achieve success without effort that they emphasize the significance of their abilities. Failure is attributed to insufficient effort and thus they avoid demonstration of incompetence. To avoid failure, they often choose goals that are far below their actual capabilities. Depending on the perceived competence, they can express both positive and negative motivational patterns. The two goal orientations are considered to be orthogonal dimensions (Duda, 2001), which was confirmed in some studies (Hom, Duda, & Miller, 1993; White, 1998; Givvin, 2001). This means that athletes can be positioned high or low on both dimensions, or high on one and low on the other one. However, young people who are low on both dimensions are interested neither in the development nor in the demonstration of their competence in sport and if they get involved in sport their involvement will not be permanent (Duda, 2001).

By creating a certain motivational climate, significant individuals 'transmit a message' to young people that more or less directs them towards a specific goal orientation (Duda & Ntoumanis, 2005). The term **motivational climate** covers the most important aspects of the social-psychological situation created by significant others, and differs according to the structure of goals and criteria for assessing success. Of particular importance is the prize structure that parents use to strengthen the goal orientation of the young (Brustard et al., 2001). Families are characterized by two basic patterns of the motivational climate (White, 2007): **Task involving climate/mastery**: parents support advancement, efforts and self-improvement. Success is considered a consequence of effort and work, rather than superior abilities. It emphasizes the valuation of success in relation to their previous performance. **Ego-involving climate/performance**: parents tend to punish or emphasize

\(^1\) Hereinafter referred to as AGT.
failure, mistakes or poor performance, provide less positive feedback, and the basic imperative is achieving results. In this environment, success is assessed in relation to the performance of other athletes. However, the focus is on the ways in which athletes perceive the social and psychological environment, rather than on the objective characteristics of the environment (Weigand, Carr, Petherick, & Taylor, 2001). Therefore, the impact of significant people can move in the direction of strengthening or weakening the dispositional goal orientation of the young (Weigand et al., 2001). When the motivational climate is very prominent, it is possible for it to prevail over goal orientations and become a better predictor of achievement-oriented behaviour (Roberts et al., 2007).

Studies originally, within separate lines, confirmed that the individual variables (dispositional goal orientation) and situational variables (perceived motivational climate) individually affect behaviour, cognition, and feelings of young people in the context of achievement. The results of recent studies (Roberts et al., 2007; Duda & Ntoumanis, 2005) indicate that it is necessary to take into account the goal orientation that determines the probability of adoption of specific goals and perception of the motivational climate as a potential variable that may affect dispositional characteristics.

Studies up to now regarding connections between task orientation and the perceived task motivational climate initiated by the parents (White & Duda, 1993, according to White 2007, White, 1996; White, 1998; White, Kavussanu, & Guest, 1998; Waldron & Krane, 2005), agree that there is a positive correlation between the perception of young people that their parents create a climate of Learning/Enjoyment and their task goal orientation. However, these studies provided different relationships between a perceived ego climate (dimensions: Success Without Effort and a Worry-Conducive climate) and the ego orientations of youths. The results of two studies are similar: there is a positive connection between ego goal orientation of youth and the Success Without Effort Climate initiated by both parents (White & Duda, 1993, according to White 2007), or initiated by fathers (White et al., 1998), or with a Worry Conductive Climate initiated by mothers (White et al., 1998). In contrast to the stated results, there are the results of surveys (White, 1996; Waldron & Krane, 2005) where no connection was determined between Success Without Effort and a Worry-Conducive climate initiated by the parents and the ego orientation of young athletes. In a study in which profiles of athletes’ goals were used (both dimensions simultaneously), it was concluded that young people who are highly ego oriented and low task oriented feel that both parents valued a Climate of Success Without Effort and the fathers worried about possible errors (White, 1998).

Since goal orientation occurs through specific experiences during socialization in sports, we want to determine the possible differences between different competitive levels of female handball players (players who are not national team members and national team members) based on their goal orientation and perception of the motivational climate, as well as the relationship between goal orientation and the motivational climate created by parents.

**METHOD**

**The participants**

The sample of participants consisted of 42 female handball players, aged 15-20 ($M=17.31$, $SD=1.83$). The sample consisted of female handball players of different levels...
of competitive success, with 57.1% of female handball players who are not national team members and play in a club \((n=24)\), and 42.9% of junior national team members \((n=18)\). Their involvement in sports activities ranged from 2-13 years \((M=7.67, SD=2.56)\).

The measuring instrument

The most common instrument used to test goal orientation of young athletes (Biddle, Wang, C. K. J. Kavussanu, M., & Spray, 2003; White, 2007) is TEOSQ (Task-and Ego-Orientation). Participants answer by circling one of the offered answers using a Likert scale (from 1 - "strongly disagree" to 5 - "strongly agree"). The questionnaire contains two subscales: task orientation and ego orientation. The root of each entry begins with: "I feel most successful in sport when ..." This study used a form of 11 items, which in earlier research (Veskovic & Milanovic, 2001) on a sample of athletes in our community \((N=227)\) demonstrated the best psychometric properties (EFA – the principal axis exploratory factor analysis, varimax rotation - the number of factors based on the screen test, the criteria that eigenvalues > 1, and retained items based on the criteria that communality > .3 and based on simple factor structure). Reliability coefficients in previous studies on samples of athletes ranged in the interval .70 - .86 for task goal orientation, and .77 - .89 for ego goal orientation (Hom et al., 1993, Treasure & Roberts, 1994; White, 1996; White, 1998; White, et al., 1998; Givvin, 2001; Sit & Lindner, 2005, Bortoli, Bertollo, Comani, & Robazza, 2011; Veskovic & Milanovic, 2011). Internal consistency reliability of the scores in the current study were \(\alpha = .70\) for the task orientation scale and \(\alpha = .81\) for the ego orientation scale.

The Perceived Motivational Climate in Sport Questionnaire 2 - PIMCQ-2 consists of three subscales: the task involving climate (dimension Learning/Enjoyment Climate) and ego involving climate (dimensions: a Worry-Conducive Climate and Success Without Effort). Participants answer by circling one of the offered answers using a Likert scale (from 1 - "strongly disagree" to 5 - "strongly agree"). Entries begin with roots: "I feel that my mother ..." or, "I feel that my father ...". Subscale reliability coefficients in previous studies (White, 1996; White, 1998; White, et al., 1998, White, & Duda, 1994) range in the following intervals: for the Learning/Enjoyment Climate subscale .84 - .90 and .73-.85 for the subscale Success Without Effort, and .87 - .91 for the subscale a Worry-Conducive Climate. The internal consistency reliability of the scores in the current study were \(\alpha = .85\) to .87 for the Worry-Conductive, \(\alpha = .48\) to .63 for the Learning/Enjoyment and \(\alpha = .55\) to .81 for Success Without Effort subscales.

Statistical analysis

To compare goal orientation and the perceived motivational climate among players who are not national team members and national team members, we used a One-Way ANOVA. Pearson's correlation coefficient was used to determine the relationships among all the variables in the study. A simple linear regression (Enter method) was used to see which dimension of the motivational climate predictors were most effective for goal orientation.
RESULTS

The ANOVA results (Table 1) show that the differences in task goal orientations between the players that are not national team members and national team members were not significant. Also, the differences in ego goal orientation between the players that are not national team members and national team members were not significant. Significant differences were manifested in dimensions of a perceived motivational climate initiated by the parents (Table 1). The biggest difference is in the dimension of the Learning/Enjoyment Climate-mothers, where the players that are not national team members compared with the national team members believe that their mothers to a much higher degree create this climate. The players that are not national team members perceive that their mothers to a greater degree create a Worry-Conducive Climate than was considered by the national team members. However, the female handball players of a level below the national team, compared to the players of the national team level, believe that their fathers to a higher degree create both dimensions of the ego involving climate.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
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<td>1.00</td>
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<td>1.00</td>
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<tr>
<td>Ego orientation</td>
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<td>1.00</td>
<td>.142</td>
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<td>1.00</td>
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<tr>
<td>Worry-Conducive Climate-Mothers</td>
<td>.369</td>
<td>.338</td>
<td>.340**</td>
<td>1</td>
<td>.369</td>
<td>.338</td>
<td>.340**</td>
<td>1.00</td>
</tr>
<tr>
<td>Learning/Enjoyment Climate-Mothers</td>
<td>.154</td>
<td>.009</td>
<td>.586**</td>
<td>.268</td>
<td>.154</td>
<td>.009</td>
<td>.586**</td>
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</tr>
<tr>
<td>Worry-Conducive Climate Fathers</td>
<td>.104</td>
<td>.037</td>
<td>.820**</td>
<td>.317**</td>
<td>.611**</td>
<td>.104</td>
<td>.037</td>
<td>.820**</td>
</tr>
<tr>
<td>Learning/Enjoyment Climate Fathers</td>
<td>.219</td>
<td>.124</td>
<td>.203</td>
<td>.596**</td>
<td>.289</td>
<td>.169</td>
<td>.219</td>
<td>.124</td>
</tr>
<tr>
<td>Success Without Effort Fathers</td>
<td>.212</td>
<td>.068</td>
<td>.476**</td>
<td>.259</td>
<td>.807**</td>
<td>.622**</td>
<td>.212</td>
<td>.068</td>
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</tbody>
</table>

Simple Pearson's correlations indicated that the correlations between the various subscales were low to moderate (Table 2). The only subscales that had a moderate to high correlation were the PIMCQ-2 subscales. A perceived Learning/Enjoyment Climate-mother was positively associated with both goal orientations, but the connection was of low intensity.
Since the number of participants in the sample compared to the number of all the possible predictor variables - dimensions of perceived motivational climate - was small (N>120), which did not meet the requirements for the application of a stepwise regression, we used a simple linear regression (one predictor variable - one criterion variable). Since the correlation between the dimensions of the perceived motivational climate of the mothers and fathers was high (Table 2), in order to avoid multicollinearity, following the example of the research of Waldron & Krane (2005), the average parent scores for the three subscales were used in the analyses. Three participants answered only for one parent and because of that the subscales scores for one parent were included in the analyses. The obtained results indicate that a Learning/Enjoyment Climate was a significant predictor of task goal orientation $\beta=.34$, $t(40)=4.27$, $p<.05$, accounting for about 12% of the variance of goal orientation, $R^2=0.12$, $F(1.40)=5.05$, $p<.05$. None of the dimensions of the perceived ego motivational climate were a predictor of ego goal orientation: a Worry Conducive Climate $\beta=.01$, $t(40)=-.51$, $p>.05$, Success Without Effort-mother $\beta=.00$, $t(40)=-.07$, $p>.05$.

DISCUSSION

Both the female handball players at the national team level and those at the level below the national team that participated in our research were to a greater extent task- than ego-goal oriented. They were mostly focused on the development and improvement of their competence to make efforts in their activities, trying to find a strategy that would successfully solve tasks. They are to a much lesser degree focused on demonstrating their competence to others. For them, the main criterion of success is a subjective feeling of skills development and achieving personal advancement. The results are consistent with numerous studies on different samples of athletes (White, et al., 1998, Balaguer, Duda, Atienza, & Mayo, 2002; Hatzigeorgiadis, 2002; Gano-Overwaya, Guivernaub, Magyarc, Waldron, & Ewinge, 2005; Waldron & Krane, 2005; Hall, Kerr, Kozub, & Finnie, 2007; Givvin, 2001; Veskovic & Milanovic, 2011).

Female handball players perceive that both parents put more emphasis on task- than ego- involving climate which is supported by the results of previous studies (White 1998, White, et al., 1998; Salselas & Marquez, 2009). It means that female handball players think their parents support progress, effort and training, that they consider success the consequence of effort, not superior ability, and that they are to a much lesser degree inclined to punish or emphasize the failure and provide plenty of positive feedback. In addition, the female handball players consider that fathers to a greater extent than mothers create a Success Without Effort Climate. This results are in accordance with the results of a research carried out on a large sample of adolescents - athletes who train different team sports (White, 1998). On the other hand, compared to the players that are not national team members, national team members feel that their mothers to a greater degree promote a Learning/Enjoyment Climate, so that they are more positive than fathers in supporting advancement, effort and improvement, which is considered a favourable factor in learning and developing sports skills. Two more significant differences between the female handball players of different competitive levels were obtained. The players that are not national team members compared with the national team members perceive that both their mothers and fathers to a greater degree worry about achieving results, or that they do not have a positive view of the mistakes that are an integral part of the learning process. This result is consis-
tent with the results of a previous study (White, 1996) carried out on a sample of male and female volleyball players of a similar age as female handball players that are not national team members from our sample. Secondly, compared to these players that are not national team members, national team members feel that their fathers to a greater extent create Success Without Effort Climate. Similar results were obtained in two previous studies: on the sample of young athletes who train different team sports (White, 1998) and in a study which included a sample of young swimmers (Salselas & Marquez, 2009) where swimmers attending advanced swim programs (who learned to swim but are still being taught the fundamentals), unlike competitor swimmers, perceived that both parents to a higher degree emphasized a Success Without Effort Climate. We believe that there may be different reasons behind the results showing that female handball players at levels below the national team compared to the female handball players at national team level to a greater extent perceive that their fathers create an ego motivational climate. Firstly, players that are not national team members compared to national team members have perfected performance skills to a lesser degree and might pay more attention to demonstrating competence and feedback related to the failure, errors or bad performance. Secondly, it can be assumed that with the development of the sports career, the parents gradually "retreat into the background", and that the ego involving climate initiated by a coach becomes a more significant variable in the development of ego goal orientation. Since the obtained results do not provide the possibility of making the final conclusion, the reasons mentioned were set out in the form of assumptions that would be interesting to verify in future studies.

The low non-significant correlation between task- and ego-goal orientation confirms that the two goal orientations are two orthogonal i.e. independent constructs, which is consistent with the theoretical assumption (Duda, 2001) and research results (Hom et al., 1993, White, 1998; Givvin, 2001). The regression analysis showed that Learning/Enjoyment initiated by both parents represents a predictor of task goal orientation, which is in accordance with the results of numerous studies (White & Duda, 1993, according to White 2007, White, 1996, White, 1998, White et al., 1998; Waldron & Krane, 2005). However, the result that none of the dimensions of the motivational climate created by the parents were a predictor of ego goal orientation does not confirm the theoretical assumption and is in accordance with some studies (White, 1996; Waldron & Krane, 2005) and not with others (White & Duda, 1993, by White 2007, White et al., 1998). In other words, the study carried out on a sample of female handball players from Serbia indicates that there is a potential for the positive effect of parents on task goal orientation of young people in our community, which is manifested through the initiation of a task involving climate. On the other hand, the female handball players' perception that their parents emphasize an ego involving climate will not affect their goal orientation and potentially the development of maladaptive motivational patterns.

The obtained results empirically support the necessity to estimate the roles of all significant persons (peers, coach) for the development of achievement motivation in general and especially for goal orientation, as well as the change of roles of significant persons in different phases of a sports career. The research results indicate one more important issue. Having in mind the popularity of sport in our society, the frequent presence of elite athletes in the media, pointing to the significance of making an effort and constant aspiring for improvement, as well as a general motivational climate in our society, highly aimed at making an effort and improvement of sports performance, once could ask whether all these variables can contribute to the predicative power of a task involving climate created by parents.
CONCLUSION

The study carried out on a sample of female handball players in Serbia provided insight into the goal orientation and perceived motivational climate in the families of female handball players at different levels of success. Furthermore, the results confirm the theoretical assumption of the existence of links between task goal orientation and the motivational climate initiated by the parents, but not between the ego goal orientation of female handball players and the ego motivational climate created by their parents. The contribution of this research is to provide a basis for future research by asking questions that can more closely link the acquired results with the characteristics of our socio-cultural environment. However, for a more complete understanding of the results, one should take into account some of the limitations of this study. Firstly, the research is of a correlation type so it cannot provide insight into the cause-and-effect relationships between variables. Secondly, for the generalization of the obtained results, one should keep in mind that due to the specific nature of the sample of participants – the high selectivity of the subsample of female handball players who are members of the national team, the research was carried out on a relatively small number of participants. Thirdly, the two applied scales (Learning/Enjoyment Climate-mother and Learning/Enjoyment Climate-father) do not show high reliability due to the small number of items, which indicates the need for further adaptation of the scales for the participants in our community.

REFERENCES


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FOKUSIRANOST NA POSTIZANJE GOLOVA I PERCEPCIJA MOTIVACIJE RODITELJA NA PRIMERU RUKOMETASHICA RAZLIČITIH TAKMIČARSKIH NIVOA

Istraživanje je sprovedeno sa namerom da se ispita da li između rukometešica različitog takmičarskog nivoa postoje razlike u ciljnoj usmerenosti i u percepciji motivacione klime koju kreiraju roditelji i da se ispituju relacije između motivacione klime koju kreiraju roditelji i ciljne usmerenosti rukometešica. Uzorak čine rukometešice (N=42), prosečnog uzrasta 17,31 godina, grupisane dva poduzorka: nereprezentativne (n=24) i reprezentativne (n=18). Ispitanice su popunile Upitnik ciljne orijentacije (TESQ) i Upitnik opažene motivacione klime (PIMCQ-2). Rukometešice oba takmičarska nivoa snažnije su usmerene na učenje, nego na postizanje rezultata, što je saglasno sa dosadašnjim istraživanjima autora iz drugih sredina. One smatraju da majke u poređenju sa očevima u značajno većem stepenu kreiraju klimu učenja/uživanja, dok očevi u poređenju sa majkama u većem stepenu kreiraju klimu postizanja uspeha bez napora. Nereprezentativne u poređenju sa reprezentativnim opažaju da njihove majke u većem stepenu naglašavaju klimu brige a da njihovi očevi u većem stepenu naglašavaju klimu brige i klimu postizanja uspeha bez napora. Rezultati ovog istraživanja potvrđuju teorijsku pretpostavku da opažena motivaciona klima učenja/uživanja koju kreiraju roditelji jeste prediktor cilja usmerenog na učenje. Klima usmerena na postizanje rezultata nije prediktor cilja usmerenog na rezultat, što ima potvrdu u nekim od dosadašnjih istraživanja.

Ključne reči: rukometešice nereprezentativne, rukometešice reprezentativne, ciljna usmerenost, opažena motivaciona klima.