EXAMINATION OF PARENTAL INVOLVEMENT IN GREEK FEMALE ATHLETES
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ABSTRACT
The purpose of this study was to examine perceived and desired parental involvement in female sports in Greece. The parental involvement in sport questionnaire was administrated to 383 female former and current athletes (mean age 20.33 years, competitive experience 7.10 years) from different sports (rhythmic gymnastics, artistic gymnastics, swimming, basketball, volleyball, track and field). The questionnaire assessed athletes’ perception about their parental involvement (directive behavior, praise and understanding, active involvement, pressure) and their desired parental involvement. The results showed that athletes in rhythmic, artistic gymnastics and swimming scored higher in praise and understanding, rhythmic and artistic gymnastics athletes perceived higher active involvement than desired and rhythmic gymnastics athletes perceived higher directive behavior than desired. Athletes in specializing phase desired more parental praise and understanding. Finally, pressure was predicted from all parental involvement variables. As parental involvement differs between sports, the results are discussed in order to minimize the negative influence of parental involvement in each sport.

Key words: sport, parental involvement, female athletes, Greece, rhythmic gymnastics.

INTRODUCTION

Sport participation is an important factor in exercise adherence and children’s life long exercise. On the other hand, parents are a social influence that is affecting children in general. More precise parental attitudes and behaviors are considered as critical factors for children’s sport participation (Kirk, O’Connor, Carlson, Burke, Davis, & Glover, 1997) and children’s attraction to physical activity (Brustad, 1993). Parents can introduce their children to certain sports (Baxter-Jones & Maffuli, 2003) or can play an important role in their children’s affective experience of extracurricular activities (Anderson, Funk, Elliot, & Smith, 2003). Sport participation is a type of such activities for children in Greece.

Children infer information about their parents’ beliefs, behaviors and goals, which influences their psychosocial development (Holt, Tamminen, Black, Mandigo, & Fox, 2009). The influence of parents within youth sport has generated considerable attention (Brusrad, Babkes, & Smith, 2004). According to LeBlanc and Dickson (2006) it is a parent’s duty, among others, to explore child’s needs, to find the appropriate sport programs and help the child attend the chosen sport program. That means that parents need to invest time, energy and money (Stein, Raedeke & Glenn, 1999). So, in sports parents are highly involved and their influence can be not only positive but also negative (Holt et al., 2009), as children concern about living up to the expectations of their parents. Parental involvement can help creating a positive motivational climate, if they support their children or negative if they pressure their children and are sources of anxiety (Stein, Raedeke, & Glenn, 1999). For example, children tended to report enhanced sport enjoyment when they perceived their parents to be positively involved and satisfied with their sport participation (McCarthy & Jones, 2007) or when the perceived that parental pressure was low (Brustad, 1988). Children’s concerns however, about the way that sport involvement may affect the quality of their interactions with their parents could contribute to anxiety (Brustad, Babkes, & Smith, 2004). In general, when parental behaviors are regarded by children as positive and supportive, they are linked to favorable affective experiences for children in sport (Brustad et al., 2004).

Hellstad (1987) suggested that there are three types of parents on a continuum: overinvolved, underinvolved and moderally involved. Underinvolved parents can be disinterested parents or misinformed parents (Stroebel, 2006). Hellstad’s (1987) study revealed that moderate involvement seems to facilitate a sport career, whereas underinvolved and overinvolved parents may play a disruptive role. Based on Grolnick’s theory of parenting styles it was found that autonomy-supportive parents allowed their children to be involved in decision making, while controlling parents did not support their children’s autonomy, were not sensitive to their children’s mood (Holt et al., 2009).

So, in order to examine parental involvement in sports Lee and MacLean (1997) developed the Parental Involvement in Sport Questionnaire (PISQ). The participants in their study were young swimmers. Children-athletes identified the frequency by which certain behaviors of their parents were exhibited and the desirability of these behaviors. Discrepancies between exhibited and desired behaviors indicated the extent of participants’ satisfaction with those behaviors (Wuerth, Lee, & Alfermann, 2004). Young swimming athletes perceived an excess of directive behavior and pressure, insufficient praise and understanding and satisfactory levels of active involvement.
The participants in Wuerth et al. (2004) study were young athletes from both team sports (handball and hockey) and individual sports (swimming, track and field, tennis), although the differences between them were not examined. The results of this study revealed that athletes perceived only low levels of pressure, but high levels of praise and understanding. Also, athletes with successful career reported a higher amount of parental involvement.

Sports are a context in which children mature. According to Salmela (1994) in sports there is a descriptive model of career development which consists of three active phases: initiation, development, and mastery. Côté (1999) has also proposed that children’s involvement with sport consist of several stages. The children begin to get involved in sports during the so called initiation phase (Salmela, 1994) or sampling years (Côté, 1999) and during these years parents are responsible for initially getting their children interested in sport. The second phase or stage is the developmental phase (Salmela, 1994) or specializing years (Côté, 1999), and starts when children increase their commitment to sport and increasingly focus on the improvement of skills and techniques (Wuerth et al., 2004). In mastery phase, athletes are obsessed with their sport (Wuerth et al., 2004), they are committed to achieving an elite level of performance. In each one of the career development phases parents and athletes must adapt to meet different demands that are placed on them (Wuerth et al., 2004). The pattern of involvement of parents in youth sport across carrier phases and career transitions was examined by using PISQ (Wuerth et al., 2004). Parents’ involvement was higher in the initiation phase than later, as athletes in initiation phase perceived more directive behavior, more praise and understanding and more pressure than athletes in the other phases. These findings were consistent with Salmela’s (1994) findings.

Rhythmic gymnastics is a competitive sport in which children participate in competition in very young age. Childhood and adolescence is a period of intensive training since at that age the selection of elite gymnasts for the national team take place (Cupisti, D’ Alessandro, Castrogiovanni, Barale, & Morelli, 2000). Rhythmic gymnastics is a sport, mainly for girls. In Greece, rhythmic gymnastics is a sport exclusively for girls and athletes have a very high worldwide competition level. On the other hand in Greece, psychologists have tended their attention to this sport only recently, as it is a rather new sport. In order to examine parental involvement in rhythmic gymnastics we included female athletes from other popular sports, both team and individual.

The present study was designed to examine: (a) Greek female athletes’ responses about parental behavior in different sports (b) the differences on perceived and desired parental behavior (parent’s discrepancies) among different sports (c) the differences on perceived and desired parental behavior between former and current athletes (d) the differences on perceived and desired parental behavior between individual sports (rhythmic, artistic, swimming, track and fields) and team sports (basketball, volleyball), and (e) which variables of parental behavior contributes to the prediction of perceived parental pressure.
MATERIAL AND METHOD

Participants
In the present study participated 383 female athletes (former and current athletes) from 6 different sports (rhythmic gymnastics, artistic gymnastics, basketball, volleyball, swimming, track and field) from all over Greece. Former athletes were 158 participants (41.3%) and current athletes were 225 participants (58.7%). Table 1 shows the frequency (percent) of current and former athletes in each sport. The mean age of the total sample was 20.33 years (± 8.44). For former athletes mean age was 26.77 years (± 8.97) and for current athletes mean age was 15.80 years (±3.93). Participants were athletes who had participated in championships at provincial or higher level. Their mean competitive experience was 7.10 years (± 3.67).

Table 1. Number of participants for the total sample and separately in each group (sports, former athletes, current athletes)

<table>
<thead>
<tr>
<th>Sport</th>
<th>Former athletes</th>
<th>Current athletes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>Rhythmic</td>
<td>44 (27.8)</td>
<td>41 (18.2)</td>
<td>85 (22.2)</td>
</tr>
<tr>
<td>Artistic</td>
<td>15 (9.5)</td>
<td>13 (5.8)</td>
<td>28 (7.3)</td>
</tr>
<tr>
<td>Basketball</td>
<td>15 (9.5)</td>
<td>16 (7.1)</td>
<td>31 (8.1)</td>
</tr>
<tr>
<td>Track and field</td>
<td>59 (37.3)</td>
<td>45 (20.0)</td>
<td>104 (27.2)</td>
</tr>
<tr>
<td>Volleyball</td>
<td>11 (7.0)</td>
<td>64 (28.4)</td>
<td>75 (19.6)</td>
</tr>
<tr>
<td>Swimming</td>
<td>14 (8.9)</td>
<td>46 (20.4)</td>
<td>60 (15.7)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>158</td>
<td>225</td>
<td>383</td>
</tr>
</tbody>
</table>

Instruments

Demographic questionnaire
Participants had to answer their sport, if they were current or former athletes, how many years they had received professional coaching. Additionally participants answered their best qualified place in official championships. Researchers aggregated participants in three groups: local group if the athlete had participated only in local championships or games (N= 153, N_{former}= 46, N_{current}= 107), national if the athlete had won 1st to 8th place in national championship (N= 141, N_{former}= 64, N_{current}= 77), Balkan if the athlete had won 1st to 8th place in Balkan Games (N= 11, N_{former}= 6, N_{current}= 5), European if the athlete had won 1st to 8th place in European Championship (N= 17, N_{former}= 13, N_{current}= 4), Universal if the athlete had won 1st to 8th place in Universal Championship (N= 0, N_{former}= 5) and Olympic if the athlete had won 1st to 8th place in Olympic Games (N= 4, N_{former}= 4).
Parental involvement
The Parental Involvement in Sport Questionnaire (Lee & McLean, 1997) was used. The questionnaire was adopted in Greek in a previous study (Lazopoulou, 2006). The instrument measures 3 multi-item scales and a single-item scale. The scales measured Directive Behavior (DB), Active Involvement (AI), Praise and understanding (PU) and Pressure (P). For each scale participants answered about their perceived parental behaviour (p) and their desired parental behaviour (d).

Participants did not complete different items for mother and father, but a single questionnaire for parents. It was not in the purpose of the present study to examine separately parental behaviour for each parent. This way single parent families could be included.

The perceived DB (pDB) consisted by 5 items had satisfactory internal reliability (Cronbach’s α=.79). The perceived PU (pPU) consisted by 6 items (Cronbach’s α=.77). The perceived AI (pAI) consisted by 5 items (Cronbach’s α=.63). Perceived Pressure (pP) was measured by 2 items (Cronbach’s α=.62). One item was excluded because it loaded on two factors.

The desired DB (dDB) consisted by 6 items (Cronbach’s α=.80), the desired PU (dPU) consisted by 7 items (Cronbach’s α=.81), the desired AI (dAI) consisted by 2 items (Cronbach’s α=.65) and desired P (dP) consisted by a 2 items with no satisfactory α (<.60), so a single item was only included.

Design and procedure
After an initial approach to coaches, athletes and their parents were informed about the research. For underage athletes permission was given by one of their guardians. Current athletes completed the questionnaires before a practice not during competitive session. Former athletes were contacted personally to take part in the research and complete the questionnaires individually. Athletes were classified into one of the three phases of career development in Salmela’s model. A fourth phase was included by dividing the mastery phase. In sampling years were included participants who had competitive age less than 4 years (24.3%), in specializing years were included participants who had competitive age more than 4 years and less than 7 (23.6%), in mastery years were included participants who had more than 7 years but less than 10 (26.7%). A fourth phase was included in the present study in which was included participants who had competitive age more than 10 years (25.4%).

Statistical tests
A mixed between-within subjects 2X6 (2-way) MANOVA was conducted to evaluate the effects of sport type and behavior discrepancies on the four factors of PISQ. The between subjects factors was sport group with six levels (rhythmic gymnastics, artistic gymnastics, basketball, volleyball, swimming, track & fields). The within subjects factor was parent’s behaviour with two levels (perceived and desired). The dependent variables were the four factors of the PISQ (directive behaviour, active involvement, praise and understanding, and pressure). Follow-up analyses to significant interactions conducted using paired Samples t-test. Bonferroni post-hoc tests were used as follow – up analyses to significant main effects. Levene's Test of Equality of Error Variances was not significant for any of the variables (p>.05).
The differences on parental behaviour (directive behaviour, active involvement, praise and understanding, pressure) between former and current athletes in different sports, between participants in individual sports and team sports, and between different phases of career development were examined by using separate univariate Analyses of Variance. Finally, regression analysis was used to examine the prediction of perceived parental pressure.

RESULTS

The means and standard deviations for the parental behaviour are presented in Table 2.

Table 2. Means and standard deviations for parental behavior (perceived, desired) for all groups.
Differences between perceived and desired parental behaviour

Significant differences on the dependent measures, were found among the sport groups, Wilk’s Λ =.84, \( F(20,1234) = 3.37, \ p<.001, \ η^2=.043 \), and the behaviour discrepancies, Wilk’s Λ =.97, \( F(4,1234) = 2.58, \ p<.005, \ η^2=.027 \). The interaction Group X Behaviour Discrepancies was also significant, Wilk’s Λ =.87, \( F(20,1234) = 2.65, \ p<.001, \ η^2=.034 \).

According to the Univariate tests the main effect for parent’s behaviour discrepancies was significant for the variable pressure, \( F(1,375) = 5.65, \ p<.05, \ partial η^2=.015 \). As shown in Table 2, the Mean score on desired pressure was higher than the Mean score on perceived pressure. The main effect for sport group was significant for the dependent variables praise and understanding, \( F(5,375) = 9.76, \ p<.001, \ partial η^2=.115 \), and active involvement, \( F(5,375) = 3.27, \ p<.01, \ partial η^2=.042 \). According to Bonferroni post hoc tests, in praise and understanding, rhythmic and artistic gymnastic athletes, and swimming athletes scored significantly higher than basketball and volleyball athletes (\( p<.05 \)), and rhythmic gymnasts scored significantly higher than track and field athletes (\( p<.001 \)). Regarding the Active Involvement variable, swimmers scored significantly higher than track and field athletes (\( p<.05 \)).

![Figure 1. Interactions between Sport group and parental Directive Behavior discrepancies](image-url)
The interaction Group X Behaviour Discrepancies was significant for directive behaviour \( F(5,375) = 2.98, p<.05, \text{partial } \eta^2=.038 \) and active involvement, \( F(5,375) = 6.49, p<.001, \text{partial } \eta^2=.080 \). The Group X Behaviour Discrepancies interactions are presented in Figures 1 and 2, where it is apparent that athletes from swimming, rhythmic gymnastics and artistic gymnastics scored higher in perceived than in desired behaviour regarding directive behaviour and active involvement. On the contrary on athletes from track and field events, volleyball and basketball, the scores for perceived behaviour were lower than the scores for desired behaviour. According to the follow up tests, the scores regarding parent’s directive behaviour was significantly higher for perceived than desired behaviour in rhythmic gymnastics (\( t_{84}=2.93, p<.01 \)). The scores regarding parent’s active involvement was significantly higher for perceived than desired behaviour in artistic gymnastics (\( t_{26}=3.44, p<.01 \)) and rhythmic gymnastics (\( t_{83}=3.75, p<.001 \)) while in track and field athletes the corresponding scores were significantly lower for perceived than desired behaviour (\( t_{74}=-3.48, p<.001 \)).

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Figure2}
\caption{Sport group and parental Active involvement discrepancies}
\end{figure}

**Differences between former and current athletes/ sports**

In perceived parental behaviour differences were found in pPU and pAI. In pPU differences were found different sports (\( F(5, 370)= 6.29, p<.01, \text{\eta}^2=.08 \)) but not between former and current athletes nor the interaction. The Duncan post hoc test (\( p<.05 \)) showed that athletes in rhythmic and artistic gymnastics cored higher than athletes in basketball and volleyball.
In pAI significant differences revealed between different sports, \( F(5, 370) = 6.06, p<.01, \eta^2 = .08 \) and the interaction of former/current athlete and sport \( (F(5, 370) = 2.55, p<.05, \eta^2 = .03) \). The Duncan post hoc test \((p<.05)\) showed that athletes in rhythmic gymnastics, in artistic gymnastics and swimming scored higher than athletes in basketball, volleyball, track and field. By the separate univariate analysis it was found that in former athletes in basketball scored lower than all other athletes. For current athletes in rhythmic gymnastics and swimming scored higher than athletes in volleyball.

In pP the differences were significant only in the interaction of former/current athlete and sport, \( F(5, 370) = 2.98, p<.05, \eta^2 = .04 \). More precise, in basketball current athletes perceived higher pP than former athletes, \( F(1, 29) = 4.77, p<.05, \eta^2 = .14 \), and in volleyball former athletes perceived higher pP than current athletes, \( F(1, 73) = 8.20, p<.01, \eta^2 = .10 \).

In desired parental behaviour differences were found in dPU between different sports, \( F(5, 370) = 6.21, p<.001, \eta^2 = .08 \), but not between former and current athletes nor the interaction. The Duncan post hoc test showed that rhythmic gymnastics and artistic gymnastics scored higher than basketball and volleyball.

In dAI there was significant difference in the interaction between former/current athlete and sports \( F(5, 369) = 2.41, p<.05, \eta^2 = .03 \). Separate univariate analysis were conducted for each sport. Significant differences between former and current athletes were found in rhythmic gymnastics, \( F(1, 82) = 7.57, p<.01, \eta^2 = .085 \), and basketball, \( F(1, 29) = 5.24, p<.05, \eta^2 = .153 \).

**Differences between individual and team sports**
Differences were found on pPU \( (F(1, 373) = 28.49, p<.001) \), pAI \( (F(1, 373) = 12.20, p<.001) \) and dPU \( (F(1, 373) = 7.26, p<.01) \). Athletes in individual sports scored higher on pPU \( (M_{ind} = 3.87, SD = .80; M_{team} = 3.38, SD = .87) \), pAI \( (M_{ind} = 2.70, SD = 1.05; M_{team} = 2.31, SD = .85) \) and dPU \( (M_{ind} = 3.83, SD = .86; M_{team} = 3.57, SD = .91) \).

**Differences between different phases of development**
Differences were found only in desired Praise and Understanding, where participants in the specializing years desired more praise and understanding from their parents than the other groups, \( F(3, 377) = 2.93, p<.05 \).

**Regression of perceived parental pressure**
Stepwise regression analyses were conducted with perceived Parental pressure as the dependent variable and the other three PISQ scales as independent variables. The same procedure was used in another study \( (Lee & McLean, 1997) \). The independent variables explained the 54% of the variance, \( F(3, 378) = 51.86, p<.001 \). Perceived parental pressure was predicted by perceived DB \( (\beta =.48, t = 9.54, p<.001) \), by pPU \( (\beta = -.21, t = -4.29, p<.001) \) and by pAI \( (\beta = .14, t = 2.69, p<.01) \).

The same regression analyses were conducted separately for former athletes and current athletes. For former athletes the independent variables explained the 36% of the variance, \( F(3, 154) = 29.56, p<.001 \), and for current athletes explained the 27% of the variance, \( F(3, 220) = 26.54, p<.001 \). For former athletes contributed pDB \( (\beta = .47, t = 5.89, p<.001) \), pPU \( (\beta = -
.20, \( t=-2.86, p \leq .005 \) and pAI \( (\beta=.25, t=2.91, p<.01) \) while for current athletes contributed pDB \( (\beta=.47, t=7.37, p<.001) \), pPU \( (\beta=-.23, t=-3.55, p<.001) \) but not pAI \( (p=.18) \).

**DISCUSSION AND CONCLUSIONS**

The present study examined perceived and desired parental involvement in competitive youth sport by current and ex female athletes. First of all it seems that PISQ can detect differences between sports, former and current athletes in Greek population. From the results of the present study it was found that all athletes desired more parental pressure. Also, there were differences between sports in Praise and Understanding, and Active Involvement. Between former and current athletes there were found no differences. Finally, in specializing years athletes desired more praise and understanding.

Specific cultures have been categorized as generally individualist or collectivist (Triandis, 1995). Greek culture tends to have a rather collectivist orientation than an individualist, characterized by a consideration of others when making decisions. Parents and peers contribute to this orientation. Parents are an important variable in youth sport. Using PISQ it can be seen how athletes perceive their parents involvement and, also, how much parental involvement they desire. In general, as children grow to the middle childhood age and join peer groups, their parents become more demanding from them about their duties in several contexts (Cole & Cole, 2001), as sports. This is in contrast to the aspect that parental involvement is higher in the initiation phase than in the other phases (Salmela, 1994; Wuerth et al., 2004). The findings of the present study are consist to Wuerth’s study, in perceived and desired parental behavior. Maybe the way that parental involvement is perceived by the athletes is different in each phase, as it can become more salient over the years. Hellstedt (1987) conclude that more important than the degree of involvement is the way of parental involvement. The way that directive behaviour, active involvement and praise and understanding are perceived by Greek athletes may explain why they all predict pressure, as in other countries only directive behaviour did. This could be examined by using qualitative measures which should be used currently with quantitative measures. The prediction of perceived pressure for each culture can help sport psychologists design effective intervention programs so that pressure will be minimized by excluding parental variables.

On the other hand across the world structured after-school activities, as sports, targeting youth development, are very common for children and adolescents (Conroy & Coatsworth, 2006). Parental pressure and involvement in these contexts should more clearly be examined by using qualitative and quantitative measures, so that parents will be a positive influence on children’s participation and more precise children’s sport participation.

Athletes in rhythmic gymnastics, artistic gymnastics and swimming start training at a very young age. In these sports in Greece more than others, parents are highly involved as they have to transport children to and off the training centers, invest money and time, and actively participate in the sport clubs as administration or just members. That is perhaps the reason why athletes in these sports differ in factors of parental involvement than athletes in basketball, volleyball and tracks. So, parental involvement differs between sports, but not between former and current athletes. That means that parental involvement have not changed over the years in each sport but it is rather stable. Seminars should be addressed to parents, so they can understand the way that
athletes perceive parental involvement, and finally be involved in a positive way. Former athletes should and could be used as sources of persuasion, according to persuasion theory (Petty & Cacioppo, 1987).

The present study has a few limitations. First of all in the study did not participate athletes from all sports, but only a few. Secondly, athletes’ parents (fathers and mothers) were not included. Further studies should include athletes from different countries or cultures to examine the possible differences in parental involvement. A new study should be designed by both male and female athletes and their parents, in order to examine if parents and their children perceive and desire the same level of parental involvement in sports.

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