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**ARTISTIC GYMNASTICS.**

**IMPACT AND EFFECTS ON THE ATHLETES SOCIAL DEVELOPMENT AND LATER PROFESSIONAL OCCUPATIONAL ESTABLISHMENT**

PhD. George DALLAS G., PhD. Nikolaos PATSANTARAS, PhD Irene KAMBERIDOU, PhD Bogdan GOUGOU
University of Athens

**Key words:** artistic gymnastics, high level "topos", high performance, social relations, sexuality, professional establishment, recognition, occupational placement, diversity, identity, gender equity and gender equality

**Introduction**

Artistic Gymnastics is a sport that requires ever-increasing and specialized physical abilities, including the mental-inner capacities of the psyche (Bernik et al., 1983; Haywood et al., 1986). The multi-composition and complexity of the large number of exercises in combination with the diversity of apparatuses demands long, intensive and prolonged specialized training, on a daily basis, from the beginning of the gymnast's career (Alekirof & Nerebin, 1985; Rozin, 1997) which starts at an extremely young age. Indeed, relative international sources repeatedly stress the importance of physical capabilities, body composition and aptitudes in order to achieve high-performance (Bajin, 1987; Mironov & Schinckar, 1995) while underlining the differences in muscular force and flexibility between artistic gymnasts and athletes of other sports. (Haywood et al., 1986).

Specifically, the anthropometric profile of the artistic gymnast is characterized by short physical height, small body mass, small diameter of
ischium, great muscular development of the upper limbs and a broad shoulder diameter (Bernik et al., 1983; Claessens et al., 1991; Claessens et al., 1999; Nelson et al., 1983; Ver crusien 1984), body characteristics that are below the average or age-appropriate, typical and "normal" standards. (Armstrong & Welsman, 2005)

Indeed, this weight-height analogy is significantly different to that of other athletes, of the same age groups, who are involved in other sports - as well as to that of non-athletes of corresponding age groups. Moreover, these differences are perceived, to a greater extent, in female athletes rather than in male athletes (Armstrong & Welsman, 2005), whereas both genders display a large degree of mobility and flexibility in their joints. (Haywood et al., 1986).

Above all, artistic gymnastics has certain socio-cultural particularities in contrast to many other sports. Firstly, children begin this sport activity in their preschool years or in the very beginning of their school education. Secondly, they are daily exposed to long hours of training within the restricted and limited socio-cultural space and environment of the gym at a very young and tender age. Thirdly, male and female high performance artistic gymnasts or elite gymnasts, who began this sport activity at a very young age, have had the encouragement and support of their families and their school environment. (Messing & Voigt, 1989). As a result, during this socialization process, high level artistic gymnasts adapt to the demands of their sport while retaining social values and role models of behavior. The "role" of high level artistic gymnasts supersedes or rather operates as a restraint on other age-appropriate roles and characteristics associated with childhood and adolescence (e.g. pupil). For instance, they are left with no free-time for other recreational activities, interests, self-education, rest and relaxation or "fun and games", as opposed to other athletes of corresponding age group. The daily and extensively long training hours not only drastically reduce free-time and minimize opportunities to construct, formulate and develop social relations, but also restrict and obstruct broader educational opportunities and orientations.

However, the opposite seems to be true in Greece. The results of our study - that includes an analysis of a closed questionnaire distributed to former male and female athletes of artistic gymnasts throughout Greece - reveal that this sport has not obstructed or restricted the creation, formation and development of social relations within the sports system nor outside the sports system, namely in other social spheres.

Participation in competitive sports, which usually begins between the ages of 6 - 7, means that many athletes have already achieved many years of "experience" during their adolescent period in the extensive and intensive training processes as well as in high level international competitions. Moreover, this premature initiation or early inauguration of their sport careers also predetermines and predefines the premature ending and completion of their sport careers. In Greece, specifically as indicated in the study, they are put out of commission at an early age, between the ages of 19-22 for women and 20-24 for men - in contrast to other sports where these age groups represent the beginning of sport careers.

Unquestionably, many studies focus on the reasons and causes that lead to this premature ending or "predestined" sudden rupture, such as the morphological transformations of the body, biological maturation, including other physical parameters related to sport performance. (Claessens et al, 1998; Lidner et al, 1991) Moreover, attributed to psychological changes, and not only physical ones, are the "drop-outs" or the sudden ruptures or premature career endings which takes place between the ages of 10-17 (Gould & Horn, 1984), due to the pressures exercised for fast success or high performance by trainers (Koukouris, 1989, 1991, 1994; Patsantas, 1993), by the mass media (Patsantas, 1994) and by sports associations and federations. Undoubtedly, the results of many studies indicate that external causes push male and female gymnasts to abandon high level sports, along with the fact that it was not originally their own choice to engage in this sport. (Miholovic, 1968; Orlick, 1974; Vuolle, 1978). Undeniably, a plethora of research focuses on the causes of access-entrance and abandonment-withdrawal from the sport. However, studies do not examine the consequences, the results or the impact that this early access and this premature withdrawal has had on their emotional development, their personal growth and their social relations, development or advancement.
For instance, in the last fifteen years in particular the human body has been perceived, examined and studied exclusively in its biological dimension, in the framework of sport science, due to sports medicine and other related sciences (Patsantaros, 1994), and especially in the sphere of championships (Thiele & Schultz, 1992). Namely, the human body appears as a physio-organic entity, as a material entity, as a "means", as a "tool" which is "instrumentalized" through rational interventions with the purpose of being "used", "exploited" and "manipulated" in order to achieve high levels or maximum sports performance/records. As a result significant questions and issues have not been raised nor been the subject of scientific research. For example, questions such as: To what extent do the specific body-types or physical characteristics of artistic gymnasts - after the end of their sport careers - influence and affect their subsequent experiences or later social relations and development? Are sociocultural inferences and meanings interconnected to corporeality? Following their withdrawal from the sport, to what extent has the extensive, excessive and intensive training of the muscular system created and/or caused aesthetic problems - in female athletes in particular? Have the behaviours, attitudes or pressures of the trainers, the family environment and the sport associations, during their sports careers/course, provided gymnasts with the necessary resources for the future or has it made them more hesitant, insecure, with drawn or alienated from any other social activity and social intercourse? Has their exclusive and long-term sport activity limited or significantly restrained their horizons for interpersonal relations, intimate relationships, broader social relations as well as professional/occupational orientation, development, advancement, establishment or placement? To what extent has the painful and daily training process, during childhood, brought about a "syndrome" of deprivation (e.g. limited recreational activities, disturbed eating habits etc.)? What is the future professional orientation, career or occupational course of athletes who focus exclusively on artistic gymnastics, in contrast to their peers who have organized, planned, chosen and prepared for their educational orientations and career targets? What future prospects or opportunities do sports associations, federations of artistic gymnastics etc., provide for their members once they have completed, withdrawn or abandoned their careers?

In Greece, the interrelations and the direct relationship between sports experience, body composition-morphology and artistic gymnastics have not been examined and studied in the framework of sport science, although these factors influence, affect and predetermine, not only the athletic course/career but also the later social relations and social development of high level, high performance athletes. (Pfister, 1999) Without an examination of these interrelations it is impossible to understand the meaning that competitive sports and the "living sports experience" has on the social life and social development of high performance athletes of artistic gymnastics. (Brandl-Bredenbeck & Brottschnied, 1998). Sport science analyses and studies cannot be conducted a) without comparing, incorporating or integrating, into our analytical framework, the human body as a "cultural topos", as a means of "social influence and social impact", b) without exploring, raising and examining questions and issues of "adjacent-contingent" and interrelated importance concerning the meaning of high level sports, the significance of the high level "topos" of high performance sports, namely issues of primary significance concerning the socio-cultural life and development of male and female athletes which are related to health, beauty, sexuality, corporeality, identity etc. (Pfister, 1999).

It is necessary to reiterate that in competitive high performance sports, the body is perceived in its "physiological-biological" dimension, whereas it is systematically ignored as a "topos" of categorization of social and cultural experiences. Therefore, although we have a wealth of documented knowledge in relation to training methods and processes for increasing performance in artistic gymnastics, we know very little about, the associated with this process, "body experiences" and the "meanings" that this activity has on the personal and wider social life-relations of the participant. The interrelations between social influences

---

1 The "scientificization" of sport communication practices has been identified and acknowledged, as a role, with the "maximization" of sports performances. Analytically, regarding the processes and methods of competitive sports "scientificization" see, Patsantaros 1994: 158-160.
on body-type, have not comprised a subject of neither theoretical nor empirical study and research - even though these interactions, correlations and interrelations are of a foundational importance. (Ussher, 1997).

Methods. Participants

A closed questionnaire was completed by ninety-three (93) former male and female athletes of artistic gymnastics throughout Greece, from all levels of distinction (collective, national, world/international) between the ages of 18-59 (20.81±9.49), 29 male and 64 female. The questionnaire participants were assured that their responses would remain confidential-anonymous and that only the total findings and final results of the study would be announced. The questions concerned their views and observations on the impact, effect and influence of their athletic role 1) on school performance, 2) in the formation of social relations within the sports system, 3) in providing or ensuring future professional orientations, careers or occupational placements, 4) the reasons for premature withdrawal-exit from the sport, and 5) the imposed pressures for distinction exerted by different agents, officials etc. The statistics package SPSS v. 13 for personal computers were used in the statistical analysis and the data was processed with the descriptive statistical method. Furthermore, the statistic method χ² was used to check and verify the homogeneity of the responses/answers for both genders (former male and female athletes), as well as to ensure and ascertain independence-autonomy between the answers.

Results

The relation between the first parameter “creation-formation-development of social relations” and the second parameter “long-hours of training and activity with the sport” are not homogeneous as regards the views between the two genders due to the long hours dedicated to artistic gymnastics (χ²=8.04, d.f.=3, p=0.45). Specifically, the percentages of former female athletes who formed, developed and established their social lives-relations during their sports careers was four times greater than those of the former male athletes. In reference to the formation/development of social relations/life during their sports careers as well as after the end of their sports careers, the percentage for the former male athletes was almost double that of the former female athletes (75.9% and 45.3% respectively).

The overwhelming majority of former male and female artistic gymnasts presented a homogenous distribution of views concerning the effect and impact of the sport in the formation of social relations within the sport system (87% and 79.7% respectively) (Table 1) - an extremely large percentage in comparison to the remaining respondents who claimed that it negatively affected the formation and development of social relations within and without the sports system.

However, the views are not homogeneous, namely they differ between and according to the level of distinction of the questionnaire respondents and the creation/formulation of positive social relations within the sports system (χ²=9.17, d.f.=4, p=0.05). In other words, the higher the distinction level the smaller the percentage of social relations within/inside the sports system. For example, the percentages attained for the collective (lower level), the national and the European-world (high level) are 91.2%, 83.3% and 64.7% respectively. (Table 2)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Formation of social relations</th>
<th>Artistic Gymnastics and the Sports System</th>
<th>Obstacles for another occupational target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Within the field</td>
<td>Outside the field</td>
<td>Occupational Placement/Establishment</td>
</tr>
<tr>
<td>Male</td>
<td>Positive</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>26 (39.70)</td>
<td>1 (1.60)</td>
<td>14 (48.30)</td>
</tr>
<tr>
<td>Female</td>
<td>Positive</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>51 (39.70)</td>
<td>1 (1.60)</td>
<td>22 (34.60)</td>
</tr>
<tr>
<td>Total</td>
<td>Positive</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>77 (39.70)</td>
<td>2 (2.20)</td>
<td>36 (38.70)</td>
</tr>
</tbody>
</table>
Despite the fact that the greatest percentage of respondents (74.2%) (Table 1) claim that their sport activity ensured them some type of professional/occupational placement within the sports field/sector (79.3% for former male athletes and 71.9% for former female athletes, in contrast to 19.4% who claim that it was an obstacle for another occupational/professional target or placement), the level of their sports distinction indicates that views are not homogeneous ($\chi^2=17.61$, d.f.=4, $p=0.001$). The distinction percentages on a collective level (73.5%) and on a national level (85.7) that professionally establish or provide occupational placements for former male and female athletes within the sports system are significantly higher than those of the corresponding (47.1%) of the questionnaire respondents who had achieved sports distinctions of a high level (world/international). On the other hand, the percentage of respondents, who were ensured, due to their sport, some other occupation or professional placement outside the sport system (14.0%) presents a linear relation to the level of distinction (collective: 5.9%, national: 9.5%, world/international: 41.2%), while on almost the same levels fluctuates the percentage of the questionnaire respondents who faced obstacles in pursuing another professional target or career.

In reference to the formation of sexual relations, only 6.5% claimed they had no sexual relations during their sports careers - this percentage being in direct dependence to the level of distinction ($\chi^2=18.35$, d.f.=2, $p=0.000$). In other words, the individuals who had distinctions on a world level (29.4%) restrained from sexual relationships or were deprived of them, as opposed to the collective level (0%) (Ages up to 14) and the national level (2.4%). A difference of views is apparent regarding the pressures for distinction exerted on male and female athletes by the state during their sports careers ($\chi^2=4.59$, d.f.=2, $p=0.05$), with the percentage of male athletes being almost triple that of the corresponding female athletes (31.0% and 12.5% respectively). Namely, more pressure is exerted by the state on male athletes of artistic gymnastics.

**Table 2**

<table>
<thead>
<tr>
<th>Level of sports</th>
<th>Formation of social relations</th>
<th>Artistic Gymnastics and the Sports System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Within the System</td>
<td>Occupational/</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collective</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>National</td>
<td>35</td>
<td>2</td>
</tr>
<tr>
<td>World/International</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>77</td>
<td>2</td>
</tr>
</tbody>
</table>

Inhomogeneous, or different views are additionally indicated in the examination of the level of sports distinction ($\chi^2=21.29$, d.f.=2, $p=0.000$), in other words there is greater pressure exerted in the high distinction levels (19.0% and 0% respectively). A high percentage of pressure is also exercised by the trainers' dominant roles in the sports system, as opposed to the families and the sports clubs or associations that do not seem to exercise much influence in this case. (Table 3)

**Table 3**

<table>
<thead>
<tr>
<th>Level of distinction</th>
<th>Trainer</th>
<th>Mass Media</th>
<th>Family</th>
<th>Sports Clubs/Association</th>
<th>State (Federation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective</td>
<td>19</td>
<td>5 (1.9)</td>
<td>5 (1.7)</td>
<td>4 (1.8)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>National</td>
<td>22</td>
<td>1 (0.4)</td>
<td>4 (0.5)</td>
<td>3 (0.7)</td>
<td>8 (19.0)</td>
</tr>
<tr>
<td>World</td>
<td>8 (4.7)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>9 (52.9)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>49 (52.7)</td>
<td>2 (2.1)</td>
<td>9 (9.7)</td>
<td>7 (7.5)</td>
<td>17 (18.5)</td>
</tr>
</tbody>
</table>
According to the results, 47.3% of the respondents ended their sport careers prematurely, on their own initiative - the percentage of female drop-outs, the female athletes who abandoned the sport being higher than that of the male athletes (51.6% and 37.9% respectively). However, the views/responses are not homogeneous and this inhomogeneous factor is significant when one examines the participant's level of sport distinction ($\chi^2=8.32$, d.f.=2, p=0.05), presenting in reverse a proportional relation between the level of the participant's sport distinction and the premature termination of the career with percentages ranging from 64.7%, 42.9% and 23.5% in the collective, national and world level, respectively. (Table 4) On the other hand, there are no differences observed in the percentages of the questionnaire respondents that prematurely ended their careers due to disagreements with or the indifference and neglect of the organizing institutions.

**Table 4**

<table>
<thead>
<tr>
<th>Level of Distinction</th>
<th>Personal Choice</th>
<th>Disagreements with organizing institutions</th>
<th>Indifference or Neglect of Organizing Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective</td>
<td>22 (64.7)</td>
<td>2 (5.9)</td>
<td>9 (26.5)</td>
</tr>
<tr>
<td>National</td>
<td>18 (62.9)</td>
<td>9 (21.4)</td>
<td>13 (31.0)</td>
</tr>
<tr>
<td>World</td>
<td>4 (23.5)</td>
<td>9 (52.9)</td>
<td>7 (41.2)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>44 (47.3)</strong></td>
<td><strong>20 (21.5)</strong></td>
<td><strong>29 (31.2)</strong></td>
</tr>
</tbody>
</table>

Although there are no differences observed between the two genders (21.5%) that prematurely ended their sports activity due to disagreements with the organizing institutions (clubs, federations etc.) (Table 4), there is however a difference or a diversity of views ($\chi^2=14.87$, d.f.=2, p=0.001) when one examines the level of sports distinction: 5.9%, 21.4% and 52.9% in collective, national and high level sports, respectively. Furthermore, the indifference or the neglect of the organizing institutions appears as a cause or a reason for premature termination or withdrawal from the sport (31.2%), while the percentages between the two genders do not differ even when examining the level of sport distinction. In this case gender plays no role as the percentages that arise are 26.5%, 31.0% and 41.2% in collective, national and high levels, respectively. (Table 4).

**Discussion**

As indicated in the results of the study, the incentives for children (preschoolers, first graders etc.) to begin artistic gymnastics start in the family and in the school environment. This result is additionally supported by other research data that establishes the family and the school environment as dominant leading factors that contribute to a child's "choice" to participate in this sport. (Messing & Voigt, 1989). According to the greatest percentage of former male and female artistic gymnasts (79.70%) their participation in the sport has had a positive effect on the formation of social relations within the sports system. On the other hand, a small percentage of former female athletes claim that it has been a restraining factor or an obstacle in the creation-formation and development of social relations outside the social system of sports, a result that has been indicated in other studies as well. (Lusebringen, 1997).

Diversity is apparent in the factors that exercise pressure for distinction, as far as their significance is concerned, in correspondence or equivalence to the level of competition. Although the widespread view that dominates is that the mass media, for example, exercises the greatest pressure on the athletes for distinction (Patsantiras, 1994), the opposite is true in artistic gymnastics. To be precise, the mass media does not influence these athletes due to the low degree of commercialization that characterizes this sport in Greece. On the other hand, the pressures exerted by the state and by the trainers comprise the first factors of pressures for distinction - the state exerting pressure primarily on higher competitive levels in contrast to the trainer who acts in this direction by exercising pressure for distinction in the lower levels of competition.

The picture presented by the data is expected and predictable since the state, the federations and the trainers all benefit by the success or high performance of
the male and female athletes (Patsantaras, 1994). Additionally, of particular interest is the fact that gender “demarcation” or gender “division” is evident in the social environment of Greece. For example, pressure for distinction is exercised on girls by the family environment and on boys by the federation-state.

Moreover, as previously indicated, the daily and long hours of excessive training in combination with the demands and conditions of the sport, do not allow free-time for other activities, interests, self-education, interpersonal relations etc., a result confirmed by other studies as well (Kolip & Koerperzufriedenheit, 1999; Maguire, & Roberts, 1998) On the other hand, as mentioned above, only a small percentage (p<.001) of the respondents claim they had restrained from or have been deprived of sexual relations during their sports careers. Undoubtedly, the question pertaining to the sexual relations of male and female artistic gymnasts shows that their sports experience has increased their self-confidence and self-esteem thereby contributing positively to their sexual activity/life (Heintz, 2001). In this case, the percentages observed in Greece concerning the sexual relations of female gymnasts are much greater than those of the corresponding male gymnasts. On the other hand, the level of distinction plays a restraining role, for both genders, in the formation of sexual-intimate relations. In other words elite gymnasts, the high level male and female athletes, are deprived of or restrain from sexual relations to a greater percentage in order to achieve international high levels of performance.

Additionally, the conditions and circumstances confronted in competitive sports, by female athletes in particular have many times become the subject of research in the framework of sports science. Controversy surrounds the differential treatment of men and women in sport: the sense of exclusion, the sexist sports culture, narratives of maleness, hypermasculine or super-feminine athletes, denied sexuality, the downgrading of women’s achievements in the mass media as opposed to the glorification of male achievements and performance, the “invisibility” of women in the sports hierarchies and sport decision-making positions etc. (Kamberidou, 2006) A sense of exclusion and difference is felt at different levels, such as at the level of the social subject and the level of institutions and politics - structures of subordination as well as domination that result in very personal and stressful experiences. Discrimination, due to biological sex, is an element of social exclusion and social elimination that is actively present - a factor that is inconsistent with prevailing social and sport values, such as gender equality and gender equity. (Kamberidou, 2004)

For the female high performance athletes of artistic gymnastics, successful inclusion into the competitive sports system has been identified and described as an “escape” or an abandonment of traditional expectations of “femininity” and “femaleness”. Unquestionably women’s dedication to competitive sports has contributed to the development of diversity and gender identities that deviate from traditional stereotypes and perceptions of femininity. As a result female athletes have been portrayed in the mass media as androgynous or mannish, thereby downgrading their sports performance. (Kamberidou, 2005) Furthermore, studies reveal “identity crises” due to transforming gender roles. For example, the connection between “I am an athlete” and “I am a woman” has become more difficult and complicated. (Pfister, 1999). This is one reason, certain studies claim, that female athletes abandon at a younger age their active participation in sports as opposed to male athletes. (Palzki, 1990; Rose, 1990).

In regard to the premature ending of the female athlete’s sports career due to disagreements with or the neglect of organizing institutions, it is directly related to the level of distinction, namely the great expectations, demands and pressures exerted by institutions for national and international recognition and success. Unquestionably, through the success of both male and female athletes the organizing institutions (clubs, federations etc.) gain not only economic/financial benefits, but also broader social ones. On the other hand, the percentage of male and female athletes that terminated their sports careers for personal reasons is reduced significantly when the athletes, regardless of gender, have reached high levels of distinction-high performance - as indicated in other studies as well. (Alfermann, Stichart & Diab, 1993; Buhmann & Alfermann, 1990)

However, the social life-relations-development of the questionnaire respondents in Greece is not formulated in the same way. A large percentage of
former female athletes in Greece, as opposed to the percentage of former male athletes, constructed and cultivated their social relations during their sports careers, and an equivalent large percentage after the end of their sport careers (p<.05), thereby indicating that male athletes are more “alienated”, “isolated” or “pressured” during the training process. Additionally, former female athletes, even though they had confronted the same extensive training processes, formulated and developed social and interpersonal relations outside the sports system, namely in other social spheres.

At this point it is necessary to reiterate that in competitive sports the human body, systematically ignored as a “topos” of socio-cultural experience, has been perceived exclusively in its “physio-biological” dimension, for both genders. Certainly there is an overwhelming abundance of documented knowledge in relation to training methods and processes for increasing performance in artistic gymnastics, but very little about the associated with this process “body experiences” and “meanings” that this has on the personal and wider social life of the gender subject.

Undeniably, we are embodied, namely the biological body helps shape social relations and is not independent of them. The biological body is not simply constrained by social relations, but also forms a basis for and contributes towards these relations. (Penney, 2002). Consequently, what is required is an examination of the gender factor, specifically an analysis the predominating and prevailing social views and social values, including gender stereotyping, as regards the “masculine” nature and image of masculinity, maleness and manhood vs. the structure, the construction and the expression of “femaleness”, “femininity”, and “womanhood” - including the male and female body aesthetic. At this point it is necessary to specify that in gender literature “sex” is identified with the biological differences between men and women whereas gender (the social sex) with social/biological issues which are typically associated with discussions on “masculine” and “feminine” identities, personal characteristics, social behaviours, stereotypes etc. (Kamberidou, 2004)

However, this nature/culture division and dualism is also problematic since the biological body, as previously mentioned, is not simply constrained by social relations, but also forms a basis for these relations and is not independent of them. Accordingly, in talking gender we are not only concerned with the experiences of women and girls. Men and boys also have a gender. Gender is an issue for both men and women - and not only in the arenas of physical education and sport. Concentrating exclusively on gender “differences” only supports inequalities and obstructs - meaningful and equitable participation in social and civic life. The emphasis on “difference” promotes social inequalities, gender inequalities, social discrimination, and violence, including “invisible” forms of violence, such as racism, sexism and homophobia. What must be taken into account are the commonalities and diversities, as both genders have multiple identities and multiple differences, attitudes and behaviours concerning physical culture, shape, sexuality etc., according to race, culture, class, colour, sexual orientation, religion, physical handicap etc. In other words respect for the individual, cultural identity, ethnic self-definition and acknowledging diversity, namely multiple masculinities and femininities, alternative identities etc. (Kamberidou, 2004)

Conclusions
In this study, we focused on the “living experiences” of the questionnaire respondents, with the use of the “interpretative adaptation model” (Pfister 1999:27), in order to determine the meaning the respondents themselves have given to the circumstances, events, situations, demands and conditions they experienced in relation to their competitive sports experiences/careers. Namely how they themselves processed, defined and interpreted their lived experiences in relation to external influences. The purpose of our study was to penetrate and pursue specific issues in order to correlate or rather interrelate them with personal sport experiences, social interpretations and socio-cultural realities. The observations, views and interpretations of the respondents - former male and female gymnasts - are significant because they reconstruct and depict social reality as it is interpreted, assessed-judged, defined and constructed by them, as gender subjects, in combination or in correlation with the formal, conventional and strict “structures” of the sport that unavoidably obstructs, to a great degree, the free
development, advancement and social progress of the social subject. (Pantsartaras et al., 2005).

Furthermore, in reference to gender, the factor of "difference" is emphasized in view of the fact that the competitive sports experience of the female athletes are categorized differently (Deem & Gilroy, 1998), thereby confirming that experiences in artistic gymnastics are determined differently, namely according to the biological gender. (Kamberidou, 2004) This indicates that the competitive sports level in artistic gymnastics could be considered as an "autonomous" experience that influences and affects other individual, personal and social experiences while at the same time it is also influenced and affected by them. Additionally, in accordance to the level of competition, apparent is the hierarchy of agents or officials that discriminate between male and female athletes, such as the state, the mass media, sports agents/officials, coaches etc. (Kamberidou, 2005)

Undoubtedly, sport performance plays a very important role in social and professional recognition, establishment and placement. A large percentage of male and female high performance athletes or elite gymnasts have been established professionally within the sports system, marking it as a "topos" of professional-occupational placement, while at the same time, the high sports level operates as a restriction or a significant barrier to other professional-occupational roles outside the sports system.

Apparently, for both genders this sports "topos" is perceived as a social space for the creation, formulation, development and reproduction of social relations. The role that Artistic Gymnastics plays in other expressions of life is determined by different and diverse "sports biographies", influences, expectations etc. For example, a subjective interpretation and analysis - and not an objective interpretation or character - can be assigned to most of the responses of the male and female athletes, such as those concerning sexual relations and sports performance. In this framework, in our qualitative approach, assessment and evaluation of the data we did not attempt to "discover" a probable "normality" related to specific phenomena but primarily to reveal the influences and effects of this sport in various significant sectors of personal and social relations. Our target was not the generalization of the data, but a qualitative grouping of the interrelations between living sports experience and the broader-wider social course and social development of male and female high performance athletes in artistic gymnastics.

Final Remarks, Recommendations

Contemporary critical theories (post-Marxism, cultural studies, gender studies and feminisms) distinguish sport as a site through which questions related to social and political transformative possibilities, agency, ideology and power must be considered (Cole, 1994), in combination with the necessity to locate cultural practices within their social-historical specificity. Evidently the body-sport relationship is now part of social formation, which seems to be dominated, in western society, by "perfect" bodies, gendered forms of body technology, namely practices of "normalizing" and remaking bodies and sport identities. Consequently, it is critical to recognize the importance and impact of sports in the production of national identities, ethnic self-definition and the corresponding technologies of "normalization". Are we destined to see a future of genetically designed sportbodies, in view of the ongoing body management, the pure-body politics and "body invasion" practices, including the "myth" of the athlete's pure/natural body? In the age of cyborgs, plastic bodies, "genetic doping", virtual reality and increasing state interventions, we need to reconsider and examine how sport, exercise and the politics of fitness - knowledge, discourses and technologies - are deployed in our everyday lives. (Cole, 1994; Kamberidou & Pantsartaras, 2006)

Undeniably, changes have occurred in sports due to socio-cultural, economic, scientific and technological shifts, while sport technologies represent only one manifestation of this contemporary socio-political reality. New agendas need to be developed, such as the new agenda in gender studies, which among other things, is the rethinking and re-evaluation of the categories, relations and interrelations between sport, the body, "nature", gender, sexuality, race, class, science, power, subjectivity, domination, opposition as well as "difference" vs. diversity. In view of
the new technologies of power (Kamberidou & Patsantas 2006) new questions need to be raised - questions related to resistance and opposition politics - in this transitional stage of the postmodernist period.

We are in a transitional period that not only disorients and disorganizes but also marginalizes or excludes an extremely large sector of the population, and not only in the sport structures. Our social system is faced with difficulties in defining the problems and thus providing solutions for a plethora of new questions and issues that have emerged. In a society where everything as we know it today is in the process of transformation due to significant changes in the global scene - the globalization of the economy, aggressive competition, "genetically designed sport bodies", terrorism, ethnic conflicts, electronic surveillance etc., unquestionably, the gender subject is having dramatic difficulties in adapting and comprehending what is going on during this transitional stage of the postmodernist period. (Kamberidou & Patsantas 2006)

Prevailing discussions that emphasise “difference” - as opposed to diversity which means being different is being unique, namely respect, understanding and solidarity with those who are different in culture, religion or language - support and reproduce social exclusions, discriminations, gender divisions, gender classifications and ethnic inequalities. Gender equality and gender equity is required in order to nurture within our children attitudes, values and skills that are conducive to living in harmony with others, respecting human rights and resolving conflicts non-violently. Something that the sport system or the social space of sport could contribute to significantly. For instance, the use of games and sports to promote gender and ethnic equality, solidarity and peaceful coexistence, to build Team and Trust, as is the example of the American Peace Games Project (www.peacegames.org), a widespread international campaign to change attitudes. Specifically, in order to develop and sustain respect for cultural "differences", or rather diversity, social exclusions need to be eradicated. A new form of education is necessary to eliminate social exclusion or alleviate the alienation, solitude and loneliness of the gender subject. True democracy requires the participation of the citizen in all social spheres, including sports and its decision-making processes.

However, decisions without adequate education, knowledge, and access to information and the citizen's active participation lead in the wrong direction. It is crucial to formulate and adopt educational curricula, beginning in kindergarten, supported by specific teaching methods as well as methods of learning that incorporate Gender Education, gender studies and gender issues, thereby contributing to the gender subject's progression and future inclusion, among other things. In other words, public education as a laboratory or an incubator for democracy.

However, educational reforms alone will have very limited and restricted results if international interdisciplinary research is not systematically promoted, supported and encouraged. An international-interdisciplinary research network could examine, re-evaluate and discuss current issues, such as 1) Gender Embodiment. 2) Bodies designed for sport, the re-making of the gendered body. 3) How can the gender specific, the gendered educational choices, stereotypes, perceptions and attitudes, including those based on cultural differences, race, class, religion, sexual orientation, physical handicaps etc. be changed or eradicated. (Kamberidou & Patsantas 2006) 4) The use of games and sports, as previously mentioned, to promote gender and ethnic equality, solidarity and peace, as is the example of the American Peace Games Project (www.peacegames.org), a widespread international campaign to change attitudes, since the sports "topos" is perceived, for both genders, as an "arena", as a social space for the creation, formulation, development and cultivation of social relations, life-long learning and empowerment. Such questions and issues require interdisciplinary research on the factors that lie behind the disrespect, the violation and the exploitation of individual human rights.

The establishment of an international, inter-cultural network of researchers - from the sport sciences, sport studies, the social sciences, the humanities, gender studies and women's studies is required in order to 1) provide a clearer picture, especially in reference to the topography of the marginalized and the excluded social groups within the European Union, 2) examine complex social patterns rather than isolated behaviours, and identify measures to assist teachers, parents...
and policymakers in formulating practices, 3) explore how pro-social literature and curricula can be an effective part of a holistic academic model that builds self-esteem, courage, identity, and an ability to be active agents of social change regardless of gender, 4) examine the interrelations between sport performance, the gender subject, the socio-cultural environment and corporeality, including the male/female body aesthetic, 5) examine the multi-variable, multifaceted and complex transforming-changing processes of perceptions, sports roles and sports identities, 6) study the social effects and the social impact of intensive and prolonged specialized training on the personal and social lives of former athletes, in other words, the emphasis on body morphology, physical capabilities and aptitudes. Additionally, in order to promote basic research aimed at eliminating social exclusions and social discriminations, and in order to guarantee success, indiscriminate cooperation between all stakeholders, schools, universities, the researchers, the citizens, and policy makers is absolutely necessary.

**Abstract**

Systematically neglected, even today, is the examination of the interrelations between the social subject, sport performance, the socio-cultural environment and corporeality - namely the influences and impact on the social relations, social development and interpersonal relations of the individual due to the transformations on the human body resulting from the training processes. Contemporary critical theories have distinguished sport as a site through which these issues and questions regarding social and political transformative possibilities, agency, ideology and power must be considered, in combination with the necessity to locate cultural practices within their social-historical and gender specificity. Today, the body-sport relationship is an element of social formation: gender embodiment, bodies designed for sport, the re-making of the gendered body etc. In competitive high performance sports, the body is perceived in its "physiological-biological" dimension, whereas it has been systematically ignored as a "topos" of categorization for social and cultural experiences. The "particularity", the "distinctively explicit" body morphology of the male and female athlete of artistic gymnastics in contrast to that of athletes in other sports - in relation to the customary, average and age-appropriate body type and characteristics. Artistic Gymnastics has not been conceived as a social "topos" that transforms, through interventions (e.g., through the training process), established and prevailing conceptions pertaining to the human body. Specifically, as a multi-variable reconstruction or transformative process of perceptions, sports roles and sport identities.

The purpose of this study is to examine the meaning and significance that this specific body morphology - a result of long-term, intensive and long hours of specialized training on apparatuses - has on the wider social life-reations, social development and professional "biographies" of the participants. In other words, to what extent this "somatotype" or body characteristics, dimensions and "particularities", including the training and the level of performance, influence, affect, or have a dynamic impact on the social relations, social development and the later professional-occupational placement or establishment of the artistic gymnast.

The results of the study - that includes an analysis of a closed questionnaire distributed to former male and female athletes of artistic gymnasts throughout Greece - reveal that this sport has not obstructed or restricted the creation, formation and development of social relations within the sports system nor outside the sports system, namely in other social spheres. On the contrary, it has contributed to the social recognition, and to a great extent, the future professional-occupational placements and establishment of former artistic gymnasts of both genders. On the other hand, a small percentage of former female athletes claim that their preoccupation with artistic gymnastics has been a restraining factor, an obstacle in the creation-formation and development of social and interpersonal relations outside the social space of sports.
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