

ENCOURAGING THE OVERCOMING OF GENDER DIFFERENCES IN PHYSICAL ACTIVITY: THE ROLE OF THE ENJOYMENT

FAVORIRE IL SUPERAMENTO DELLE DIFFERENZE DI GENERE NELL'ATTIVITÀ FISICA: IL RUOLO DEL DIVERTIMENTO



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Maria Luigia Salvatori
Universidad Catolica San Antonio de Murcia - Spain
marialuigia.salvatori@gmail.com; mlsalvatori@alu.ucam.edu



Domenico Cherubini
Universidad Catolica San Antonio de Murcia - Spain
dcherubini@ucam.edu



ABSTRACT

Expectations of women in sport are often based on gender stereotypes. In this context, enjoyment would seem to play a key role in improving gender trends in sport choice. This article aims to explore the relationship between perceived competence as one of the basic psychological needs and gender differences among primary school students, considering enjoyment as a mediator factor. 50 children performed different games proposed by emphasizing the enjoyment aspect for the experimental group and a regular program of curricular physical education. The findings of this study highlight the importance of enjoyment in play a significant role in promoting gender equality in the choice of sport.

Le aspettative nei confronti delle donne nello sport sono spesso basate su stereotipi di genere. In questo contesto, il divertimento sembrerebbe svolgere un ruolo chiave nel migliorare le tendenze di genere nella scelta dello sport. Questo articolo si propone di esplorare la relazione tra la competenza percepita come uno dei bisogni psicologici di base e le differenze di genere tra gli studenti della scuola primaria, considerando il divertimento come fattore mediatore. 50 bambini hanno eseguito diversi giochi proposti enfatizzando l'aspetto ludico per il gruppo sperimentale e un programma regolare di educazione fisica curricolare. I risultati di questo studio evidenziano l'importanza del divertimento nello svolgere un ruolo significativo nel promuovere l'uguaglianza di genere nella scelta dello sport.

KEYWORDS

academic achievement; motor competence; exercise.
risultati accademici; capacità motoria; esercizio.

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Introduction

The formation of identity is configured as a long and complex process in which a wide range of factors intervene providing the individual with the cognitive, emotional, conscious and unconscious supports functional to the construction of a coherent and dynamically integrated self-image. Identity development cannot ignore the socio-cultural environment in which the person is immersed, permeated by specific value, ethical, behavioral and legislative systems. Gender identity, namely the inner feeling of belonging to the male or female gender, is built on the basis of the convergence of constitutional and socio-cultural aspects from the living environment in which the person is inserted (McGovern, Drewson, Hope, & Konopack, 2020). This process also takes place thanks to agents and organizations responsible for socialization that, often, are bearers of beliefs and expectations that reflect gender stereotypes, that is the representations of male and female in a specific society. Gender stereotypes can be defined as simplified and reductionist representations of reality, socio-culturally shared, which attribute certain characteristics to men, women and their relationships (Portela-Pino et al., 2020). They are on the basis of the preservation of traditional gender roles and are an expression of: (i) a generalizing tendency that implies the affirmation of a representation that is independent of empirical evidence; (ii) a shared collective character of this representation or the common and widespread belief that men and women possess different heritages of characteristics; (iii) a minimization of individual differences within the same category and an accentuation of the differences between the elements present within the two different categories.

Gender stereotypes have a dual function, descriptive and prescriptive, not only defining how people actually are but also how they should be. They revolve around opposing characteristics (competence-care, strength-sweetness, independence-dependence, etc.) and see the male gender more oriented to the assumption of responsibility in an active way, while the female one as reactive, as a response to events of which one is not a first-person supporter (Orlandi et al., 2021). Education has been shown to increase children's and future adults' awareness of gender stereotypes and the ability to identify them. Therefore, through a "thought" education it may also be possible to deconstruct such stereotypes. Sport, like other social organizers, constitutes a real space for the formation of the identity structure because, alongside the school, the peer group and the family, it is considered one of the ideal contexts in which to experiment and experiment (Duffey et al., 2021). As such, it contributes to the process of acquiring meaning and self-awareness. Like the other bodies appointed and involved in the process of identity formation, the sports world does not seem to be exempt from logics that invite to adhere to gender stereotypes, resulting in sexist and heterosexist prejudice. In this sense, the sporting context is configured as a sexualized environment and sexuality is a structuring principle insofar as it clearly influences the degree of participation of

individuals and their choice to attend such realities (Molanorouzi, Khoo, & Morris, 2015).

In the choice of sport, the children are often encouraged to undertake sport considered “male” or “female”, namely in accordance with their sex. Actually, do not exist any biological obstacles whereby a little girl cannot play soccer, or a little boy cannot to dance. Sometimes, within the scholastic environment there is still a dualistic mind-body view, where sensorimotor aspects are excluded. Scholastic education and, specifically, physical education should not be restricted to the teaching of the corporeality in a limited vision. Neuroscience, which currently cooperate with the pedagogical approach, solicitate teacher and trainers to promote a corporeality and movement education within a wider framework (Meyers-Levy, & Loken, 2015).

Sport, in fact, plays a very important role in the educational development of an individual. The educational features involve teachers and trainers, whose role will be those to create an environment in which will be analyzed the respect of the rules, the self-respect, and the respect of the others. Sport become element of discovery whereby interpret social roles and functions.

It can be element of knowledge of one's limits and, at the same time, a means of discovery of one's capability. Through the sport activities it is possible to get in touch and promote one's morphological dimension (Lenhart et al., 2012).

One of the tasks of trainers, teachers and coaches can be to highlight the vision and mission of their work regarding the context in which each one operates (school, sports, rehabilitation, preventive). Thus, the trainer identifies paths and strategies that consider both theoretical innovations and the design of individualized educational and sports paths, that is respectful of personal differences, age, gender and sexual orientation (Chalabaev, Sarrazin, Fontayne, Boiché, & Clément-Guillotin, 2013). Some "good practices" concerning the development of identity and physical self-concept emerge from the scientific literature. In particular, to improve the physical self-concept seems very useful:

1. pay attention to the different physical and sporting skills of the individual, considering the student in his multidimensionality;
2. be aware of the influence that the media have in the elaboration of the individual regarding his own body, sexual and aesthetic image;
3. try not to make judgments, understanding and valuing each subject in its uniqueness and totality;
4. Keep in mind the ways in which the individual assigns the causes of success or failure in a specific sports performance, helping the individual to recognize and positively use his resources and emotions in order to prevent him from abandoning physical activity and / or sports.

Therefore, the purpose of the present paper was to explore the relationship between perceived competence as one of the basic psychological needs and gender differences among primary school students, considering enjoyment as a mediator factor.

Method

Study design

We utilized a randomized controlled study to investigate the role of enjoyment on gender differences in the choice of physical activity among children.

The study was conducted in a primary school. The intervention consisted of different games proposed by emphasizing the enjoyment aspect for the experimental group and a regular program of curricular physical education. The evaluation regarded 24 lessons monitoring the participants at the 1st and 12th week, and the measurements were administered one day before intervention program and one day after training.

Participants

50 children were recruited with an age range of 8-10 years (M age = 9.04, $SD = \pm 0.66$) from a local primary school.

Inclusion criteria were: participants had to be able of completing a moderate-to-vigorous intensity aerobic exercise session, current students in one of the school, and able to abstain from all physical activity outside the parameters of the study protocol during test days. From the study were excluded any children with an orthopedic condition limiting their ability to perform sports, and those unable to abstain from exercise outside the study protocol. Participation in the research study was voluntary.

Children and their parents were informed about the study characteristics. The researchers ensured the anonymity of the participants, and the protocol was performed in accordance with the Declaration of Helsinki. All parents provided their written informed consent. The study was conducted from 30 January 2023 to 30 April 2023.

Procedures

Before the first training session, a special briefing was given to provide explanation on content of the exercise training program and the motivation of every single child was verified. One week before the beginning of the intervention, participants were led to the school gym to proceed with the measurements included standardized motor assessment tests and a cognitive test.

The participants were tested individually and completed each test immediately prior to and following the intervention, at the same time of the day and under the same experimental conditions. Measurements were instructed, supervised and performed by two experienced physical education teachers.

Measures

Motor tests

The evaluation regarded 6 subtests which are part of the Motorfit battery (Perotta, Corona, & Cozzarelli, 2011), as shown below:

1. Motorfit Locomotor
 - Jumping forward on one foot (SAP1);
 - Lateral galloping (GL);
 - Hopping step forward on one foot (SAP2);
2. Motorfit Object
 - Throwing a ball with one hand (LP);
 - Catching a ball with hands (RP);
 - Hitting a ball with a tennis racket (CP).

They were chosen due to their simple and time-efficient implementation, by requiring minimal equipment.

Physical Activity Enjoyment Scale

Participants' enjoyment of physical activity was measured using the 16-item Physical Activity Enjoyment Scale (PACES; Carraro, Young & Robazza, 2008). This scale intended to gauge enjoyment of children involved in outdoor recreational physical activity. The scale was slightly modified to render them easily understandable by children. Item scores ranged from 1 (not at all) to 5 (very much).

Sport Orientation Questionnaire (SOQ)

The Sport Orientation Questionnaire (SOQ) was developed in 1988 by Gill and Deeter. Its objective is to identify individual and sport-specific differences in performance orientation. The SOQ is composed of three distinct but interrelated subscales, namely competition (13 items), win (6 items), and goal orientation in relation to sport (6 items). Respondents respond to these items on a 5-point Likert scale (1=strongly disagree; 5=strongly agree).

Exercise training intervention

The training intervention included 10 minutes of warm-up, 40 minutes of core session, and 10 minutes of cool-down. The core session consisted of a series of games which had the purpose to increase involvement, motivation, and enjoyment. In fact, the exercise program was designed a way to be enjoyable and appealing in order to create full awareness of one's own ability. Each game consisted of activities finalized to acquire and improve motor competence. They could be schematically summarized as follows:

- Targeted activities to bring students closer to different types of sports;
- Individual exercises;
- Cooperation exercises;
- Team or individual competitions and games to promote healthy competition;
- Exercises and movements to develop lateralization, control, and general and segmental coordination;
- Recreational-motor activities to develop motor and postural patterns, stillness and movement: running, jumping, catching, throwing;
- Games of coordination and exploration to gain mastery of space;
- Use of body segments in games aimed at enhancing concentration and attention,
- Exercises and recreational activities in pairs, in teams, also organized in the form of a competition to develop cohesion, reciprocity in the group and trust in the other,
- The body to communicate, express and represent real and imaginary situations, personal sensations, emotions and feelings;
- Rhythmic activities and games with the help of music.

Statistical analysis

Data analysis was carried out using SPSS software version 25.0 (IBM, Armonk, NY, USA). Correlation coefficients (Pearson's r) were calculated. The normality of all variables was tested using the Shapiro-Wilk test procedure, and the data were checked for homogeneity of variance assumptions (Levene test). We used an independent sample t-test to assess group differences at baseline and a two-way Anova (experimental/control group) \times time (pre/post-intervention). When the "Group \times Time" interactions reached significance, post hoc testing was conducted. Partial age squared (η^2p) (small ($\eta^2p < 0.06$), medium ($0.06 \leq \eta^2p < 0.14$), large ($\eta^2p \geq 0.14$) was used to estimate the magnitude of the difference within each group. Effect sizes (ES) were determined by Cohen's d (small ($0.20 \leq d < 0.50$), moderate ($0.50 \leq d < 0.79$) and large ($d \geq 0.80$). Statistical significance was set at p 0.05.

Results

All participants received treatment conditions equally and according to the same procedures and time conditions. None of them were injured during the course of the study. The students involved in the research did not differ in age, sex, anthropometric characteristics, psychological measures, as well as socioeconomic status.

Motor tests

Statistical analysis revealed a significant "Time x Group" interaction for Motorfit Locomotor ($F_{1,97} = 66.12$, $p < 0.001$, $\eta^2p = 0.40$, large effect size) and Motorfit Object ($F_{1,97} = 106.50$, $p < 0.001$, $\eta^2p = 0.52$ large effect size). Post-hoc analysis revealed a positive for Motorfit Locomotor ($t = 8.72$, $p < 0.001$, $d = 1.24$, large effect size) and Motorfit Object ($t = 10.40$, $p < 0.001$, $d = 1.48$, large effect size) in the intervention group. No significant changes were found for the control group ($p > 0.05$).

Physical Activity Enjoyment Scale (PACES)

Statistical analysis revealed a significant "Time x Group" interaction for PACES ($F_{1,97} = 70.97$, $p < 0.001$, $\eta^2p = 0.42$, large effect size). Post-hoc analysis revealed a positive improvement in PACES ($t = 5.69$, $p < 0.001$, $d = 0.81$, large effect size) in the intervention group. No significant changes were found for the control group ($p > 0.05$).

Sport Orientation Questionnaire (SOQ)

Statistical analysis revealed a significant "Time x Group" interaction for Competitiveness ($F_{1,48} = 106.76$, $p < 0.001$, $\eta^2p = 0.69$), Win ($F_{1,48} = 45.50$, $p < 0.001$, $\eta^2p = 0.58$), and Goal orientation in relation to sport ($F_{1,48} = 71.30$, $p < 0.001$, $\eta^2p = 0.59$). Post-hoc analysis revealed a positive improvement in Competitiveness ($t = 12.97$, $p < 0.001$, $d = 2.59$), Win ($t = 6.23$, $p < 0.001$, $d = 1.24$), and Goal orientation in relation to sport ($t = 9.56$, $p < 0.001$, $d = 1.91$) in the intervention group. No significant changes were found for the control group ($p > 0,05$).

Discussion

Given the crucial role of physical activity in fostering the positive development of the individual, the purpose of the present paper was to explore the relationship

between perceived competence as one of the basic psychological needs and gender differences among primary school students, considering enjoyment as a mediator factor.

The main finding of the present research was that male students had higher scores of perceived competence and enjoyment compared with female students. One possible reason related to this result is that boys have higher perceived competence in their own abilities than girls. This is in accordance with the Self-Determination theory. The Theory of Self-Determination (Deci and Ryan, 1985), in fact, argues that an individual's well-being is the result of the satisfaction of three basic psychological needs: (i) Need for autonomy, i.e. feeling free in each action and feeling that one acts of one's own will; (ii) Need for competence, i.e. believing that you can act competently in your environment to perform important tasks; (iii) Need for relationships, i.e. seeking and developing safe and positive relationships with others in one's social context. To meet these three needs, a person must develop a certain amount of self-determination, a combination of skills, knowledge, and beliefs that allow the individual to adopt self-regulating, autonomous, goal-directed behaviors. Over time, self-determination leads individuals to engage in behaviors by acting out of choice rather than obligation or compulsion.

A further reason lies in the different attitude that boys and girls had in relation to the competitiveness. According to Gill and Deeter (1988), differences in competitive behavior reflect personality or individual differences in motivation to achieve a goal. The three domains identified reflect three areas of sports orientation, including a general motivation for competitiveness (or the desire to strive for success in situations of sporting success), the specific desire to win (victory orientation), and the desire to meet personal standards (goal orientation). Although these three areas are interrelated, they represent unique components of sports guidance.

Previous research has established that male athletes generally score higher than women in terms of sports orientation in all three areas (competitiveness, winning, and goal orientation) (Pfister, 2010; Gill and Deeter 1988). In addition, males typically score higher in terms of competitiveness than females, and females report being more goal-oriented (Gill 1988; Gill and Deeter 1988). It is assumed that individuals driven to compete and achieve challenging sports-related goals are more likely to participate in sports. Swain and Jones (1992) reported that athletes with a higher competitive orientation had a higher self-concept than athletes who scored lower in competitive orientation. Although the direction of this relationship is unclear, Swain and Jones suggested that individuals who have developed greater awareness of their motor skills are more likely to be driven to compete and take pleasure in performing a given sporting activity, and that a more competitive athlete is likely to feel more confident in a competitive environment. These findings

suggest that, for adolescent athletes, it is particularly important to assess the type of sports-related goals, as well as the extent to which they are driven to achieve them.

Another finding was that enjoyment seems to play a significant role than the perceived competence in students' participation in school physical activities. These results could be the result of social and cultural legacies linked to physical activities according to which certain physical activities suit the most to girls rather than boys and vice-versa. Indeed, despite the rapid growth of women's sport, as in particular in recent years in women's football, the overall participation levels of women remain low compared to men's. In addition, they do not participate in all sports activities and physical activity. This has been partly attributed to the fact that many sports are still considered typically "male" and, therefore, deemed less suitable for women and girls by society. The exclusion of women from certain sports, combined with active discrimination, not only has a negative impact on individual women, but is also detrimental to sports culture and limits the potential and sustainability of sport as a whole (Bonneville-Roussy et al., 2017).

On the basis of the results achieved in this research and consistent with the results of previous research on primary school students it is possible to claim that boys had significantly a higher physical activity in comparison to girls and that enjoyment seems to play a crucial role than the perceived competence in mediating students' participation in physical activities.

It is clear that it is necessary, especially in the context of primary school, to propose an education of corporeality and movement in a broader vision. Teachers should consider practices of education to the body by developing the practice of care, time for play, educational experiences in the name of playful pleasure and the relationship between different expressive languages.

Sporting activity can lead to a morphological and psychological shaping of the individual. Sport cooperates in the enhancement of the aesthetic form and improves the way in which the subject interfaces on a social level, allowing, among other things, to break down psychological resistance and potential dysfunctions (Pluhar et al., 2019).

Sport is the basic element for the formation and construction of the group. In sport, the team is the input that allows the individual to transform subjective responsibility into collective responsibility. The transition from an individual to an individual, as part of a group, creates a model to be imitated in a positive way even outside the sporting context. The elaboration of the values of friendship, relationship, mutual collaboration, respect for rules, loyalty, recognition of roles, are skills that the individual can apply to all contexts of life and stages of growth. In the national indications of the "General Objectives of the Formation Process" what is defined as "corporeality as a value" is clearly exposed. This highlights how exercise science, assisted by other disciplines, can promote the positive

development of the individual. In the psycho-pedagogical field, it has been highlighted how physical education can promote interdisciplinary approaches with cognitive, emotional and expressive characteristics (Sindik, Mandić, Schiefler, & Kondrič, 2013).

Despite the present research presented evident point of strength some limits need to be highlighted: the first one was the small number of the sample and conduct of the trial in a single school. A further limit was the lack of evaluation of important variables that could affects the participation in physical activity, such as motivation, emotional factors and self-esteem.

On the contrary, the value of this paper was related to the fact that it showed the importance of physical activity in improving self-competence, as well as the importance of enjoyment in play a significant role in promoting gender equality in the choice of sport.

Conclusions

In conclusion, we can believe that educating to corporeality means, above all, generating good educational and training practices that can help the individual to have a greater awareness of himself from both a personal and social point of view. This should be guaranteed through educational and sports programs that pay attention both to the uniqueness of the individual and to the training of teachers, teachers and coaches, so as to play sports a fundamental tool for the improvement and physical, mental and social integration of each individual.

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