

Examining social support and self-esteem in high-performance sportswomen in Spain

IAGO PORTELA-PINO¹, MILLÁN BREA CASTRO², MYRIAM ALVARIÑAS-VILLAVERDE³ ✉

¹Department of Health Sciences. Faculty of Health Sciences. Isabel I University. Burgos, Spain.

²Department of Psychoeducational Analysis and Intervention. Faculty of Education. University of Vigo. Ourense, Spain.

³Department of Specifics Didactics. Faculty of Education and Sport Sciences. University of Vigo. Pontevedra, Spain.

ABSTRACT

The purpose of this study was to determine whether perceived social support is related to self-esteem and the type of sport performed by elite female athletes. 243 Spanish elite female athletes completed the Multidimensional Scale of Perceived Social Support. The results show that the greatest social support for high-performance sportswomen is family. The social support of the family and the group of friends has an impact on their self-esteem. Athletes who practice team sports versus those who practice individual sports have higher self-esteem and perceive friends as their main social support. In addition, family social support predicts self-esteem.

Keywords: Sport, Woman performance, Self-esteem, Social support.

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✉ **Corresponding author.** Faculty of Education and Sport Sciences, University of Vigo, Spain. Campus A Xunqueira s/n 36005 Pontevedra, Spain. <https://orcid.org/0000-0003-2768-269X>

E-mail: myalva@uvigo.gal

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INTRODUCTION

The fact that athletes are under constant pressure and stress suggests that they require an important social support network to mitigate the effect of the continuous demands to which they are subjected.

Therefore, the concept of athletes' social support has attracted increasing interest in the last decade, but nevertheless there are few studies, especially in the female collective, and existing studies have usually focused on the benefits of support (Freeman & Rees, 2008; Poucher et al., 2018) or on the analysis of the perspectives of athletes or coaches separately (Thelwell et al., 2017).

The concept of social support is multidimensional (Holt & Hoar, 2006). Social support is generally understood as the emotional, informational, or practical help that an athlete receives from a person who is affectively close to him/her and who is available when needed (Thoits, 2010). Researchers have highlighted the importance of social support for physical and mental health, subjective well-being, coping, and stress management in people of different ages (Cohen et al., 2000; Goodwin et al., 2004; Nurullah, 2012; Schwarzer & Buchwald, 2004). In the field of sport psychology, social support is an external resource that helps athletes cope better with stress (Katagami & Tsuchiya, 2016). And, in some studies it is evident that athletes' perceptions of parental support are related to their sport performance mediated by self-esteem (Rouquette et al., 2021). In Gabana et al. (2017) study conducted with Olympic athletes and their coaches note that the provision of support is personally and professionally rewarding and the athletes appeared highly dependent on their support providers.

Self-esteem is revealed as a protective factor to avoid situations of anger and stress (Muñoz-Villena et al., 2020). In sports, self-esteem does not seem to be improved by having a social support network (Pedrosa et al., 2012) but by the very benefits generated by a continued sports practice (Coatsworth & Conroy, 2006; Levy & Ebbeck, 2005; Warburton, & Bredin, 2017). Parental social support and attachment have a significant positive effect on female athletes' self-esteem (Kang et al., 2015; Mastrogianni et al., 2020). And, Park et al. (2020) note, referring to table tennis athletes, that social support indirectly affects self-esteem. Female athletes are more likely to report high self-esteem than those who do not engage in sport activity (Galante & Ward, 2017).

Therefore, the objective of this study was to determine whether perceived social support is related to self-esteem and the type of sport performed by elite female athletes.

METHOD

Participants

The investigation has been developed by means of a non-probabilistic purposive sampling method with a sample of 243 Spanish elite female athletes in different individual and collective sports with a mean age of 23.89 years (min. 15; max. 52). A cross-sectional observational study was carried out, and the selection of the group was deliberate. The inclusion and exclusion criteria for the group of respondents were verified by survey questions on the presence or absence of the indicators listed below. An elite athlete was considered an elite athlete: if she competes in the first national league or has participated in the national championship. Informed consent was obtained from the participants.

Instrument

The instrument used for the assessment of perceived social support is the Multidimensional Scale of Perceived Social Support –MSPSS (Zimet et al., 1988; Zimet et al., 1990) adapted to Spanish by Trejos-Herrera et al. (2018). It is a 12-item Likert-type scale with 7 response alternatives that measures three factors: family members (items 3, 4, 8 and 11), friends (items 6, 7, 9) and 12), and significant others (items 1, 2, 5 and 10). The results can be calculated in total for the whole test or for each of the scales separately. The higher the scores obtained, the higher the level of social support you have. The scale shows a reliability by Cronbach's α coefficient of 0.84 similar to other studies (Dambi et al., 2018).

To measure self-esteem, the Rosenberg 10-item scale was used, which aims to measure feelings of self-worth and self-esteem (Rosenberg, 1965). Five of the items of the scale are formulated positively and the other five negatively to control for the acquiescence effect; the positive ones are scored from 1 to 4 and the negative ones from 4 to 1 (Martín-Albo et al., 2007). Chronbach's Alpha was also used to measure its reliability, giving a result of $\alpha = .871$, which implies high reliability (George & Mallery, 2003; Gliem & Gliem, 2003). For the interpretation of the results, the following classification was followed: less than 25: low self-esteem; between 26-29 medium self-esteem and >30-40 high self-esteem.

Procedure

The basic strategy of application in this research consisted of sending the questionnaire to the participants by mail, stating the anonymous and free participation, and the confidentiality of the information. The study was conducted according to the ethical standards established by the Declaration of Helsinki and in agreement with the recommendations of EEC Good Clinical Practice and with the Spanish legislation in force governing research.

Statistical analysis

Statistical analyses were performed with the SPSS v. 23 statistical software (IBM Corp., 2012). Descriptive data analysis was conducted by calculating mean scores and standard deviation. The normality and homogeneity of the variables were calculated. A study of the association between self-esteem and social support was carried out, for which a Spearman correlational test was performed. An ANOVA was performed for the analysis between social support and self-esteem and a T-Student for independent samples for social support and type of sport. The Bonferroni test is used to find out between which categories the differences occur. The significance level for all analyses was $p < .05$ (Sijtsma, 2009).

RESULTS

Most of the female athletes practice futsal (27.16%) and rowing (25.92%). They are followed by rugby (11.52%), handball (9.05%), volleyball (7.41%) and figure skating (5.76%). And to a lesser Football (3.29%), rhythmic gymnastics (3.29%) and basketball (3.29%). Lastly, e-spots (1.65%) and aesthetic gymnastics (1.65%).

The mean age at which women who reach the sports elite start their sports career is 11.84 years. Their self-esteem has a mean of 28.87 and their greatest social support is family (= 24.37). To statistically evaluate the strength of the relationship between self-esteem and perceived social support, a correlation analysis was performed (rho-Spearman correlation coefficient).

Age correlates, although very low, with the level of social support ($r = .137$) and self-esteem ($r = .266$) and self-esteem correlates with social support ($r = .319$), especially with family social support ($r = .282$) and that

of friends ($r = .188$). As expected, the factors of family and friends' social support correlate with the social support variable, but not with social support from other people. In addition, there is a positive correlation between family support and support from friends ($r = .431$) and also with respect to support from other people ($r = .170$). These are, in any case, low values.

Table 1. Descriptive data and correlations between dependent and independent variables.

| | | M | SD | Age | Career age | Social support | Sources of social support | | |
|----------------|------|-------|------|--------|------------|----------------|---------------------------|----------|---------|
| | | | | | | | MSPSS F | MSPSS Fr | MSPSS P |
| Career age | r | 11.84 | 5.41 | .423** | | | | | |
| | Sig. | | | < .001 | | | | | |
| Social support | r | 20.18 | 4.01 | .137* | -.177** | | | | |
| | Sig. | | | .033 | .006 | | | | |
| MSPSSF | r | 22.37 | 5.86 | .074 | -.114 | .760** | | | |
| | Sig. | | | .253 | .076 | < .001 | | | |
| MSPSSFr | r | 24.22 | 4.14 | .122 | .037 | .464** | .431** | | |
| | Sig. | | | .058 | .570 | < .001 | < .001 | | |
| MSPSSP | r | 24.17 | 6.23 | .068 | -.094 | .120 | .170** | .164* | |
| | Sig. | | | .293 | .144 | .061 | .008 | .010 | |
| Self-Esteem | r | 28.87 | 5.48 | .266** | .020 | .319** | .282** | .188** | .082 |
| | Sig. | | | < .001 | .753 | < .001 | < .001 | .003 | .204 |

Note. Age: Current age; Career age = Age at the beginning of the sport career; MSPSSF = MSPSS FAMILY, MSPSSFr = MSPSS FRIENDS; MSPSSP = MSPSS PEOPLE.

Table 2. Differences between means of social support as a function of grouped self-esteem level.

| Variable | Self-Steem | N | Mean | SD | F | sig | Bonferroni |
|----------------|------------|-----|-------|-------|-------|--------|--|
| Social support | Low | 73 | 19.28 | 3.874 | 11.21 | < .001 | Low-high = .001 Medium-high = .0001 |
| | Medium | 77 | 19.25 | 4.359 | | | |
| | High | 93 | 21.68 | 3.369 | | | |
| | Total | 243 | 20.19 | 4.016 | | | |
| MSPSS Family | Low | 73 | 21.32 | 6.456 | 9.051 | < .001 | Low-high = .002 Medium-high = .001 |
| | Medium | 77 | 21 | 5.902 | | | |
| | High | 93 | 24.33 | 4.773 | | | |
| | Total | 243 | 22.37 | 5.867 | | | |
| MSPSS Friends | Low | 73 | 23.78 | 4.243 | 2.938 | .045 | Low-high = .012 Medium-high = .001 |
| | Medium | 77 | 23.66 | 4.514 | | | |
| | High | 93 | 25.03 | 3.63 | | | |
| | Total | 243 | 24.22 | 4.145 | | | |

Table 3. Differences between the means of social support according to the type of individual or collective sport.

| Variable | Type of sport | N | Mean | t | sig | ES |
|----------------|---------------|-----|-------|--------|------|--------|
| Social support | Individual | 93 | 19.1 | -3.412 | .001 | -1.769 |
| | Collective | 150 | 20.87 | | | |
| Friends | Individual | 93 | 23.46 | -2.269 | .024 | -1.23 |
| | Collective | 150 | 24.69 | | | |
| Self-Esteem | Individual | 93 | 27.52 | -3.085 | .002 | -2.197 |
| | Collective | 150 | 29.71 | | | |

Note. ES: Effect size.

As we can see, social support is greater when self-esteem is also high, especially when the support is derived from the family. However, there are no differences in terms of self-esteem in the case of support from other people. ($F = .105$; $Sig. = .900$).

Social support varies according to the source. Social support is greater in group sports, when there is support from the group of friends. Self-esteem is higher in the group of athletes who practice team sports. And there is no difference according to the type of sport, neither in family support ($t = -1.567$; $Sig = .118$) nor with respect to the support of other people ($t = -1.567$; $Sig = .118$).

DISCUSSION AND CONCLUSIONS

In this study, focused on women who practice high-level sport, it was found that their greatest social support is their family, and they perceive that this support increases with age. The analysis of the results showed that the social support perceived from family and friends correlates (with low values) with the perception of self-esteem in elite athletes.

Studies indicate that there are many benefits to the athlete derived from social support, however, it appears that this support varies depending on the source (Cranmer & Sollitto, 2015; Hatteberg, 2021) and context (Brown et al., 2018). Those athletes who perceive greater family support also perceive this support from the peer group and others. Thus, it appears that athletes who feel supported do so from all sources of support and those who do not feel supported have a tendency to feel no source of support. However, it appears that high levels of support are needed for this social support to influence performance (Poucher et al., 2018).

In relation to self-esteem, we can conclude that when self-esteem is high, there is greater social support from family and friends. Self-esteem is not influenced by the support of other people. Therefore, it seems that self-esteem does improve with the social support network, but it is necessary to determine with what type of sources it improves (Galante & Ward, 2017; Pedrosa et al., 2012; Park et al., 2020). In fact, participating in a competitive sport can improve the self-esteem of adolescent athletes and it is also likely that this engagement strengthens athletes' relationships with their family (Kang et al., 2015; Mastrogianni et al., 2020; Rouquette et al., 2021).

Women who practice team sports feel greater social support from their group of friends and self-esteem is also higher in this group. Curiously, there is no difference depending on the type of sport with respect to family support.

We can conclude that there is a relationship between social support from friends and family with self-esteem, especially in team sports. Therefore, we consider that it is necessary to care for the self-esteem of athletes in demanding sports environments, especially in individual sports, through prevention programs that include psychological resources (such as talking regularly with children about their emotions and needs, helping them to identify the abilities they can modify and those they cannot, considering mistakes as an opportunity for learning, setting plausible goals, avoiding negative phrases or sentences) and social resources so that athletes perceive the necessary social support to avoid situations of stress and anxiety.

The results of this research should be treated with caution. Further research on the association between the level of self-esteem and social support is needed to understand how support providers (primarily family, friends and coaches) can foster their own personal support relationships and whether high levels of interpersonal dependence are needed to achieve athletic success.

AUTHOR CONTRIBUTIONS

Iago Portela-Pino: conceptualization and design of the study; data analysis and writing of results; writing of the manuscript. Millán Brea Castro: data collection and drafting of the manuscript. Myriam Alvariñas-Villaverde: drafting the manuscript, revising and editing.

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No potential conflict of interest were reported by the authors.

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