

## PERCEIVED PHYSICAL SELF-CONCEPT PROFILES: INTENTION TO BE PHYSICALLY ACTIVE AND EMOTIONAL REGULATION

Marta Vega-Díaz<sup>1</sup>, Carmen De Labra<sup>1</sup> and Higinio González-García<sup>2</sup>  
<sup>1</sup>University of La Coruña; <sup>2</sup>Universidad Internacional de La Rioja (Spain)

### Abstract

The objectives of the study were to identify physical self-concept profiles and examine their role in the intention to be physically active and emotional regulation. A sample of 606 physical activity practitioners ( $M_{age} = 34.19$ ,  $SD = 13.05$ ), completed a series of self-report measures that evaluated physical self-concept, the intention to be physically active, and emotional regulation. Cluster analyzes revealed three profiles of physical self-concept. Profile b with relatively high physical self-concept experienced significant differences in intention to be physically active, self-blame, and positive reappraisal. Profile a with low physical self-concept showed significant differences in acceptance, rumination, and catastrophizing. Profile c with a very low physical self-concept revealed significant differences in blaming others. In conclusion, profile b with relatively high physical self-concept and with optimal scores in condition, attractiveness and strength is associated with a higher intention to be physically active and the use of functional emotional regulation strategies.

KEY WORDS: *self-concept, intention to be active, cluster analysis, emotion.*

### Resumen

Los objetivos del estudio fueron identificar perfiles de autoconcepto físico y examinar su rol sobre la intención de ser físicamente activo y la regulación emocional. Una muestra de 606 practicantes de actividad física ( $M_{edad} = 34,19$ ;  $DT = 13,05$ ) completó una serie de medidas de autoinforme que evaluaban el autoconcepto físico, la intención de ser físicamente activo y la regulación emocional. Los análisis de conglomerados revelaron tres perfiles de autoconcepto físico. El perfil b con autoconcepto físico relativamente alto experimentó diferencias significativas en la intención de ser físicamente activo, autoculpa y reevaluación positiva. El perfil a con autoconcepto físico bajo mostró diferencias significativas en aceptación, rumiación y catastrofización. El perfil c con autoconcepto físico muy bajo reveló diferencias significativas en culpar a los demás. Como conclusión, el perfil b con autoconcepto físico relativamente alto está asociado con la mayor intencionalidad de ser físicamente activo y el uso de estrategias de regulación emocional funcionales.

PALABRAS CLAVE: *autoconcepto, intención de ser activo, clúster análisis, emoción.*

## Introduction

Physical self-concept has been a widely studied topic in the scientific literature (Esnaola et al., 2008; García-Grau et al., 2014; Goñi et al., 2004; Harter, 1990; Rojas et al., 2021). This variable can be conceptualized as the cognitive-social construction that reflects the attributes that an individual consciously recognizes in their own person and the personal self-image that they perceive of themselves, linked to the appreciation of their physical capacity (Harter, 1990). The findings of literature have shown that the physical self-concept is related to both positive and negative results in the intention to be physically active (Asci, 2002, 2005; Goñi & Zulaika, 2000; Moreno-Murci et al., 2013) and emotional regulation (Ibarra et al., 2014; Morales, 2017; Zurita et al., 2017). More specifically, the higher a person's perception of the various dimensions of physical self-concept is, the greater is their intention to be physically active (Goñi & Zulaika, 2000; Moreno-Murcia et al., 2013). Regarding emotional regulation, negative physical self-concept is associated with the use of dysfunctional and passive emotional strategies (Morales, 2017), such as blame others, catastrophizing and rumination, and positive ones with active and functional strategies (Carver et al., 1989) as acceptance or positive refocusing.

In the scientific literature it is described that physical self-concept encompasses two main components: physical and sports capacity (Esnaola et al., 2008). Other authors like Fox (1988) registered domains such as physical condition, physical attractiveness and strength, while Bracken (1992) made reference to physical and sporting competence, physical appearance, physical fitness and health. Currently, one of the most recognized models divide into four subdomains: physical ability, physical condition, physical attractiveness and strength (Blanco et al., 2015; Esnaola & Revuelta, 2009; Goñi et al., 2004). Physical ability refers to the optimal personal perception of athletic and sports competition (the individual is seen as having optimal qualities, skills, learning capacity, safety in the practice of physical activity and predisposition to sport) (Goñi et al., 2010). The physical condition includes the resistance evaluation, energy and confidence in the practice of sport (Navas et al., 2013). Physical attractiveness is linked to physical appearance and assesses satisfaction with body image (Ruiz de Arzúa & Rodríguez, 2006). Finally, the strength takes into account the opinion of the practitioner about the feeling of security when developing exercises that require lifting weight (Cheng-Chen et al., 2018). The identification and differentiation of the subdomains of the physical self-concept is vital because it is easier to modify one of its subdomains than the entire physical self-perception of the subject. Therefore, it is interesting to know the factors on which physical self-concept depends. These include the psychological profile, conditioned by the personality (Allen et al., 2012; Laborde et al., 2014) and the external evaluations about personal capacities (Jackson et al., 2001). In addition, the literature reveals that the evolutionary trajectory of physical self-concept is not linear, this means that physical self-concept is minimized in preadolescence and is maximized during adolescence and youth (Núñez-Pérez et al., 1998). Previous research found that there are differences in perceived physical self-concept in relation to gender, resulting in

worse adjustment in women (Grao-Cruces et al., 2016; Lau et al., 2004). Specifically, men tend to configure a more optimal image in the physical capacities considered stereotypically as masculine (endurance, sports competence and physical strength) compared to women who have worse perceptions of strength, physical ability, attractiveness and self-esteem (Revuelta & Esnaola, 2011; Saéz et al., 2020; Soriano et al., 2011; Videra-García & Reigal-Garrido, 2013). Sometimes it has been found that people who live with overweight and obesity have a worse physical perception than those with a Body Mass Index (BMI) in the normal weight range (Goñi & Rodríguez, 2007). In addition, underweight people tend to have a worse physical self-concept than those with an adequate BMI (Goñi & Rodríguez, 2007).

There are several studies focused on knowing the relationship between the practice of physical activity and perceived physical self-concept (Asci, 2002, 2005; Moreno-Murcia et al., 2013; Onetti-Onetti et al., 2019). A positive bidirectional relationship has been found between these variables. As it was found a higher physical self-concept among students who participated in school sports compared to non-practitioners (Goñi & Zulaika, 2000). These findings have been found by other researchers (Asci, 2002, 2005; Moreno-Murcia et al., 2013). More specifically, when people do not exercise it is described that low scores are seen in the perception of physical condition and physical ability (Crocker et al., 2000; Fox, 1997; Moreno et al., 2007; Rojas et al., 2011). On the other hand, the literature has revealed that aerobic exercise practitioners consider that they have optimal physical ability, but these exercises have less action on the dimension of physical attractiveness (Marsh & Peart, 1988). An investigation by Bakker (1998) found that adolescents who participated in dance had worse physical self-concept than non-dancers in the domains of physical ability and physical attractiveness. In the study by Moreno-Murcia et al. (2011) it was also found that the female samples who practiced exercise were perceived as less attractive. However, in men the opposite occurred. These results can perhaps be explained because women may participate in sports to improve their personal image and men to maintain their physical attractiveness (Moreno-Murcia et al., 2011). Another explanation can be attributed to the fact that overly demanding environments exert a conditioning effect on satisfactory personal perception. Therefore, the ideal environment that surrounds people who do physical activity will be the one that provides positive feedback, does not punish mistakes and avoids stressing the participants (Ntoumanis & Biddle, 1999).

To sum up, it can be considered that exercise increases the levels of perceived competence and the perception of physical condition. Therefore, it is not surprising that when people consider that they have an optimal physical condition, this variable acts as a reliable predictor of their intention to be physically active (Cerkez et al., 2015; Fox & Corbin, 1989; Sonstroem et al., 1992) and it will improve self-esteem (Weiss et al., 1990).

Emotional regulation has been previously examined in the scientific literature (Ruíz et al., 2012). Similarly, the study of self-concept and its direct influence on emotional regulation (understood as strategies to deal with negative events) has been a topic discussed (Ibarra et al., 2014; Morales, 2017; Zurita et al., 2017).

Emotional regulation is conceptualized as cognitive forms that correspond to an individual's own style and are used to deal with stressful situations (Garnefski et al., 2002). Garnefski et al. (2002) and Kelly et al. (2012) established that there are two main types of emotional regulation strategies: dysfunctional (blame others, self-blame, rumination and catastrophizing) and functional cognitive regulation (acceptance, positive refocusing, refocus on planning, positive reappraisal and put yourself into perspective). Starting with dysfunctional emotional regulation strategies, blame others implies the existence of thoughts in which other people are considered responsible for the consequences suffered after going through an unfavorable event (and it is associated with low emotional well-being) (Tennen & Affleck, 1990). Self-blame implies assigning responsibility for a fact (García, 2006). Some authors consider it with a positive psychological mechanism (it is related to the belief in personal control over the results experienced) (Bulman & Wortman, 1977). However, other researchers perceive it as negative, as it lies in overly self-critical responses (Janoff-Bulman, 1979). Rumination is linked to phenomena such as repeatedly thinking about negative situations experienced, which generates feelings of anguish (Cova et al., 2007; Scaini et al., 2021), and with the lack of interest to act actively in stressful situations. Finally, catastrophizing is related to the anticipation of stressful experiences (Olmedilla et al., 2013). In the opposite extreme of dysfunctional emotional regulation strategies are the functional ones. Among these functional strategies, acceptance implies admitting the reality of a stressful situation and trying to deal with it (Morales, 2019). Positive refocusing is manifested when individuals choose to think in pleasant situations instead of focusing on the current reality (Garnefski et al., 2001). Refocus on planning is a characteristic strategy of individuals who study the difficulties of a stressful event, analyze possible alternatives to manage it, and develop active strategies to solve it (Lazarus, 2000). Positive reappraisal is a strategy that defines individuals capable of finding learning from the adverse situations experienced (Chau et al., 2002). Finally, put yourself into perspective is a psychological skill that helps minimize the severity of a negative situation (Garnefski et al., 2001). As can be predicted, after having detailed emotional regulation strategies, subjects can adopt active or passive attitudes to events perceived as non-optimal. In active strategies actions are carried out to find solutions to problems, while in passive strategies it is preferred to adopt thoughts such as the inability to do something, the use of avoidance and self-blame (Morales, 2019). Regarding the relationship between physical self-concept and emotional regulation, it was found that the best scores in physical self-concept are associated with the higher use of productive or active strategies (Carver et al., 1989). However, unfavorable perceptions are related to the use of passive, unproductive, indifference and avoidance strategies (Morales, 2017).

As can be seen in the preceding paragraphs, previous studies have mainly investigated the bivariate relationships between physical self-concept and the intention to be physically active (Asci, 2002; Moreno-Murcia et al., 2013) and emotional regulation (Zurita et al., 2017). Hence, the multivariate nature of this construct has not been jointly analyzed. However, it is likely that the influence of physical self-concept may work together on all the dimensions described.

Therefore, to limit the possibility of losing information, this research project aims to identify physical self-concept profiles and examine their role on the intention to be physically active and emotional regulation in a cross-sectional design.

In this work, the perceived physical self-concept was examined to find out its role on adults over 18 years of age. Due to this, the objectives of the study were to identify physical self-concept profiles and examine their role on the intention to be physically active and emotional regulation of the participants. Regarding the relationships between perceived physical self-concept and the detailed variables, the hypotheses established were: (a) Participants who perceive themselves as having optimal physical abilities, condition, attractiveness, and strength will report higher scores on intention to be physically active and emotional regulation; (b) Participants who perceive themselves as having low physical ability, condition, attractiveness, and strength will report lower scores on intention to be physically active and emotional regulation.

## Method

### *Participants*

The study sample was made up of 606 physical activity practitioners (300 men and 304 women, and 2 did not specify the gender) ( $M_{\text{age}} = 34.19$ ,  $SD = 13.05$ ). Regarding the time of physical activity per week, 392 participants practiced between 5-10 hours per week, 168 between 10 and 15 hours per week, 31 between 15 and 20 hours per week, and 15 trained more than 20 hours per week. Of the 606 physical activity practitioners, one part practiced sports ( $n = 512$ ) and the other were not athletes ( $n = 94$ ). From the athletes' sample, a minority competed professionally ( $n = 94$ ); 6 at international level, 11 national, 25 regional and 56 local. The sample collection was carried out randomly, ensuring guarantees of ethical guidelines and information collection at all times. As an inclusion criterion, the Spanish population older than 18 years old and under 65 years old, and physical activity practitioners were selected. However, underage participants, those over 65 years old, with different nationalities than Spanish and with sedentary habits were excluded from the study.

### *Instruments*

- a) *Ad hoc Sociodemographic Questionnaire*. Some of the items evaluated aspects related to the biological variables of the children (sex, age); work (part-time, full-time or student employment), personal (marital status), lifestyles (sports practice, physical activity practice and physical activity practice time per week: between 5-10 hours per week, between 10 and 15 hours per week, between 15 and 20 hours per week, and more than 20 hours per week), and achievement of sporting successes (local, regional, national and international level). Of the total 8 items, 2 evaluated biological variables, 1 item the employment and academic training, 1 item the personal, 3 items were dedicated to the study of lifestyle and 1 to the scope of sporting success. Most

of the questions were closed-ended and polytomous, although dichotomous and trichotomic questions were also raised.

- b) *Physical Self-Perception Profile* (PSPP; Fox & Corbin, 1989), Spanish brief version (CAF-A) by Goñi et al. (2006). The CAF-A consists of 8 items in which the perceived physical self-concept is measured. Some researchers have shown that the internal consistency of scales tends to increase with a higher number of items (Clark & Watson, 1995). In case of the CAF-A, as it is a brief measure, each factor is made up of 2 items. Due to this, the mean item-intercorrelation between items was taken as a marker of internal consistency (Clark & Watson, 1995). Clark and Watson (1995) offered a general rule of thumb that recommends an average correlation between items that ranges from .15 to .50. The internal consistency coefficients measured by inter-item correlation are detailed below and were as follows: sports ability ( $r = .50$ ; 2 items, e.g., "I look clumsy in sports activities"), physical condition ( $r = .64$ ; 2 items, e.g., "I can run and exercise during a long time without getting tired"), physical attractiveness ( $r = .72$ ; 2 items, "I am happy with my body image") and strength ( $r = .64$ ; 2 items, e.g., "I am strong"). The responses correspond to a Likert-type scale with a range from 1 (false) to 5 (true).
- c) *Measuring the Intention to be Physically Active* (MIPA; Hein et al., 2004), validated Spanish version (MIFA) by Moreno et al. (2007). The scale is made up of five items that measure the intention to be physically active (e.g., "After finishing high school, I would like to keep physically active"). The responses correspond to a Likert-type scale with a range from 1 (totally disagree) to 5 (totally agree). MIFA factor analysis reveals an interest in being physically active ( $\alpha = .80$ ).
- d) *Cognitive Emotion Regulation Questionnaire* (CERQ; Garnefski & Kraaij, 2006), short Spanish version by Domínguez-Sánchez et al. (2013). The CERQ is used to measure the personal capacity to face negative or unpleasant events. This test measures strategies such as: Self-blame ( $r = .36$ ; 2 items, p. e.g., "I feel solely responsible for what happened"), Acceptance ( $r = .55$ ; 2 items, e.g., "I think I have to accept the situation"), Rumination ( $r = .44$ ; 2 items; e.g., "I keep thinking about the terrible thing that happened to me"), Positive refocusing ( $r = .60$ ; 2 items, e.g., "I think about something nice instead of thinking about what happened"), Refocus on planning ( $r = .44$ ; 2 items, e.g., "I think of a bigger plan about what I could do"), Positive reappraisal ( $r = .51$ ; 2 items, e.g., "I tell myself that there are worse things in life"), Catastrophizing ( $r = .40$ ; 2 items, e.g., "I am worry about what I think and feel about what has happened to me"), Put yourself into perspective ( $r = .62$ ; 2 items, e.g., "I think it has not been so bad compared to other things) and Blame others ( $r = .63$ ; 2 items, e.g., "I feel that others are responsible for what happened"). It consists of 18 items, each of which presents five responses that correspond to a Likert-type scale with a range from 1 (almost never) to 5 (almost always). The level of internal consistence (Cronbach  $\alpha$ ) of the total questionnaire score in this study was 0,75.

### *Procedure*

This study was approved by the local Ethics Committee of Universidad Internacional de la Rioja (UNIR, No. 074/2022) and conducted by the principles of the Declaration of Helsinki. Anonymity was preserved at all times when conducting the research. The participants signed an informed consent via online before the study was carried out. First, the study sample participants were contacted online who, after ensuring their consent and interest in participating in the research, received the link to the research questionnaire. Subsequently, the respondents answered the questions on the form with absolute freedom through the link available in their email or Internet through the "Google Forms" platform. When an user completed the survey and sent it, the data was automatically stored in the application and the new information was visible to the researcher.

### *Data analysis*

Analyzes were performed using SPSS 20 software version, and a cluster analysis was carried out, a methodology used in multiple investigations (González-García et al., 2019; Martínez-Martínez et al., 2022). First, data was filtered for multivariate outliers and multicollinearity of scales. Second, to increase the confidence in the stability of the cluster solution, a two-step approach was performed that included both hierarchical and non-hierarchical cluster analyzes using standardized CAF scores. In particular, to identify the number of groups (models of perceived physical self-concept), a hierarchical group analysis was carried out (Ward's method of linking with the squared Euclidean distance). Then, a group analysis of  $k$  means was performed, using the most appropriate group solution identified in the step one. Third, to examine the differences between the groups in ability, condition, attractiveness and strength, a multivariate analysis of variance (MANOVA) was performed with the outcome variables of the perceived self-concept profiles (ability, condition, attractiveness and strength) entered as dependent variables.

In the analyzes, to prevent Type I error, a significant multivariate effect ( $p < .05$ ) was followed with subsequent ANOVA using the Bonferroni adjustment ( $p < .005$ ) for the variables of emotional regulation and intention to be physically active. The partial eta squared ( $\eta^2$ ) was evaluated to provide an effect size index. Finally, a series of chi-square tests were carried out with qualitative variables such as gender, competition level and successes achieved (international, national, regional and local).

## **Results**

### *Perceived physical self-concept*

A MANOVA analysis was performed to detect significant multivariate effects between the three groups in the dimensions of perceived self-concept of the participants. Perceived self-concept, Wilk's Lambda = .18,  $F(8) = 203.28$ ,  $p < .001$ ,

$\eta^2 = .57$ . Subsequently, ANOVAs indicate significant differences ( $p < .001$ ) in all dimensions of perceived physical self-concept, this provides evidence of the sustainability of the cluster solution (Table 1). The descriptive labels for these groups are: *Profile a*, characterized by high scores in ability and low in condition, attractiveness and strength; *Profile b*, low scores in ability and high in condition, attractiveness and strength; *Profile c*, low scores in ability, condition and attractiveness and slightly positive in strength.

**Table 1**

Scores of the perceived physical self-concept profiles in the participants group

Physical self-concept	Profile a (n=126)	Profile b (n=252)	Profile c (n=228)	F (5.262)	p	$\eta^2$
	M (SD)	M (SD)	M (SD)			
Ability	.70 (.93)	-.23 (.83)	-.13 (.98)	46.69	.000*	.17
Condition	-1.28 (.55)	.79 (.64)	-.16 (.62)	479.13	.000*	.67
Attractiveness	-.57 (1.07)	.83 (.46)	-.59 (.69)	291.64	.000*	.54
Strength	-1.37 (.65)	.65 (.70)	.01 (.65)	360.84	.000*	.02

Note: \*  $p < .01$ .

*Differences between the cluster groups on the intention to be physically active and emotional regulation*

The differences between the cluster groups in the intention to be physically active and emotional regulation, Wilk's Lambda = .66,  $F(20) = 13.39$ ,  $p < .001$ ,  $\eta^2 = .000$  indicated that there are significant differences and marginal differences between groups in the results of intention to be physically active and emotional regulation. In Table 2, the results of the ANOVA show significant differences (Bonferroni correction,  $p < .005$ ) in the variables of emotional regulation such as acceptance, rumination, positive reappraisal and catastrophizing and marginal in the strategy of blame others. However, no significant differences have been found in emotional strategies involving self-blame, positive refocusing and put yourself into perspective.

In Table 2 the ANOVA results show significant differences according to the Bonferroni correction ( $p < .005$ ) in the variables of acceptance, rumination and catastrophizing, strategies more present in (a) Profile with low physical self-concept (participants with moderate scores in ability and low in condition, attractiveness and strength). Participants of profile b, profile with relatively high physical self-concept (defined by low scores in ability and moderate in condition, attractiveness and strength) show significant differences in the intention to be physically active and positive refocusing. Within group (c) Profile with very low physical self-concept; marginal differences were found in the strategy of blame others ( $p < .01$ ).



**Table 2**

Cluster differences in intention to be physically and emotional regulation according to perceived physical self-concept profiles

Variables	Perfil a (n= 126)	Perfil b (n= 252)	Perfil c (n= 228)	F (5.262)	P	$\eta^2$
	M (SD)	M (SD)	M (SD)			
Intention to be physically active	2.85 (.95)	4.11 (.73)	3.47 (.81)	106.25	.00*	.01
Self-blame	3.34 (.94)	3.40 (.90)	3.39 (.83)	.17	.83	.00
Acceptance	4.12 (.82)	4.11(.82)	3.83 (.90)	7.56	.00*	.02
Rumination	3.99 (.90)	3.79 (.93)	3.76 (.88)	2.66	.00*	.00
Positive refocusing	2.61 (1.16)	3.29 (1.10)	3.18 (1.04)	16.80	.07	.05
Refocus on planning	3.76 (.95)	4.01 (.83)	3.86 (.84)	3.77	.02	.01
Positive reappraisal	4.00 (.94)	4.32 (.71)	3.97 (.92)	11.83	.00*	.03
Put yourself into perspective	3.41 (.99)	3.68 (.89)	3.52 (.95)	3.82	.02	.01
Catastrophizing	3.19 (1.26)	2.78 (1.16)	3.00 (1.07)	5.65	.00*	.01
Blame others	2.25 (.94)	2.56 (1.10)	2.57 (1.04)	4.39	.01+	.01

Note: \* $p < .005$  (after Bonferroni adjustment); \* $p < .01$  = Marginally significant.

#### *Clusters covariation among sociodemographic variables*

Results of chi-square test showed significant differences ( $p < .05$ ) according to gender,  $\chi^2(1) = 44.99$ . Particularly, the most number of females were included in profile c, profile with very low physical self-concept, whereas the most number of males pertained to profile b, with relatively high physical self-concept. Besides, there were differences in the scope of successes in sports,  $p < .05$ ;  $\chi^2(5) = 23.30$ . Particularly, those that did not obtained successes pertained more to profiles b and c. Besides, those that obtained national and international successes pertained more to profiles a and b. In particular, the participants who were not successful belonged to a greater extent to profile b, with relatively high physical self-concept, and profile c, with even very low physical self-concept. On the other hand, the participants who were successful at the national and international level belonged to a greater extent to the profile a, with low physical self-concept, and profile b, with relatively high physical self-concept.

## **Discussion**

The goals of the study were to identify physical self-concept profiles and examine their role on the intention to be physically active and emotional regulation. The results obtained in the study have managed to increase the knowledge available in the scientific literature on the subject of perceived physical self-concept through the profiling methodology in two different ways (Hortigüela et al., 2016). In the first place, the group analysis approach carried out provided a

parsimonious and meaningful way of summarizing the different dimensions that include the multidimensional variable of physical self-concept and that are perceived by the participants. Second, the group methodology used in this project established a relationship between physical self-concept, the intention to be physically active and emotional regulation (self-blame, acceptance, rumination, positive refocusing, refocus on planning, positive reappraisal, put yourself into perspective, catastrophizing and blame others). The previous studies have addressed the issue of physical self-concept and they did not take into account the multivariate nature of the construct. In other words, a large field of available scientific literature focuses on bivariate analyzes (Asci, 2002; Moreno-Murcia et al., 2013; Zurita et al., 2017) instead of taking into account a greater number of variables. Therefore, the different dimensions of the physical self-concept may coexist and exert their influence on the levels of intention to be physically active and emotional regulation in a synchronous way.

Directing the focus of attention to this research, within this project three profiles of perceived physical self-concept were identified in the sample: Profile a, with low physical self-concept characterized by moderate scores in ability and low in condition, attractiveness and strength; profile b, with relatively high physical self-concept defined by low scores in ability and moderate in condition, attractiveness and strength; profile c, with very low physical self-concept, characterized by low scores in ability, condition, attractiveness and slightly positive in strength. The determined findings reflected the diversity and variability of physical self-concept and also reveal how the variables studied such as ability, condition, attractiveness and strength can coexist according to the perceptions of the physical activity practitioners who participated in this study. At this point, it is important to mention that participants from profile a, with low physical self-concept; are defined by moderate scores in ability and low scores in physical condition, attractiveness and strength. This fact can be explained by the type of physical activity practiced. As it has been proven that aerobic exercises may help to improve the physical perception of physical activity practitioners, but do not have much influence on the attractiveness dimension (Marsh & Peart, 1988). Participants from profile b with relatively high physical self-concept; show low ability scores and moderate scores in physical condition, attractiveness and strength. Profile b with relatively high physical self-concept includes mostly males and it seems that physical self-concept is conditioned by gender (Grao-Cruces et al., 2016; Lau et al., 2004). Due to this, if the profile (b) with relatively high physical self-concept is made up of a minority of women, it does not seem unusual to find higher levels in the capacities considered stereotypically as masculine (physical condition and strength) (Revuelta & Esnaola, 2011; Soriano et al., 2011; Videra-García & Reigal-Garrido, 2013). Participants from profile c with very low physical self-concept; show low scores in ability, condition and attractiveness and slightly positive in strength. In this case, there is the possibility that the psychological profile of the individual (determined by their personality), is responsible for configuring unfavorable physical self-concept (Allen et al., 2012; Laborde et al., 2014).

In relation to the role of self-concept on the intention to be physically active, it has been shown that participants from profile a, with low physical self-concept; is defined by moderate scores in ability, but low in condition, attractiveness and strength (unfavorable self-ratings in most domains of physical self-concept), are linked to the worst intention to be physically active. This finding seems consistent with what was stated by Goñi & Zulaika (2000) and Moreno-Murcia et al. (2013) who argued that the intention to be physically active is high in people who perceive an adequate physical self-concept. In relation to participants from profile b, with relatively high physical self-concept; who have low ability scores but moderate levels of physical condition, attractiveness and strength (the best self-concepts) are associated with the highest intentions to be physically active. As can be seen, the satisfactory perception of physical condition acts as a reliable predictor of the intention to be physically active (Fox & Corbin, 1989; Sonstroem et al., 1992) and improves self-esteem (Weiss et al., 1990). Participants from profile c, with very low physical self-concept; the members present very unfavorable scores in ability, condition and attractiveness and slightly positive in strength, and had intermediate scores in the intention to be physically active. In this case, it seems likely that the intention to be physically active is mainly oriented towards the performance of exercises where weightlifting is put into practice (since the sample is perceived with strength and security in the activities that imply this skill) (Goñi et al., 2004). In this sample, the intention to practice sports that do not involve force does not seem to be high because, if a routine of aerobic exercise was adopted, satisfactory scores in physical ability should have been found (Marsh & Peart, 1988).

Continuing with the emotional regulation, it has been proven that participants from profile a, with low physical self-concept; the athletes present moderate scores in ability, but low in condition, attractiveness and strength are defined by cognitive strategies such as acceptance, although there is also the presence of rumination and catastrophizing. Scientific literature generally links negative physical self-concept with dysfunctional and passive strategies (Morales, 2017) and, therefore, the presence of acceptance was not what was expected. However, in this case, it cannot be denied that a proportion of the sample of this group opts for trying to face the problems admitting reality (Morales, 2019). On the contrary, the adoption of passive strategies such as rumination (generation of feelings of anguish) (Cova et al., 2007; Scaini et al., 2021) and catastrophizing (anticipation of stressful experiences (Olmedilla et al., 2013) is expected. Participants from profile b, with relatively high physical self-concept (low scores in ability but moderate scores in physical condition, attractiveness and strength) are associated with high scores in positive reappraisal. The literature relates positive physical self-concept with productive or active strategies of emotional regulation (Carver et al., 1989) and in this case, were obtained homogeneous results as previously stated. Participants from profile c, with very low physical self-concept; report negative scores in ability, condition and attractiveness and practically irrelevant in strength (unfavorable self-concept), are associated with marginally significant differences in the adoption of dysfunctional strategies (blame others). In

this way, this group is committed to the adoption of passive strategies that imply a suboptimal psychological well-being (Tennen & Affleck, 1990).

The results of this study suggest that profile b, with relatively high physical self-concept; defined by low scores in ability and moderate in condition, attractiveness and strength is associated with high intentions to be physically active (Asci, 2002, 2005; Goñi & Zulaika, 2000; Moreno-Murcia et al., 2013). On the other hand, participants of profile a, with low physical self-concept; defined by moderate levels of ability and low levels of condition, attractiveness and strength are characterized by mostly dysfunctional and passive emotional regulation strategies (rumination and catastrophizing), although also manifest some active ones such as acceptance. Self-concept profile with moderate levels of perceived physical condition, attractiveness and strength are linked to the use of active and functional emotional strategies such as positive refocusing (Carver et al., 1989). Finally, the unfavorable physical self-concepts, defined by unsatisfactory perceptions in ability, condition and attractiveness, although positive (but practically insignificant) in strength, favor passive emotional regulation strategies (Morales, 2017) focused on blame others for the negative stimuli experienced.

Moreover, significant differences were found in the variables of emotional regulation (acceptance), presented in a higher proportion in participants of profile a, with low physical self-concept. In this sample of physical activity practitioners, it was found differences in the use of passive strategies such as catastrophizing and rumination. Regarding the participants of profile b, with relatively high physical self-concept; defined by low scores in ability and moderate in physical condition, attractiveness and strength, significant differences were registered in positive reappraisal. Marginal differences were detected in profile c, with very low physical self-concept (low scores in ability, condition, attractiveness and slightly positive in strength), who adopted strategies of blaming others.

Continuing with the differences found between the physical self-concept and the sociodemographic variables, differences were found around gender in which the majority of men were found within profile b, with relatively high physical self-concept; defined by low scores on ability, but moderate in condition, attractiveness, and strength (higher physical self-concept) and where there was the highest intention to be physically active. Women belonged to profile c, with very low physical self-concept; defined by low scores in ability, condition and attractiveness and slightly positive in strength (worst physical self-concept), and were linked to worse intentions to be physically active with respect to the previously described situation. On the other hand, significant differences were found in the level of success achieved in the sport. In particular, the participants who were not successful belonged to a greater extent to profile b, with relatively high physical self-concept and profile c, with even very low physical self-concept. However, the participants who were successful at the national and international level belonged to a greater extent to the profile a, with low physical self-concept and profile b, with relatively high physical self-concept. In this case, it seems to be observed that athletes who do not achieve sporting success are associated with a very low physical self-concept. Likewise, athletes who achieve success within the sports field are linked to the perception of more favorable physical self-concepts.

People with a favorable physical self-concept, especially those who perceive high ability, have high expectations of sporting success (Esnaola & Revuelta, 2009). However, perceptions of task difficulty lower expectations of success (Esnaola & Revuelta, 2009). Previously, García-Calvo (2013) found that people who trust in their abilities are more likely to achieve their goals. This finding is consistent with what was found in the present investigation because the participants who perceived themselves to have greater ability and believed in their physical condition were the ones who reported greater sporting success.

Therefore, the results of the previous studies and this research provided evidence that negative physical self-concept is not linked to optimal purposes of adopting non-sedentary lifestyles (Asci, 2002, 2005; Goñi & Zulaika, 2000; Moreno-Murcia et al., 2013). Physical self-concept is conditioned by gender, being worse in female samples in the domains of attractiveness, strength and physical condition compared to males (Lau et al., 2004). Satisfactory physical self-concept is related to the use of active emotional regulation strategies such as acceptance (Carver et al., 1989). The perception of low levels of physical condition, attractiveness and strength (unfavorable physical self-concept) is associated with dysfunctional and passive strategies of emotional regulation (Morales, 2017).

A limitation of the cluster analytical study methodology is the data-base approach to determine the combination and number of profiles (Martinent et al., 2013). Therefore, it is suggested that future research should try to replicate current results obtained with people from different cultures, because this will allow to demonstrate the sustainability of the physical self-concepts of physical activity practitioners. In addition, it is recommended that future research will complement this work with other objective scores, which could include the perceptions of the coaches or family members of the physical activity practitioners. Despite the detailed limitations, this work has proposed an approach focused on the perception of physical activity practitioners that may be useful to examine the dimensions that naturally influence in physical self-concept.

As future research lines, in qualitative dimensions, other aspects that can be included in the design are contextual factors, the analysis of the role of coaches on physical activity practitioners and the personality traits of the individuals. A priori, the absence of constant pressures from the context, the adequate demands of the coaches, their positive feedback, and non-critical personality of physical activity practitioners seem to act as protective factors against unfavourable physical self-concepts.

In this work, it can be concluded that the optimal perception of a physical self-concept (with moderate scores on condition, attractiveness, and strength, but low on ability) exerts a positive role on the intention to be physically active. Gender is a variable that influences physical self-concept, with female samples being those that are usually perceived as less strong, attractiveness and with worse physical conditions. Emotional regulation is also conditioned by physical self-concept. Functional and active strategies of emotional regulation are usually used when there is a better physical self-concept compared to passive and dysfunctional strategies, when there are low levels of physical self-concept.

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