Research Article



Psychological well-being, retirement preparation and Sports-related connection in swimmers of Cuban national team

Bienestar psicológico, preparación para el retiro y vínculo deportivo en nadadores de la selección nacional cubana

Bem-estar psicológico, preparação para a aposentadoria e conexão esportiva em nadadores da seleção cubana

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ABSTRACT

A descriptive study was conducted with the objective of determining whether retired swimmers from the Cuban national team who were prepared for sport retirement and maintained a sports-related connection had a better perception of psychological well-being. The sample comprised 31 swimmers who were administered a questionnaire to assess their perception of the researched variables, with a primary focus on items related to psychological well-being. The expert method was employed to the selection of the psychological well-being items, as well as the Cronbach's Alpha statistical method. For data analysis, the Student's *t*-test for independent samples was used after verification of normality by applying the Shapiro Wilk test. As a result, Athletes who had undergone sport retirement preparation and maintained a sports-related connection exhibited a significantly higher perception of psychological well-being. These athletes had a higher score in psychological well-being items. The study concludes that sport retirement preparation and maintaining sports-related connections positively influence the psychological well-being of retired athletes. This information guides sport organizations and other relevant entities to design strategies aimed to improve athletes' quality of life based on these factors.

Keywords: Psychological well-being; Sport retirement; Sports-related connection.

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RESUMEN

Se presenta un estudio descriptivo que tuvo como objetivo comprobar si los nadadores retirados de la selección nacional cubana que fueron preparados para el retiro y mantienen vínculo deportivo, tienen una mejor percepción de bienestar psicológico. La muestra estuvo integrada por 31 nadadores a quienes se les aplicó un cuestionario que permitió conocer su percepción acerca de las variables investigadas, principalmente los ítems relacionados con el bienestar psicológico. Se aplicó el método de expertos para la selección de los ítems del bienestar psicológico, así como el método estadístico Alfa de Cronbach. Para el análisis de datos se utilizó la Prueba T-Student para muestras independientes previa verificación de normalidad aplicando el test Shapiro Wilk. Como resultados se obtuvo que, existen diferencias significativas en la percepción de bienestar psicológico de los nadadores que fueron preparados para el retiro y los que no; así como en los que mantienen vínculo deportivo, son factores que inciden positivamente en el bienestar psicológico de los deportistas. Esta información orienta a entidades deportivas y otras implicadas a diseñar estrategias de intervención para los atletas retirados, que incluyan acciones que integren los factores relacionados.

Palabras clave: Bienestar psicológico; Retiro deportivo; Vínculo deportivo.

RESUMO

Apresenta-se um estudo descritivo que teve como objetivo verificar se os nadadores da seleção cubana que se prepararam para a aposentadoria e mantêm uma conexão relacionada ao esporte tem melhor percepção do bem estar psicológico. A amostra foi constituída por 31 nadadores aos quais foi aplicado um questionário que permitiu conhecer a sua percepção sobre as variáveis investigadas, principalmente os itens relacionados com o bem-estar psicológico Para seleção dos itens de bem-estar psicológico foi aplicado o método expert, bem como o método estatístico Alfa de Cronbach. Para análise dos dados foi utilizado o Teste T de Student para amostras independentes após verificação da normalidade com teste de Shapiro Wilk. Como resultados obteve-se que os atletas com ligação desportiva e preparação para a reforma apresentaram uma perceção de bem-estar psicológico significativamente superior à dos restantes atletas. Atletas que estavam preparados para a aposentadoria e mantinham vínculo esportivo obtiveram pontuações mais altas nos itens de bem-estar psicológico. O estudo conclui que tanto a preparação para a reforma como o vínculo desportivo são fatores que influenciam positivamente o bem-estar psicológico dos atletas. Estas informações orientam entidades desportivas e demais envolvidas no desenho de estratégias de intervenção para atletas aposentados, que incluem ações que integram fatores relacionados.

Palavras-chave: Bem-estar psicológico; Aposentadoria esportiva; Conexão esportiva.

INTRODUCTION

Elite athletes, after a time at the highest level, retire from sport due to a decline in their results, fatigue, injuries, personal situations, among other aspects that lead them to make this decision. Although retirement is considered a transition in the sports career and identified as a process derived from the athlete's development logic (Jordana et al., 2017), it constitutes a difficult stage in which athletes may experience a feeling of emptiness, loneliness and disorientation (Ortega, 2006, April 16, as cited in García et al., 2009) that can affect their health and, in general, their quality of life.

González Echeverry et al. (2022) expose the need for projects, interventions and research with an integrative vision of sport and cooperative work between various social factors, in order to improve the quality of life of retired athletes. Other research, such as that carried out by García et al. (2009) and Vidaurreta & Rojas (2015) highlight the importance of knowing and monitoring the health status of retired athletes, taking into account the levels of stress they are subjected to during their active career and the drastic change that occurs in their lives when they leave the sport.

They agree with Piñeiro-Cossio et al. (2023) and Araujo-Fernandes et al. (2024) in assessing the health status of people as a broad dimension that integrates the physical, mental and social aspects, including psychological well-being. That is why, as an integral part of the health status of retired athletes, it is important to know their mental health status and, specifically, their psychological well-being.

Conceptions of psychological well-being and how to assess it, according to Ryff (2014), have evolved from an approach focused on happiness, life satisfaction and affectivity, to the consideration of people's perceptions in relation to other essential characteristics of well-being, such as autonomy, environmental control, personal growth, positive relationships, purpose and self-acceptance. These aspects were considered by Ryff (1989) to develop a widely used and versioned instrument, which allows to know the level of psychological well-being of subjects in a specific context. For the sports sector, Piñeiro-Cossio et al. (2023) developed and validated a psychological well-being scale based on Ryffs theory (2014). In general, the benefits of physical activity and its environment for the psychological wellbeing of those who practice it are well known (González Hernández, 2011; Batista et al., 2022; Fernández-Arguelles et al., 2023; Araujo-Fernandes et al., 2024), as well as the psychological effects that unexpected situations can cause in athletes in their preparation, as was the case with the postponement of the Tokyo 2020 Olympic Games (Zamora-Solé et al., 2022; Bennett et al., 2022). However, research is needed to understand how athletes perceive their state of psychological well-being once they retire from elite sports, as a basis for developing intervention strategies. For this reason, in addition to knowledge of the psychological well-being of athletes who leave high performance, information is needed on other important variables, such as the sporting connection (beyond the act of practicing some type of physical activity) and the way in which athletes have reached the transition from active status to retirement. These elements allow better orienting the work towards the search for improving people's quality of life (Torregrossa et al., 2015; Willard & Lavallee, 2016; Jordana et al., 2017; González Echeverry et al., 2022).

Specifically, the research carried out defended the thesis that adequate preparation for retirement and maintaining the sporting link are related to the level of psychological well-being of retired elite competitive athletes. This relationship allows for more precise guidance of intervention strategies that include coaches, managers, sports doctors, psychologists and all personnel related to these athletes.

In Cuba, swimming begins between the ages of five and seven. Those who practice this sport in the country, from a very early age, are governed by high training and competition demands that, in most cases, cause swimmers to retire very young and face a complex process for which, in many cases, they have not been properly prepared.

This situation gave rise to the need to find out whether preparation for retirement and maintaining the sporting link are factors that provide a better perception of psychological well-being in retired athletes. The specific context was determined for swimmers of the Cuban national team. The objective was to determine whether preparation for retirement and maintaining the sporting bond are factors that provide a better perception of psychological well-being in young retirees from the Cuban swimming team.

METHODS

The research was descriptive in nature, aimed at testing the hypothesis that preparation for retirement and the sporting connection are factors that provide a better perception of psychological well-being in retired athletes. Methodologically, it was designed in two stages: the development and application of the instrument, and the processing and analysis of the results.

Participants

Thirty-one retired swimmers (N = 31) from the Cuban national team participated. They were informed at all times about their participation and the contribution they would make to the research. The inclusion criteria were: having belonged to the Cuban national swimming team, having retired from active swimming in the last four years, and showing willingness to participate in the research. The list of possible participants was provided by the Cuban Swimming Federation, which has among its lines of work the care of retired swimmers, the detraining of these subjects, and the improvement of their quality of life. Table 1 presents the characteristics of the sample used, based on their general means.

| Concrete the area atoristics of the coursels | Table I. | |
|--|---------------------------------------|--|
| General characteristics of the sample | General characteristics of the sample | |

| NI | N <u>Gender</u> Age Years | | Ago | Years in swimming | Detiromentado | Voars of rotiromont | |
|----|---------------------------|----|-------------------|-------------------|-------------------------------|---------------------|--|
| IN | | | rears in swirning | Retirement age | ient age rears of retrientent | | |
| 31 | 14 | 17 | 22,6 | 12,4 | 20,4 | 2,53 | |

Study variables

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1. Psychological well-being: Based on the multidimensionality of this variable (Ryff, 1989), the swimmers' perception of psychological well-being was measured from the dimensions of self-

acceptance and purpose. The items of each dimension were adapted from the psychological well-being scale (Ryff, 1989). For the selection of the items, the participation of seven experts with professional experience in sports psychology, links with national aquatic sports teams and experience in psychological guidance associated with sports detraining was counted on.

- 2.Preparation for retirement: The swimmers' perception of their preparation for retirement was assessed from the active stage. The subjects were only asked if they considered that they had been prepared for retirement or not.
- 3.Sporting connection: Related to the subjects' continued relationship with sport (whether they continue swimming, refereeing, studying a sporting career, visiting training centres, among other aspects). As with the previous variable, swimmers were asked whether or not they maintained any sporting connection.

Instrument

A questionnaire was applied that first measured sociodemographic variables presented in Table 1: gender, age, years in swimming, age of retirement and years since retirement. Subsequently, swimmers were asked whether they were prepared for retirement or not, and whether or not they maintain any sporting ties.

The questionnaire ended with items that measured psychological well-being. These items consisted of short phrases that swimmers evaluated on a Likert-type scale of five categories: "strongly disagree", "somewhat disagree", "agree", "somewhat agree" and "strongly agree". For processing, the categories were coded with values between one and five, from "strongly disagree" (1) to "strongly agree" (5). In the case of negative phrases (items 3, 5, 10, 12, 13, 14 and 17), the values were reversed, assigning "strongly disagree" (5) and "strongly agree" (1). In this way, a scale was obtained whose maximum sum would be 100 points (20 items of five points each) and a minimum of 20 points (20 items of one point each).

Statistical procedures

Cronbach's alpha was calculated to assess the internal consistency of the items on the psychological well-being scale. Taking into account the diversity of the content of the items, the assessment was carried out based on the dimensions of self-acceptance (items 1, 2, 6, 8, 12, 15, 17, 18, 19 and 20) and purpose (items 3, 4, 5, 7, 9, 10, 11, 13, 14 and 16).

As for descriptive statistics, the mean of the questionnaire points was calculated, as well as the mode of the variables "sports connection" and "preparation for retirement", to identify the swimmers who responded affirmatively or negatively.

The Shapiro-Wilk statistical procedure was used to check whether the psychological well-being scale presented a normal distribution. In addition, the Student T-test was applied for independent samples, which allowed us to check the null hypothesis of similarity between the means of the psychological well-being scale of swimmers who had no preparation for retirement and those who had, as well as between those who had or did not maintain a sporting link. In both cases, the significance level assumed for the test was 0.05.

The original data were recorded in an Excel spreadsheet and, for processing, were exported to the Statistical Package for Social Sciences (SPSS) software, version 20.0.

RESULTS

This section summarizes the main results of the research: the reliability of the instrument, the general means and modes, the standard deviation, as well as the results of the T test for independent samples.

Table 2 presents the reliability results of the psychological well-being scale, obtained using the Cronbach's Alpha statistic for each dimension.

Table 2.

Cronbach's Alpha test results.

| Self-acceptance | dimension | Dimension purposes | | | |
|------------------|-----------|--------------------|---------|--|--|
| Cronbach's alpha | N items | Cronbach's alpha | N items | | |
| ,6 36 | 10 | ,622 | 10 | | |

Wadkar et al. (2016) suggest that Cronbach's alpha values between 0.6 and 0.7 are considered acceptable. Therefore, the items of the psychological well-being scale in its two dimensions have internal consistency for the context in which they were evaluated.

Table 3 presents the mean, standard deviation and significance of the goodness-of-fit test of the psychological well-being scale, as well as the number of swimmers (based on mode) who were prepared for retirement or not, and those who have or do not have a sports connection. Tables 3, 4 and 5 show the results of the T test for independent samples.

Table 3.

General statistics: scale mean, standard deviation, Shapiro-Wilk, subjects' mode according to their preparation for retirement and sports connection.

| | Well-being scale | | Preparation for retirement | | Sports link | |
|-------|--------------------|------|-------------------------------|----|-------------|----|
| Mean | Standard deviation | (10 | Yes | No | Yes | No |
| 65,77 | +/-4,842 | ,410 | 17 | 14 | 18 | 13 |

Table 4.

| Independent samples T-test results: Retirement readiness and psychological well-being. | | | | | | | |
|--|----|-------|-----------|--------|--------------|--|--|
| Preparation for | Ν | Mean | Standard | T-test | Bilateral | | |
| retirement | | | deviation | | significance | | |
| Yes | 17 | 68,71 | 3,531 | 4,970 | ,000 | | |
| No | 14 | 62,21 | 3,725 | | | | |

Table 5.

| Independent samples T-test results: sports bond and psychological well-being. | | | | | | | |
|---|----|-------|-----------|--------|--------------|--|--|
| Sports link | Ν | Mean | Standard | T-test | Bilateral | | |
| | | | deviation | | significance | | |
| Yes | 18 | 68,78 | 3,457 | 5,960 | ,000 | | |
| No | 13 | 61,62 | 3,070 | | | | |

Based on the results shown in Tables 3, 4 and 5 (significance level = 0.000), the null hypothesis is rejected and the alternative hypothesis is accepted; therefore, there are significant differences between

the means of the psychological well-being scale of swimmers who did not have preparation for retirement and those who did, as well as between those who maintain a sporting link and those who do not.

DISCUSSION

The results of the research confirmed the hypothesis that preparation for retirement and maintaining a sports connection are variables that positively influence the perception of psychological well-being of retired high-performance swimmers. Those swimmers who were prepared for retirement and maintain a sports connection showed a better perception of psychological well-being, according to the items evaluated.

Regarding the preparation of athletes for retirement as a factor that favors psychological well-being, the results coincide with authors such as Torregrossa et al. (2015) and González Echeverry et al. (2022), who emphasize the need to prepare athletes for retirement from their active stage, stimulate resilient behaviors and develop psychological coping mechanisms to face adversities with less trauma, orienting themselves towards other activities (Cañizares et al., 2022). For their part, Jordana et al. (2017), based on the general trends of the bibliographic review on the subject, identify retirement planning and the procedural conception of this stage as factors that facilitate the orientation of athletes towards other professions and help them to face the sudden changes in their lives after leaving high competition. Adaptation to the new context requires the development and optimization of protective qualities that contribute to the harmonious adjustment of the personality to new realities and demands.

However, in addition to guiding practitioners towards other tasks or professions, the study carried out confirmed that the sporting link is another factor that contributes to the psychological well-being of athletes. Therefore, the maintenance of athletes in the activity they know best must also be considered. For example, the study of a sports career or one related to this sector, professional and academic improvement, refereeing, coaching, consulting or activism, and even participation in low-level competitions. In this sense, detraining is an important process that helps keep athletes linked to sport, since performing physical activity to maintain their biological, psychological and social health (García et al., 2009; Vidaurreta & Rojas, 2015; Araujo-Fernandes et al., 2024) can guide them towards other sports activities and professions beyond direct practice, as is the case of Lima (2021), who presented positive results with the use of relaxation techniques for the well-being of high-performance athletes. It is up to sports and social institutions, related to the quality of life of athletes who leave high performance (Yoshida et al., 2006; García et al., 2009; Vidaurreta & Rojas, 2015; Vidaurreta & Rojas, 2015; González Echeverry et al., 2022), to consider preparation for retirement and maintaining the sports link as factors that contribute to the psychological well-being of athletes.

The study focused on relating the variables of preparation for retirement and sports bond with the psychological well-being of retired athletes from high competition. By demonstrating this relationship, valuable information is provided for the institutions involved to design intervention strategies. As limitations, it is noted that the sample belongs to a single sport, so in other sports contexts different results could be obtained. Another limitation is that, given that psychological well-being has a multidimensional character, the study was based on preparation for retirement and sports bond, leaving other variables that could influence the psychological well-being of athletes unevaluated. These limitations motivate new research on the subject that can show additional results and more integrative lines of work.

CONCLUSION

Understanding the psychological well-being of retired athletes from high-level competition and its relationship with other factors should be a priority in the care of this specific type of population. The study confirmed that preparation for retirement and maintaining the sporting bond are factors that allow retired swimmers to have a better perception of psychological well-being. These results guide the sports and social entities involved in the design of intervention strategies aimed at improving the quality of life of these people.

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