# Hardiness and coping strategies in selected national diving athletes

# Personalidad resistente y estrategias de afrontamiento en deportistas seleccionados nacionales de clavados

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**DOI**: 10.35429/JPDL.2023.25.9.24.28 Received July 25, 2023; Accepted December 30, 2023

#### **Abstract**

The objective is to identify the relationships between resistant personality variables and coping strategies with diving athletes. Methods: The design is cross-sectional, non-experimental, and correlational, the sample consists of 13 athletes from the national diving team, between 18 and 23 years of age, M = 20.31 SD = 1.54, 7 men (53.8%)and 6 women (46.2%). 2 instruments will be used, hardiness in Athletes from Central America and the Caribbean (PRDCC) by Ponce et al. (2015) of 18 items. The other is the Approach to Coping in Sport Questionnaire, ACSQ-1, in the Spanish version (Kim et al., 2003), the questionnaire is made up of 28 items. The procedure was completely online, the link was sent with the instruments to the coaches of the national diving team of Mexico and Colombia. Statistical analyzes were performed on frequencies, descriptive, reliability, and Spearman's correlations. Results: Adequate internal consistency in almost all the variables, between .62 and .92 in the 2 questionnaires. The existence of relationships between the variables of hardiness and approach to coping in sport is confirmed in most of its variables and as a whole. Conclusion, athletes are capable of solving their problems with a certain calm of mind if they let stress influence their decisions.

#### Resumen

El objetivo es identificar las relaciones existentes entre variables de la personalidad resistente y las estrategias de afrontamiento con deportistas de clavados. Métodos: El diseño es transversal, no experimental, y correlacional, la muestra son 13 atletas de la selección nacional de clavados, entre 18 y 23 años de edad, M = 20.31 DT = 1.54, 7 hombres (53.8%) y 6 mujeres (46.2%). Se utilizaron 2 instrumentos, Personalidad Resistente en Deportistas de Centroamericanos y del Caribe (PRDCC) de Ponce et al. (2015) de 18 ítems. El otro es el Cuestionario de Aproximación al Afrontamiento en el Deporte (Approach to Coping in Sport Questionnaire, ACSQ-1) en versión en castellano (Kim et al., 2003), el cuestionario está integrado por 28 ítems. El procedimiento fue totalmente en línea, el link se mandó con los instrumentos a los entrenadores de la selección nacional de clavados de México y Colombia. Los análisis estadísticos que se realizaron son frecuencias, descriptivos, fiabilidad, y correlaciones de Spearman. Resultados: Consistencia interna adecuada casi todas las variables, entre .62 y .92 en los 2 cuestionarios. Se confirma la existencia de relaciones entre las variables de personalidad resistente y aproximación al afrontamiento en el deporte en la mayoría de sus variables y en su conjunto. Conclusión, los deportistas son capaces de resolver sus problemas con cierta calma mental si dejar que el estrés influya en sus decisiones.

# Stress, Control, Coping

# Estrés, Control, Afrontamiento

**Citation:** PONCE-CARBAJAL, Nancy, RAMÍREZ-NAVA, Rubén, TRISTÁN-RODRÍGUEZ, José Leandro and LÓPEZ-WALLE, Jeanette Magnolia. Hardiness and coping strategies in selected national diving athletes. Journal of Philosophy and Daily Life. 2023. 9-25:24-28.

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## Introduccion

The health of the masses through physical exercise can prevent chronic degenerative diseases, but not only in this area has its benefits, but also at the psychological, spiritual and social relations of people (Desiderio et al, 2021), in addition to the fact that as a result sport helps to improve the quality of life (Romero, García-Mas and Brustad, 2009). In other research with a sample of retired athletes, they stated that the fact of having practised sport left them with a greater ability to face and solve problems in a better way, identifying the best option to solve (Ponce-Carbajal, López-Walle, Méndez (2021a). In this sense, sport has a direct contribution to health but also to the way in which problems are perceived, for a sedentary person the possibilities of solving a problem are lower, but for those who have practiced sport can feel the problem smaller, not so strong or even make decisions more easily, this thanks to the competitive environments in which it is involved and so many times that the really strong problems the athlete is perceived capable of choosing an appropriate solution, overcome, and solve.

Bauman, Bellew, and Craig, (2014), in their research establish the influence of highly competitive sport on society, as the masses are infected by the excitement of international, world and celebrity athletes that incite young people to experience the process of discovery to exercise and sport for individual interest, where many make it their systematic and permanent activity in a timeline that makes them healthier and more likely to make important decisions in their lives, presumably appropriate, turning these experiences into virtuous circles.

Athletes experience many stressful situations, properly caused by the countless ways in which they are evaluated daily, but at the same time there is an emotional burden, which needs to be controlled, because just as conditions can be perfect, they can also be a disaster, all sport of the stress resistance that has the athlete and the ability to maintain balanced the emotional part (Jaenes, Godoy, and Román, 2008; 2009) taking into account the coping strategies (Carrasco et al, 2010) these resolution skills promote stress control and overcoming difficult moments in competitions or training (Márquez, 2004).

The resilient personality is a topic focused on the study of resilience to stress, and the reasons why people get sick when they remain for a long time under stressful situations and why others see an opportunity for growth and development, and see the challenges as goals to be achieved and that over time leave important lessons. (Maddi, 2002; Jaenes, Godoy, y Román, 2008; 2009).

Salvatore Maddi and Suzanne Kobasa (Maddi, 2002), became interested in this concept thanks to the findings of one of their students, who described in his research that some of the subjects became ill after being exposed to stress for a long time, such as taking care of a sick person, and others, on the contrary, after passing the stressful test, take the events as a learning experience and decide to grow and learn (Maddi, Kobasa, Maddi and Puccetti, 1982). Jaenes (2008) in his work mentions that a higher resilient personality is a protector against stress and illness, therefore, being an athlete teaches you to have a higher tolerance to difficulties and a lower resilient personality can trigger diseases.

Hence the importance of strengthening resilience to stress and encouraging the general population to practice sport to increase the chances of making better decisions when a difficult situation arises.

Stress, seen from the point of view of coping, is understood as the behavioural or cognitive efforts that people make to cope with the emotional discomfort caused by problems that affect the balance of the subjects, causing varying degrees of stress (Lazarus & Folkman, 1984).

Lazarus & Folkman, (1984; 1986), in their book mention that strategies are the process by means of which people manage the demands between the individual and the environment that he/she could identify as stressful and the emotions that this generates. Lazarus in 1993 specifically for sport made a basic division of coping in athletes, the first referred to problem-focused coping (task-focused coping), centred on acting on the problem directly and the second to avoidance-focused coping (emotion coping and distancing coping) with the aim of not dealing with the situation in the hope of modifying its interpretation or simply avoiding the problem.

ISSN: 2414-8857

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The Approaching Coping in Sport instrument has been used and promoted by several researchers (Kim, 1999; Kim, Duda, & Ntoumanis, 2003; Márquez, 2006; Ponce-Carbajal, López-Walle, & Méndez, 2021b).

In a sport context, the way in which the athlete decides to face the stressful situation, hinders or helps to obtain a competitive result, but it is a very brief moment, in which the athlete will face the problem or avoid it, Márquez (2006), has described in his work that facing a problem, has different possible responses in stressful situations with the aim of controlling and/or neutralising a situation.

Both the resilient personality and coping strategies are topics that have been little addressed previously, which is why their study is so important, since the aim is to generate useful and new knowledge for new and current generations. In the works of Ponce (2022a) and Ponce et al. (2022b), both instruments have been studied in university and nationally selected athletes, and they have also found adequate internal consistency properties for their samples.

The aim of this work is to identify the relationships between resilient personality variables and coping strategies in diving athletes.

## **Description of the method**

The design of this study is empirical associative, simple correlation and cross-sectional (Ato, López-Garcia, & Benavente, 2013), 13 athletes from the national diving team of Mexico (8 elite athletes corresponding to 61.5%) and Colombia (5 athletes corresponding to 38.5%), between 18 and 23 years of age, M = 20.31 SD = 1.54, 7 males (53.8%) and 6 females (46.2%).

In this research two instruments were applied, the first one is the Resilience to stress with the Resilient Personality in Central American and Caribbean Athletes questionnaire (PRDCC; Ponce-Carbajal et al. 2015; Ponce, 2017) this questionnaire is composed of 18 items, and by three variables: commitment (7 to 12), control (1 to 6) and challenge (13 to 18) of 6 items each.

In some research, resilient personality has been treated as a unifactorial concept since its creation (Kobasa, 1979; Kobasa, Maddi and Kahn, 1982) but it has also been analysed in a trifactorial way, since this scale is integrated by three variables such as control, commitment and challenge (Jaenes, Godoy-Izquierdo and Román, 2008), generally in both cases this instrument in its reliability analysis properties are adequate ( $\alpha$ >0.7) so it is used in both ways. This instrument has a Likert-type response scale from 0 to 3 where 0 is "totally disagree" and 3 is "totally agree".

The second is the Approach to Coping in (ACSQ-1), **Sport** Questionnaire questionnaire was developed by Kim and Duda (1997) and was translated into Spanish by Kim, Duda, Tomás and Balaguer (2003). It is composed of 5 variables, Emotional Calmness (7), Active Planning/Cognitive Restructuring (6), Mental Withdrawal (6), Risky Behaviours (4), and Seeking Social Support (5), using 28 items, with a 5-point Likert format, where 1 takes the value of "never" and 5 the value of "always". This scale has validity based on its internal test structure and its relationship with other variables, as well as adequate levels of reliability (α>0.7) (Kim, Duda and Ntoumanis, 2003).

The procedure began with the design of the digital questionnaire using google forms. The link to the test bacteria was sent to the coaches of the national teams of Mexico and Colombia, and they, in turn, sent the questionnaires to the athletes. The form clearly stated that participation was voluntary and anonymous and also explained the importance of their participation and finally the informed consent.

The statistical analyses performed were frequencies, descriptive, means, standard deviation and normality of data by means of kolmogórov-smirnov, Cronbach's alpha reliability (∞) and bivariate correlations with Spearman's correlation coefficients, with the Statistical Package for the Social Sciences (SPSS) version 25.

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## Results

The results evidenced with respect to the internal consistency of the instruments showed that the reliability is confirmed as adequate for almost all variables, between .62 and .92 only one is below the  $\propto$  of .70, it is worth mentioning that the reliability could be low in conditions of few items as in this case that the variable of mental withdrawal has only 6 items see Table 1.

In the Spearman correlations, the results showed a positive and significant relationship in most of the variables.

Specifically, the results showed the existence of relationships between the variables of resilient personality and approach to coping in sport, correlations  $r=.557^*$  between the total resilient personality and the variable of emotional calmness and with mental withdrawal with  $r=.723^{**}$ . Between variables, control and social support seeking  $r=.676^*$ ; control and mental withdrawal  $r=.627^*$ ; engagement and mental withdrawal  $r=.687^{**}$ ; challenge and emotional calm  $r=.802^{**}$ ; challenge and cognitive restructuring  $r=.828^{**}$  and with Total Resilient Personality and emotional calm  $r=.557^*$  and Total Resilient Personality with Withdrawal  $r=.723^{**}$ .

Variable	Alpha
Control	0.76
Commitment	0.89
Challenge	0.72
PRtotal	0.91
Emotional Calming	0.81
Cognitive restructuring	0.92
Seeking social support	0.76
Mental withdrawal	0.62
Risk behaviours	0.80
Note: PRtotal refers to the Resilier	nt Personality
instrument in its unifactorial form	

**Table 1** Reliability of the variables of the Resilient Personality and Approach to Coping with Sport questionnaires

## Acknowledgments

Thanks to the Facultad de Organización Deportiva, Universidad Autónoma de Nuevo León, and CONACYT for supporting this type of research. We would also like to thank the athletes and coaches.

## **Conclusions**

The conclusion of this research is that athletes presumably have a higher resistance to stress and therefore have the ability to adapt very quickly to changes and face their problems more calmly and if the problem does not have a clear solution they are able to adapt to new conditions.

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ISSN: 2414-8857

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