# Relationships between social context and resilient personality in high altitude diving

# Relaciones existentes entre contexto social y la personalidad resistente en clavados de altura

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**DOI:** 10.35429/JSR.2022.21.8.21.26 Received January 25, 2022; Accepted June 30, 2022

#### Abstract

In this study, the objective was to identify the existing correlations between the variables of the social context, with the variables of the resistant personality. The participants were 38 high divers, participants in world-class international events, 23 (60.526%) men and 15 (39.474%) women, 19 and 45 years old, participated in this competition, with an average of M = 31.39 years, and a standard deviation of SD = 6.47, of which 5 represent the United States, 3 Russia, 4 Brazil, 4 Colombia, 4 France, 1 Italy, 1 Ukraine, 2 Romania, 2 Mexico, 1 to the Netherlands, 1 to Germany, 3 to Canada, 2 to Australia, 1 to Luxembourg, 1 to Spain, 1 to Denmark, 1 to the Czech Republic and 1 to the United Kingdom. The methodology used was a cross-sectional, causalcorrelational, non-experimental design. The results showed that, regarding the degree of correlation of the social context variables with the resistant personality, significant values were found in almost all the factors; the highest values being those that occurred in the variables of .641\*\* athlete and total resistant personality, 624\*\* Nature of training and total resistant personality and .587\*\* Nature of training and the variable of the resistant personality of commitment . Discussion, In this investigation similarities were found with other investigations in athletes, In this work relationships were identified between practically the majority of the variables of the social context with the total resistant personality, As is the case of the variable of the social context of coach, environment and resources, athlete, nature of training and training plan. By correlating positively and significantly with a personality resistant to total stress, it is clear that the resistance to stress presented by this sample of high-diving athletes has a degree of persistence towards difficulties, truly outstanding, since they are in challenging social environments (Jaenes, 2009; Elferink-Gemser, Jordet, Coelho-E-Silva, & Visscher, 2011; Ponce 2017) Conclusion, resistance to stress is forged by various variables such as a high commitment of the athletes themselves with their preparation, but also that it is dependent on the resources available given the conditions under which they compete in this sport and Resources are of vital importance for this sport, athletes consider it a pleasant challenge for them to compete in this sport.

#### Resumen

En este estudio el objetivo fue identificar las correlaciones existentes entre las variables del contexto social, con las variables de la personalidad resistente. Los participantes fueron 38 clavadistas de altura, participantes de eventos internacionales de talla mundial, en esta competencia participaron 23 (60.526 %) hombres y 15 (39.474 %) mujeres, 19 y 45 años de edad, con una media de M=31,39 años, y una desviación estándar del DT=6.47, de los cuales 5representan a Estados Unidos, 3 a Rusia, 4 a Brasil, 4 a Colombia, 4 a Francia, 1 a Italia, 1 a Ucrania, 2 a Rumania, 2 a México, 1 a Países Bajos, 1 a Alemania, 3 a Canadá, 2 a Australia, 1 a Luxemburgo, 1 a España, 1 a Dinamarca, 1 a República Checa y 1 a Reino Unido. La metodología que se utilizó fue un diseño transversal, correlacional causal, de tipo no experimental. Los resultados mostraron que, con respecto al grado de correlación de las variables del contexto social con la personalidad resistente, se encontraron valores significativos en casi todos los factores; siendo los valores más altos los que se presentaron en las variables de .641\*\* deportista y personalidad resistente total, 624\*\* Naturaleza del entrenamiento y personalidad resistente total y .587\*\* Naturaleza del entrenamiento y la variable de la personalidad resistente del compromiso. Discución, En esta investigación se encontraron similitudes con otras investigaciones en deportistas, En este trabajo se identificaron relaciones entre prácticamente la mayoría de las variables del contexto social con la personalidad resistente total, Como es el caso de la variable del contexto social de entrenador, entorno y recursos, deportista, naturaleza del entrenamiento y plan del entrenamiento, Al correlacionar positiva y significativamente con una personalidad resistente al estrés total está de manifiesto que la resistencia al estrés que presenta esta muestra de deportistas de clavados de altura tienen grado de persistencia hacia las dificultades, verdaderamente sobresaliente, ya que están en ambientes sociales desafiantes (Jaenes, 2009; Elferink-Gemser, Jordet, Coelho-E-Silva y Visscher, 2011; Ponce 2017). Conclusión, la resistencia al estrés esta forjada por diversas variables como son un alto compromiso de los propios deportistas con su preparación, pero también que está en dependencia de los recursos con los que se cuenta dadas las condiciones bajo las cuales se compite en este deporte y los recursos son de vital importancia para este deporte, los deportistas consideran para ellos un desafío placentero competir en este

Coach, Sport performance, Sport spyschology

Entrenador, Alto rendimiento, Psicología del deporte

**Citation:** VILLAREAL-ARANDA, Jazmín, PONCE-CARBAJAL, Nancy, TRISTÁN-RODRIGUEZ, José Leandro and RAMÍREZ-NAVA, Rubén. Relationships between social context and resilient personality in high altitude diving. Journal of Social Researches. 2022. 8-21:21-26.

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## Introduction

Sport is a health care tool, it helps people to improve their quality of life, therefore, it is of vital importance to promote mass sporting events that invite the population to integrate some physical activity (Bauman, Bellew, and Craig, 2014; Aguirre-Loaiza, Arenas, Barbosa-Granados, Agudelo, 2020) and do sport for their well-being. Physical activity and sport also provide its practitioners with problem-solving skills, with a better ability to identify a better option, since in sport they very often have to face stressful situations, typical of having to compete with others and measure their ability, so those confrontations involve better stress management and choosing possible solutions more clearly (Ponce-Carbajal, López-Walle, and Méndez, 2021a).

High sports performance involves a mental strengthening for those who practice it and also the social gains of infecting others who did not practice any sport, but seeing massive events more population joins this practice, as an extra benefit to the general population and at this point there are investigations that talk about the influence that generates an adequate social context that allows the development of excellent athletes (Ponce, 2017), and also of those athletes begin and the others who are already in training. Social contexts influence the formation of athletes, there is a research in high performance athletes where they describe factors such as family, the coach and the athlete himself, direct the development of the athlete in a very important way even up to the sports facilities or resources affect the formation of these athletes in their training and performance in some way (Ponce 2017).

The social context, being the environment of humans, influences with a different impact for everyone, talking about athletes, there are some studies that have investigated the various factors that can impact, and have been considered families, coaches, the resources that athletes have to develop, facilities, type of training, duration and characteristics of training and the athlete himself, these variables as a whole form the environment in which athletes are polishing and learning, and apparently the result is a consequence of the interaction of these factors.

In some research the most important variable is the athlete himself (Ponce 2017), in others the family, the coach and the environment and resources, as well as the intervention of the coach.

There is also another element that has its load of influence on those who begin their sports training, those who are already on their way in their training and development and those who have reached the pinnacle of sports that are already high performance, the part of the psychology of sport, athletes live a sea of emotions, which in turn can become movements or emotional changes that need to be controlled as manifested in his studies (Jaenes, Godoy and Román 2008; 2009). This researcher has as a line of research the resilient personality, which is also known as resistance to stress, this concept is three variables, integrated by control, commitment and challenge, Jaenes mentions that those who better manage these three variables, have a better stress management, therefore, they can have greater control of their emotions, therefore, they can better potentiate their skills.

The concept of the resilient personality was created by Salvatore Maddi and Suzanne Kobasa (Maddi, 2002), who were struck by the fact that some people were empowered by problems and others were diminished, but in such an intense way that they became ill, and they and their team became very interested in this topic.

Maddi and collaborators describe the resilient personality as an ability of those who have a high resilient personality, they are able to make problems their engine, their energy, an opportunity to develop, and reach personal growth, however, those who do not have this ability, fall into illness, feel threatened and have the tendency to get sick, in short, they are not very resistant to stress (Maddi, 2002; Jaenes, Godoy, and Román, 2008; 2009). Resilient personality was also studied by Kobasa, Maddi and Puccetti (1982) and in their study they mention that a high resistance to stress serves as a protector for health and therefore avoids illness, which means that practicing sport is a good opportunity to develop or increase it.

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The resilient personality has been studied in various high performance sports and confirms that athletes have a high resilient personality that allows them to have a very good stress management under difficult circumstances (Ponce-Carbajal, 2021a; Ponce-Carbajal, N., López-Walle, J. M., and Méndez, M. P. (2021b).

It is necessary to comment that both the social context and the resilient personality of high performance athletes have not been much explored and this is the only study of this topic in high diving athletes.

The objective of this research is to identify the relationship between social context variables and resilient personality in high performance high diving athletes.

## **Description of the method**

In this research the design is empirical associative, simple correlation and crosssectional (Ato, Lopez-Garcia, & Benavente, 2013), 38 athletes who have participated in High Diving World Series, High Diving World Cups and FINA World Championships participated. The age of the participants ranged from 19 to 45 years old, with a mean M = 31.39 years, and a standard deviation of SD = 6.47 of which, 23 were male (60.52%) and 15 female (39.47%) of which 5 represent the United States, 3 Russia, 4 Brazil, 4 Colombia, 4 France, 1 Italy, 1 Ukraine, 2 Romania, 2 Mexico, 1 The Netherlands, 1 Germany, 1 Canada, 3 Canada, 2 Australia, 1 Luxembourg, 1 Spain, 1 Denmark, 1 Czech Republic and 1 United Kingdom.

Two instruments were used for this study, the first is a questionnaire on Perception of Factors Related to Excellence in Sport (PFED; Simón, 2009). This instrument measures the athlete's perception of the support received in the process of preparation for competition. In this questionnaire variables such as the coach, the environment and resources, the family, the athlete, and training elements such as the nature and characteristics of training were integrated. This questionnaire is composed of 54 items with a Likert-type scale from 1 to 10, where 1 refers to the least contribution, and 10 is the greatest contribution to their current training as an excellent athlete.

The second instrument is the Resilient Personality in Central American and Caribbean Athletes (PRDCC; Ponce, 2017; Ponce-Carbajal et al. 2015); it is composed of 18 items, and is composed of three variables: commitment (7 to 12), control (1 to 6) and challenge (13 to 18) of items each. In other research, questionnaire has been used as a single concept, (Kobasa, 1979; Kobasa, Maddi and Kahn, 1982), and also trifactorial with its three scale components, with the variables of control, commitment and challenge (Jaenes, Godoy-Izquierdo and Román, 2008), in both forms the properties are adequate ( $\alpha$ >0.7) therefore, it is used in both situations, uni and trifactorial measurement. The response scale is a Likerttype scale from 0 to 3 where 0 is "totally disagree" and 3 is "totally agree".

The Procedure, first, the Spanish and English-speaking participants were integrated in the discipline of high diving, during the Red Bull Cliff Diving World Series 2021. In the first stage of the series, contact was made with the team of organizers of this series and with those responsible for the athletes in order to inform them and request their consent to participate in research. taking into account participation would not interfere with the performance of the athletes. In this series 6 stops were made around the world where athletes of 18 nationalities participated. With the consent of the organization and those responsible, the questionnaire was sent electronically via digital media, via email or whatsapp, with the link, so that they could know the informed consent and could answer alone during a suitable time to answer, and we would be pending to the networks in case there is a need to explain or resolve any questions 24 hours a day, they were informed on the cover of the questionnaire that the maximum duration to answer was 20 minutes. Coaches and colleagues followed up to make sure that most of the participants had the information and to confirm that the data was confidential and completely voluntary and anonymous for their safety. And if at any time they wished to withdraw, they could do so at any time they deemed appropriate.

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

#### Results

In this section we present the evidence found in this research starting with the internal consistency of the measurement instruments.

Reliability analysis of the social context

The results found for the reliability of the social context instrument showed values between .78 and .99 Cronbach's alpha ( $\propto$ ), which presumes an adequate fit for the sample.

	Variables	Reliability	
1	Trainer	0.99	
2	<b>Environment and Resources</b>	0.96	
3	Athlete	0.83	
8	Family	0.88	
4	Nature of training	0.78	
5	characteristics of training	0.83	
Note: $\alpha > .70$			

Table 1 Reliability of the social context variables

# Reliability analysis of the PRDCC

The internal consistency of the Resilient Personality in Central American and Caribbean Athletes (PRDCC) questionnaire was evaluated through the  $\propto$ , considering the global resilient personality as a single variable, the result is that the internal consistency was adequate ( $\propto = .84$ ), when analyzing the three variables of the PR revealed the following values of  $\propto$ : commitment with .60, control of .70 and challenge of .84, showing adequate values for the sample.

	Variables	Reliability	
1	Control	0.7	
2	Commitment	0.6	
3	Challenge	0.84	
4	Total PR	0.84	
<i>Note</i> : α >.70			

Table 2 Reliability of the resilient personality variables

ISSN: 2414-4835

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# **Correlations**

For the analysis of the correlations between the social context variables and the resistant personality variables (see Table 3), Spearman's statistical test of correlations was used.

**Table 3** Correlations between variables of the social context and resistant personality

## **Thanks**

To the Faculty of Sports Organization, and to the Universidad Autónoma de Nuevo León, CONACYT, which, as far as possible, supports this type of research. Also, our thanks to the organizers of the serial and to FINA and in particular to the unconditional and professional support of the coach José Antonio Martínez Ochoa, founder of the discipline of high diving in Mexico, judge of the international swimming federation and talent developer, also to the athletes, and to all the coaches who participated in this project.

## **Conclusions**

The coach is not only limited to making a training plan, his work goes beyond that, since he trains the athlete physically, mentally and emotionally.

It is worth mentioning that, in this sport, there are few coaches and this is an element that is intended to be improved, since their contribution and support for the athletes is very important.

The coach is the support to face the challenges and is the one who supports the commitment and control of the emotions of the athletes in the complicated situations they face, hence his important work.

Speaking of resources and environment, athletes perceive it is important to have the support of sports managers and administrative procedures as well as the support of the organizations to be able to access the appropriate facilities for their sport, since the conditions that this sport has to compete have different characteristics than any other, usually natural scenarios that are not accessible to everyone and are not available all the time for training, and it does condition their development and preparation.

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Most do not have a coach and therefore depend on themselves or a partner to support and correct each other, therefore, the control of emotions, the training plan and to identify what is necessary to be better is a great challenge. The success of these athletes depends on their own commitment and control of emotions. Definitely these athletes are perceived as very resistant to stress because they are successful thanks to their own effort. In conclusion, the desire to perform their training no matter if I have no training depends on the desire, discipline and work with commitment to achieve sporting success.

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