

# Role of Psychological Characteristics in the Success of Iranian Veteran and Disabled Athletes

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## ABSTRACT

**Aims** This study aimed to investigate the role of psychological characteristics on the sports success of Iranian veterans and disabled athletes.

**Instrument & Methods** In this study, the sample size was 389 men and women with disabilities in various sports participated in official competitions. Data were collected using the Cultural Intelligence Scale, Sporting Success Questionnaire. The multivariate regression analysis method and structural equation modeling were used through SPSS 23 and AMOS 22 software to assess the research model based on the conceptual model.

**Findings** Iranian veterans and disabled athletes' sports success was affected by two psychological components of cultural intelligence and the ability to resolve conflict. The ability to resolve conflict in athletes increased with the increase of cultural intelligence, and with the increase of the ability to resolve conflict, sporting success also increased ( $p \leq 0.05$ ).

**Conclusion** The ability to resolve conflict is a complete mediator of the impact of cultural intelligence on sports success. Increasing the ability to resolve conflict in athletes by increasing cultural intelligence leads to athletic success.

**Keywords** Sports; Disabled; Veteran; Social Intelligence; Individuality

## CITATION LINKS

[1] Social relationships, mental health and wellbeing in physical ... [2] The problem of psychological rehabilitation ... [3] Military veteran athletes' experiences of competing at the 2016 ... [4] Psychological characteristics of Paralympic ... [5] The effect of cultural intelligence and creative ... [6] Conflict among athletes and their coaches ... [7] Coaching communication issues with ... [8] Impact of cultural intelligence level on conflict resolution ... [9] Systematic review of the effectiveness of interpersonal ... [10] Cultural intelligence: Individual interactions ... [11] Cross-cultural language and communication ... [12] Relationship between the dimensions of cultural intelligence ... [13] The theory of multiple intelligences for athletes ... [14] Effects of cross-cultural communication competence ... [15] Relationship between cultural intelligence of coaches ... [16] Do elite coaches from disability sport ... [17] Relationship among Mental Toughness ... [18] The relationship between cognitive emotion ... [19] A systematic review of influences on ... [20] Personality correlates of the four-factor ... [21] Factor structure and psychometric characteristics conflict ... [22] Introducing the Sport Success Scale ... [23] Structural equation modeling and its application ... [24] Understanding parasport: an analysis of the differences between ... [25] The relationship between cultural intelligence ... [26] Cultural intelligence components analysis from the ... [27] Considering effects of cultural intelligence on culture ... [28] Cultural intelligence: A theory-based, short ... [29] Cultural intelligence: A theory-based, short ... [30] Cultural intelligence: A theory-based, short ...

## Introduction

Consequences of disability include disorders of the functions or structures of the body, as well as significant problems with the healthy functioning of the disabled person as a member of society [1]. One of the most important areas in exercise with disabled people is to provide the conditions for their growth and socialization, neutralize negative emotional changes and prepare the person for physical and mental adaptation to new living conditions [2]. Competitive sport is considered a way to improve military veterans due to its physiological, psychological, and social benefits [3]. Exercise has become an important way for recovery after injury, adaptation, integration, and social coping of people with disabilities. The participation of people with disabilities in sports activities has important social consequences for an individual and the whole society [4].

Disabled athletes of different ethnicities with different cultures prepare for global events at national camps. On the other hand, as the country's representatives, these people are connected with the different cultures of other countries. Differences in language, ethnicity, politics and many other characteristics can emerge as a potential source of conflict, which, if misunderstood, will make the problems for communication [5]. The effective interpersonal factors on the conflictions are the quality of relationships (including mutual respect and trust, commitment and joint orientation), communication (the process of developing and maintaining relationships and familiarity with the other person's needs and expectations for effective interaction), group unity (accepting the individual role in the team and understanding other team members, relationships and cooperation between the coach and the athlete) [6]. Training programs and competitions, expectations, values or interpersonal discrimination, and team selection processes may lead to conflicts between athletes and coaches or even the sports organization. The mentioned cases become more widespread after significant events inside or outside the country [7]. Conflict is a danger to any relationship if it is not resolved constructively. The ability to resolve conflict has been defined as the skill of effectively resolving a conflict by choosing the most appropriate strategy in each situation [8]. Therefore, relationship partners may decide to avoid situations leading to conflict, including public relations strategies and behaviors specifically focused on potential differences [9].

One of the psychological characteristics that help people to adapt to the culture of others is cultural intelligence. Cultural intelligence allows one to try other cultures effectively and interact with people from different cultures [10]. Individuals adjust their concepts and mental images based on real experiences that did not meet their expectations [11]. Cultural intelligence is the ability to learn new

patterns in cultural interactions, provide correct behavioral responses to these patterns, and understand the appearance and inside of people intellectually and practically. It also provides a framework for understanding and investing in differences rather than tolerating or ignoring them. The level of cultural intelligence, in addition to affecting the efficiency of athletes of national teams (futsal, volleyball, basketball, and handball), the cohesion of sports teams, improvement of technical capabilities and performance of athletes [13-15], is effective in resolving the conflict between athletes and their coaches and approaches to prevent and manage interpersonal conflict [6]. It is well known that psychological skills have a significant impact on athletes' function and individual development. Professional athletes have excellent physical skills, but they must also have high psychological skills to control emotions by coping with stress and pressure, intense concentration, and setting challenging but realistic goals [16]. High levels of sports competition create high-pressure conditions for veteran and disabled athletes [17]. Sports success is an active learning process achieved through purposeful exercise and the necessary skills to achieve high sports performance and success [18]. A clear understanding of the nuances in the development of athletes with disabilities is important to create appropriate programs and strategies [19].

Factors influencing the development of athletes with disabilities are relatively less known than healthy athletes; therefore, special sports training programs are essential for the successful performance of athletes with disabilities. This study aimed to investigate the role of cultural intelligence and the ability to resolve conflict as psychological characteristics on the sports success of Iranian veterans and disabled athletes.

## Instrument and Methods

The present descriptive-correlational research is applied research that was conducted by field method. This study was conducted on all disabled Iranian athletes and veterans participating in official competitions (n=389). Sports included wheelchair basketball, sitting volleyball, football, weightlifting, archery, athletics (weightlifting, javelin throw, discus throw, jumping), tennis, and boccia. The variables of the study were assessed using the cultural intelligence questionnaire of Ang & Earley with 20 items in four dimensions of metacognitive, cognitive, motivational, and behavioral (7-point Likert scale) [20], the Vickers & Fisher Conflict Resolve Questionnaire consists of 40 items in 10 subscales including conflict as a natural thing, space, and situation, transparency of receipts and impressions, paying attention to needs instead of wants, creating a positive collaborative relationship, focus on the future by learning from the past,

provide options for mutual benefit, expand and provide achievable tasks and goal setting step by step, establish mutual benefit agreements excessive consideration (on a 5-point Likert scale) [21]. Vaez-Mousavi's Sports Success Questionnaire, including 29 questions, was used in 6 subscales of Fluent performance, attention, technique, error sensitivity, commitment and progress (on a 6-point Likert scale) [22].

After obtaining ethical permission from the National Committee for Ethics in Biomedical Research and other necessary licenses, the researcher personally attended the training site of the sports teams and asked the subjects to fill out the questionnaires after giving full explanations about the research and receiving informed consent.

To test the hypotheses based on the conceptual model, multivariate regression analysis and structural equation modeling were used using SPSS 23 and AMOS 22 software. Fit indices based on three absolute, adaptive, and economical types were used to evaluate the model's fit. The bootstrapping method was used to examine the parameters more accurately; Bootstrapping is a statistical method that resamples a dataset many times. A total distribution of samples can be achieved using the results of all sampling times. This distribution provides the basis for the estimates and the standard error estimation for the various parameters. However, the standard error is expected to be more accurate than the sampling load. The main sample from which the sub-

samples are taken is a representative sample of the community. In bootstrapping, the distribution of experimental samples is obtained by multiple sub-sampling (200 times or more) instead of estimating the standard error based on one sample [23].

**Findings**

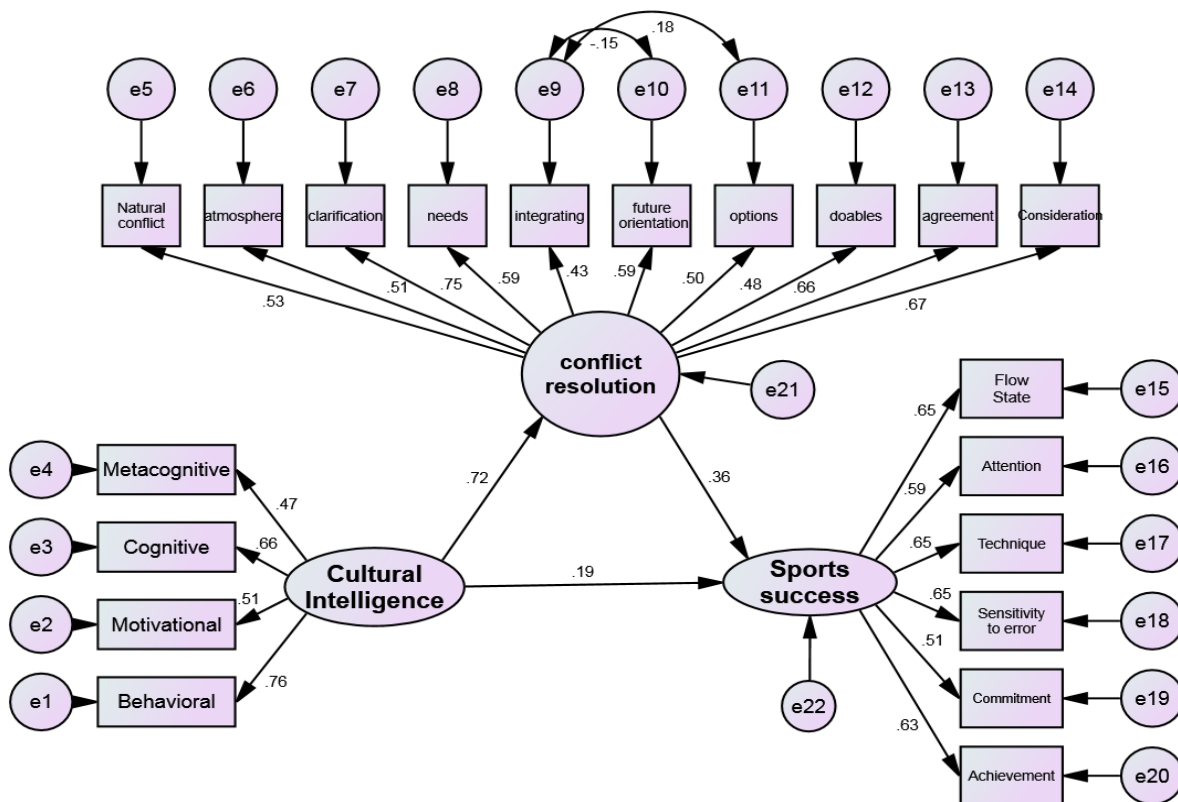
The frequency of the females was 43.5%, and males were 56.5%. The average age of the subjects was 26.62±7.22 years. Sports history of 16, 56.6, 12.4, and 5.9% of the subjects were less than 5, 5-10, 10-15, and more than 15 years, respectively. The highest level of competition the subjects have participated in were 5.7, 33.5, 17.1, and 11.4% of provincial, national, Asian, global, and Paralympic competitions, respectively. The frequency of winning bronze, silver, and gold medals was 15.3, 18.2, and 66.5%, respectively.

The results showed a significant correlation between most research variables (p<0.05; Table 1).

**Table 1)** Descriptive findings and correlation between research variables (N=389; p<0.01)

Variables	Mean±SD	3	2
1. Cultural intelligence	95.11±44.4	0.229	0.653
2. Ability to resolve conflict	143.17±26.21	0.308	1
3. Sports success	128.15±38.81	1	-

The model of the effect of cultural intelligence on the ability to resolve conflict and the success of Iranian veteran athletes has been presented in Figure 1.



**Figure 1)** The pattern of the effect of cultural intelligence on the ability to resolve conflict and success of veteran and disabled athletes in Iran (Points; e1 to e20: error measuring model variables; e21 and e22: in structural pattern error)

**Table 2)** Comparison of the estimates obtained by the method of maximum likelihood and bootstrapping for the main parameters in the model of the effect of cultural intelligence on the ability to resolve conflict and the success of Iranian veterans and disabled athletes

Parameter	Maximum accuracy			Bootstrapping					
	Standard estimate	Significance level	Non-standard estimation	Standard error	Critical ratio	Mean	Standard error	Low limit	Upper limit
<b>Cultural intelligence ability to resolve conflict</b>	0.723	0.001	0.274	0.051	9.14	0.759	0.18	0.331	0.995
<b>Ability to resolve conflict sports success</b>	0.358	0.03	0.618	0.316	2.35	0.617	0.97	0.287	0.885
<b>Cultural Intelligence sports success</b>	0.19	0.303	0.126	0.123	1.03	0.052	0.99	0.86	0.526

**Table 3)** Estimation of the total, direct, and indirect effects of cultural intelligence on sports success

Effects	Standard estimate	Significance level	Lower limit	Upper limit	Non-standard estimation	Significance level
<b>Total</b>	0.296	0.033	0.02	0.606	0.452	0.03
<b>Direct</b>	0.19	0.233	-0.86	0.526	0.126	0.278
<b>Indirect</b>	0.259	0.044	0.179	0.725	0.169	0.045

Based on the results, the relative Chi-square index was 2.47 and lower than 5, which showed that the pattern was in good condition. The value of PCFI as a fit goodness index was higher than 0.5. Also, the adaptive TLI and CFI indices were higher than 0.9. The value of RMSEA as the most important indicator of overall fit was 0.06 and indicated an appropriate fit. Based on the obtained results regarding the multivariate normality, the Mardia coefficient in this model was 95.91 (critical ratio of 31.88), which showed that the default multivariate normality for this model was not confirmed. Thus, the bootstrapping method was used to examine the parameter estimation; the results have been presented in Table 2. The standard error in the main parameters in the maximum likelihood method was less than the bootstrapping method. The standard value for all major parameters in the lower and upper ranges estimated for using bootstrapping, which shows the estimated parameters and their significant difference with zero, has the necessary accuracy by the maximum likelihood method. The total, direct, and indirect effects of cultural intelligence on sports success have been presented in Table 3.

The results showed the effects of total cultural intelligence on sports success, which is the sum of the direct effect of cultural intelligence on sports success and their indirect effects through the ability to resolve conflict. There was no significant effect of cultural intelligence on sports success. The value between the upper and lower limits indicated the significance of this indirect effect; thus, the indirect effect of cultural intelligence on sports success was significant.

## Discussion

This study showed using a model that the success of veteran and disabled athletes in Iran is affected by cultural intelligence level and the ability to resolve conflict. The results showed that the effect pattern of cultural intelligence has a good fit on the ability to resolve conflict and athletes' success. Increasing

cultural intelligence leads to the ability to resolve conflict, which leads to success in athletes. This study is consistent with Presbitero and Mohammadikhah regarding the relationship between cultural intelligence and the ability to resolve conflict [24,25]. The level of cultural intelligence affects cultural adaptation. An individual can effectively grow and adapt to a new cultural context that is different from one's cultural context without abandoning their cultural identity [20]. In intra- and intercultural interactions, in which an athlete is forced to spend a few days in a non-native environment, the high level of cultural intelligence causes behavior following its cultural environment and respects the values and norms of that society, and shows flexible behavior with respect while maintaining individual identity [26]. People with higher cultural intelligence are less likely to be exposed to cultural shock. Cultural intelligence reduces misunderstandings and uncertainty in the intercultural space [27]; it can also enable one to behave appropriately in cultural environments and act with motivation and insistence to confront intercultural interactions [28]. A high level of cultural intelligence due to intercultural cognition, metacognition, motivation, and behavioral flexibility, can enable an individual to perform effectively in various cultural contexts. Intercultural cognition (e.g., awareness of different cultural practices and behaviors) can create behavioral adaptation appropriate with nuances [24].

Also, to influence the level of cultural intelligence and the ability to resolve conflict on sports success, this study is in line with Presbitero [29] and Estura & Johnston [30]. Learning about other people's cultures is about knowing some "cultural facts" and about understanding between representatives of different cultures. Learning other people's cultures does not just know some "cultural facts"; it contributes to understanding between representatives of different cultures to prevent conflict in relationships and step towards each other while maintaining national identity [11]. Intercultural conflicts are highly likely to affect cohesion. When players get involved, they

do not trust and support each other [30]. The intercultural conflicts between sports team members need to be better understood to improve cohesion and effective performance. Cultural intelligence generally affects the performance of members of global teams [29].

Since the present study results showed the role of psychological factors on the sports success of the Iranian veterans and disabled, it is suggested to conduct similar research on other special groups, including the blind and the deaf. Also, in this study, cultural intelligence and the ability to resolve the conflict were examined. In this regard, future researchers are encouraged to consider the role of other psychological variables as well. Based on the findings, sports coaches, sports psychologists of veterans, and disabled teams are recommended to increase cultural intelligence and the methods for its improve using training courses for athletes so by influencing the ability to resolve conflict, take steps towards the greater success of Iranian veteran and disabled athletes.

## Conclusion

The ability to resolve conflict fully mediates the impact of cultural intelligence on sporting success. In other words, with the increase of cultural intelligence, the ability to resolve conflict in athletes increases, resulting in their athletic success.

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**Conflicts of Interests:** No cases have been reported by the authors.

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