

# The impact of athletic achievement on leadership traits of Olympic athletes: A cross gender, age, and cultural study

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## Abstract

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Olympic athletes possess exceptional athletic abilities alongside distinctive set of traits and skills that allows them to be outstanding leaders, inspiring others to successfully achieve their set goals (Mak & Kim, 2016). The researcher looked for a correlation between their average leadership trait score and their gender, age, sport, number of Olympic Games participations, and the athletic achievement of winning an Olympic medal. The researcher compared 119 Olympic athletes who competed in 11 individual or team sports, and 20 countries from around the world. By analyzing the 14 leadership characteristics in the Leadership Trait Questionnaire (LTQ) the entire population surveyed had the mean score of 62.48, while medalists scored 61.49 and non-medalist scored 62.70. Based on the results of this study, athletic achievement did not have a significant impact on the leadership traits measured by their individual LTQ scores, while age, gender, sport, and Olympic Games participation offered some differences. These findings should empower the Olympic athletes to transition into life after sports with confidence as they pursue various professions as their leadership characteristics provide an asset for any organization looking for a leader that inspires its followers to achieve their set goals.

## Keywords

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Olympians, Olympic athletes, Leadership, Leadership traits, career transition.

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Leaders are unique individuals that use their exceptional qualifications, abilities, skills, and values to inspire their followers to success. Effective leaders are change makers that have the capability to adapt to both internal and external factors that influence the outcome, altering the dynamic and sometimes the direction of their group or organization. Leaders have a vision, which they share with others around them, and they are looked at by their followers as the ones that “do the right thing” (Hughes, Ginnett, & Curphy, 2015) in most situations. Leadership has also been defined as someone who is a “good example” (Gould, Voelker, & Griffes, 2013) through their guidance and daily actions as they model the desired behavior, ethical and winning attitude they expect from their followers. Leaders share the common goal of motivating, changing, and shaping the mentality of their members to achieve their common objectives.

Olympians are an exceptional group of elite athletes that have achieved their goal to represent their country in the most significant world athletic competition, the Olympic Games. With its prestige dating back to the Ancient Greeks, who invented the athletic event, the Olympic Games were brought back in the modern times by Pierre de Coubertin in 1896, allowing qualified athletes from around the world to become Olympians by competing to win an Olympic medal. With the worldwide competition taking place only every four years, qualifying for the selected team is challenging as only two athletes in individual sports, and one team per country in team sports can represent each country at every sporting event. The unique personal characteristic of elite athletes allows them to possess special mental toughness and coping skills and build their confidence to overcome

the various obstacles in their way to achieve their set objectives, just like successful leaders.

Athletic identity is prevalent in the lives of elite athletes it is directly related to the sport they practice and has a strong correlation to the successful outcome of their athletic performance (Grove, Fish, & Eklund, 2004). The Olympians athletic identity changes with time, based on their life experiences. As athletes retire from the competitive sport or when an athlete fails to make the team, their clearly defined identities as athletes diminish as well (Cosh, Crabb, & Lecouteur, 2013). Elite athletes’ self-concept is identified by their athleticism and belonging to an elite group of people who share their special and specialized skills. This title of Olympian, obtained through extraordinary dedication and sacrifice, is an identifying marker that is used by the athletes for the rest of their lives.

Successful Olympic athletes possess a unique set of characteristics that differentiate them from other athletes, as they must develop certain skills to aid them in overcoming the multitude of obstacles and challenges, they must face. The iceberg profile (Hanin, 2012; Morgan, 1979), which highlighted the positive mental profile of the winners when compared to other less successful athletes was predominantly used for identifying overtraining in athletes. There is a difference between Olympians who won medals as they exhibit greater emotional control and automaticity than non-medalists who exhibited higher negative thinking (Thomas, Murphy, & Hardy, 1999). Transformational leaders exhibit such emotional control in stressful situations by motivating individuals, instilling pride, gaining respect and trust through communicating their high expectations by

encouraging problem solving (Robbins & Judge, 2013). Other key traits shown by successful Olympians were their ability to focus and control performance imagery and total commitment to the pursuit of excellence in training leading to successful performance in competitions (Kouali, Hall, & Deck, 2020; Orlick & Partington, 1987, 1986). Additionally, Olympic athletes are better prepared for unforeseen events (Gould & Maynard, 2009; Gould et al., 1993a), have positive expectations, concentration while keeping their emotions under control, alongside their excellent technical preparation. The development of the unique traits possessed by Olympians need complex attention and nurturing from their families, coaches, and highly specialized support staff, as every small detail of their lives and preparation can have a significant effect on obtaining their set goals.

While the various aspects of an athlete's life contribute and directly affect the confidence of the athlete, the physical and mental preparation alongside competition accomplishments were identified as the main source of confidence (Hays, Maynard, Thomas, & Bawden, 2007). Olympic athletes possess unique types of self-confidence that allows them to perform at optimal levels and overcome the obstacles they encounter in their pursuit of athletic excellence.

Gender differences exists between men and women on how they perceive their leadership abilities, which can be attributed to how people in general perceive successful men and women leaders as owning separate and different leadership characteristics. According to Huszco and Endres (2017), men predominantly rate themselves as better leaders than women do, attributing their

success as leaders to internal factors such as their abilities and traits, while women look at external factors such as opportunities and the support they receive.

The personal characteristics of successful leaders have been studied extensively on business leaders with various leadership styles (Hughes, Ginnett, & Curphy, 2015; Northouse, 2016). To measure their leadership individualities, various general or specific leadership measuring tools were developed and used. Numerous studies validated that the leader's characteristics are part of leadership identifying 10 specific traits positively associated with leadership (Northouse, 2016). Further analyzing these specific traits of leaders, Kirkpatrick, and Locke (1991) stated that "its unequivocally clear that leaders are not like other people" (p. 59), standing out, among others. Having vision as an essential characteristic of a leader that is committed to certain values and wants to influence the structure and process of an organization (Bush and Glover 2003; Harris, et al., 2007; Kahjed, 2018).

Kirkpatrick & Locke (1991) have identified six major leadership traits: intelligence, self-confidence, determination, integrity, motivation, and sociability that what make up the "right stuff" differentiating the leaders from non-leaders. Social intelligence, alongside intelligence, was shown to be a major component of leadership traits as it allows the person to select the best responses in various situations and in a social environment, showing their leadership (Zaccaro, Kemp & Bader, 2004). The Leadership Trait Questionnaire (LTQ) quantifies the answers of the participants who rate themselves based on their perceived leadership. With the rapid

social, cultural, and technological changes observed around the world, leaders had to adapt thus adjusting their leadership styles. Research on Olympic athletes has focused mostly on their exceptional physical and mental abilities, with only recently redirecting their attention to their career transition (Barriopedro et al, 2018; Oulevey, et al. 2018; Vilanova & Puig, 2016). The purpose of this research was to address a gap in the current literature regarding the leadership skills possessed by Olympians that could empower them in successfully transitioning from the athletic life to a career after sports.

## **Methodology**

With limited research in existence about the leadership skills of Olympic athletes, the current research aims to answer the question about the impact of athletic achievement on leadership traits of Olympic athletes across gender, age, country of origin and the type of sport they have competed in at the Olympic Games. To ensure that the data collected is valid and credible, a sound research design was developed and implemented. The group of athletes chosen to participate in the survey was carefully selected based on strict criteria and only after verification of their eligibility to participate, they were given access to a secure online questionnaire.

### *Participant selection*

Purposeful sampling was used to select participants according to elite performance criteria (Patton, 2002). In this study, only Olympic athletes were surveyed, which are defined as elite athletes who competed at past Olympic Games, representing their country in their sport of choice. The researcher verified

the validity of all survey participants at past summer Olympic Games and their status as Olympic medalists or non-medalists, using the records found in the International Olympic Committee (IOC) database, the international governing body of the Olympic Games. The subjects of this research were Olympic athletes of both genders, various ages, representing individual and team sports. The athletes were categorized as Olympic medalist if they obtained either gold, awarded to the winners; silver, awarded to the runner-up; and bronze, awarded to the third place. The athletes included in the non-medalist group were participants at the Olympic Games who placed either 4th place or higher in their sport.

### *Instrumentation and validity*

To develop a reliable and valid questionnaire, close-ended questions were chosen to seek clear answers by using a semantic differential format that allowed the athlete to respond along a scale from 1 (strongly disagree) to 5 (strongly agree) when describing their characterization of the various leadership traits. The Leadership Trait Questionnaire (LTQ) developed by Northouse (2016) was used to assess the Olympians' personal characteristics of leadership. The LTQ quantifies the perceptions of the individual leader regarding the personal attributes that he/she possesses, identifying special strengths or weaknesses he/she has. The established instrument used by the researcher, the LTQ was published publicly and did not require permission to use (Northouse, 2016). The participants in responded to the 14 leadership questions using five-point Likert-scale statements after completing the required biographical information. The questionnaire included specific questions about the athletes'

country of origin, type of sport, years Olympic Games participation, and highest place obtained. Additionally, the participants were asked about their current occupation and a word to describe an Olympian. As internet surveys were identified as the most efficient and cost-effective means of distributing the survey as Olympians originate from all parts of the globe, the researcher used an online survey platform SoGoSurvey to develop and offer direct access to the selected participants.

#### *Procedures*

After receiving approval from the Institutional Review Board at the United States Sports Academy, the researcher first contacted potential participants and communicated the objectives and process of the study. The potential participants were contacted via email with an introductory letter which highlighted the purpose and significance of the study and the importance of their response to identify some unique leadership traits of Olympic athletes that can be used later when transitioning into life after sports.

#### *Validity and reliability*

To further develop a reliable and valid questionnaire, close-ended questions were chosen to seek clear answers by using a semantic differential format that allowed the athlete to react along a scale with contrasting adjectives. To ensure that the information gathered was trustworthy and all participants were all Olympians, email invitations to participate were sent to athletes only after verifying their participation and highest placement at Olympic Games using the IOC database of official competition results. Additionally, all data collected was verified before being analyzed.

The email addresses of participants were obtained either through personal connection, social media requests, and referrals from other perspective participants who reached out to their former teammates in their respective sports, using the snowball sampling method. The participants were given one week to agree in writing to participate in the research and once they approved they were given the direct link to the survey. The online survey started with the consent form, at the end of which, the participants were given two choices; either "I agree" which indicated that they are at least 18 years old, had read this consent form and agree to participate in this research study, and also informing them that they are free to skip any question they chose, or "I do not agree" where the survey took them to the ending screen thanking them for their participation. By answering "I agree" the participants were given access to the rest of the survey.

Out of the 175 Olympians contacted, 119 provided valid responses, representing a response rate of 68%. Both genders were represented with the population consisting of 64 females (54%) and 55 males (46%). To ensure that different life experiences were represented, various ages from 21 years old to 70 years old Olympic athletes were surveyed. Athletes were from 20 different countries and competed in eleven different sports including swimming, rowing, artistic gymnastics, handball, fencing, track and field, canoe-sprinting, boxing, cycling, judo, and triathlon. Most athletes surveyed competed in one summer Olympic Games (n=47), followed by two Olympic participations (n=34), three Olympic participations (n=22), four Olympic Games (n=13), five Olympic participations (n=1), and even six Olympic Games (n=2). Olympic Games participation ranged from the

1968 Mexico City to the most recent in 2016 in Rio de Janeiro. Most athletes who participated in the survey were Olympic medalists (n=72) representing 61% of the total participants, winning Olympic gold (n=26), silver (n=26), and bronze (n=20). Other athletes surveyed were non-medalists (n=45) representing 38%, and two athletes did not answer the question.

### Results

The purpose of the study was to determine if there is correlation, measured by comparing the Olympic athlete’s average mean LTQ scores and their gender, age, sport, number of Olympic Games participations, and the athletic achievement of winning an Olympic medal.

The data collected was analyzed to determine if age had an influence on the self-perception of leadership skills of Olympians. The Olympic athletes surveyed ranged in age from 21- to 70-year-old, covering a large spread of time of life and life experiences. While all age groups were epitomized, most participants in the survey were between the ages of 41 years and 50 years (n=35) and 51 years and 60 years (n=45). The study found that the average LTQ score increased proportionate with the

age group, except for the younger age group 21-year-old to 30-year-old, who scored the third highest among all age groups.

Both genders were represented with the population consisting of 64 females (54%) and 55 males (46%) of the surveyed population. In this study that used leadership attributes, female athletes have scored in average higher (62.53) than their male counterparts (61.14), underscoring that there is no significant difference in the leadership traits between the two genders in elite athletes, representing a marginal difference between genders (see table 1).

As the main purpose of the study to identify if athletic achievement reflected by winning an Olympic medal or placing off the podium influenced the leadership traits measured by the LTQ scores of each athlete, comparison between number of Olympic Games participations and the Olympic medalist and non- medalist was calculated. Most participants (n=47) competed in only one Olympic Game and obtained the highest average LTQ score (63.80), while lowest LTQ score (59.54) was obtained by the athletes who competed in 4 summer Olympic Games. Experience gained by the athletes through years of competition at the highest level did

<b>Gender</b>	<b>nr. of participants</b>	<b>Average LTQ score</b>
Male	55	61.14
Female	64	62.53
<b>Age groups</b>		
21 year- 30-year-old	7	61.83
31 year- 40-year-old	23	61.21
41 year- 50-year-old	35	61.67
51 year- 60-year-old	45	62.75
61 year- 70-year-old	9	63.75

Table 1. Average LTQ scores based on gender and Age groups.

not influence their leadership characteristics expressed through the LTQ scores as shown in table 2.

In sports, successful leadership of coaches and organizations is often measured by the number of titles obtained resulting in being recognized as winners. In the Olympic Games, success is measured by the highest place obtained by the athlete in their sport. Medal winners are considered more successful than the non-medal winners who places just off the podium. In this study, the LTQ score of each athlete was measured and categorized based on their highest place obtained in their sport at the Olympic Games. While most of the participants in the study were medal winners (n=73), their average LTQ score was lower (61.49) than the non-medalists (n=45) score of (62.70). The entire population surveyed had the mean LTQ score of 62.48. Based on the results of this study, athletic achievement did not have a significant impact on the leadership traits measured by their individual LTQ scores. Furthermore, an athlete who placed 13th scored higher of all athletes surveyed, even Olympic gold medal winners, reaching the maximum of 70 points (see table 2).

As athletes from around the world compete at the Olympic Games, the

researcher invited Olympic athletes from various countries and continents to participate in the study. A total of 20 countries were represented covering four continents, North and South America, Europe, and Australia. The number of participants from each country varied from the majority (n=59) being from Romania, the native country of the researcher, followed by athletes who represented Germany (n =16) and the United States of America (n=13). The average LTQ

<b>Olympic Games participation</b>	<b>nr. of participants</b>	<b>Average LTQ score</b>	
1 Olympic Games	47	63.80	
2 Olympic Games	34	60.97	
3 Olympic Games	22	60.61	
4 Olympic Games	13	59.54	
5 Olympic Games	1	61.00	
6 Olympic Games	2	62.00	
<b>Highest placement</b>	<b>nr. of participants</b>	<b>Average LTQ score</b>	
1st	26	63.62	
2nd	26	58.85	
3rd	20	62.00	
4th	5	61.80	
5th	8	61.88	
6th	3	60.00	
7th	7	61.00	
8th	5	64.80	
9th	2	60.50	
10th	3	66.00	
11th	1	60.00	
12th	3	59.67	
13th	1	70.00	
14th	0	0.00	
15th	0	0.00	
16th	0	0.00	
17th- 50th	5	64.00	
above 50th	2	62.50	
no answer	2	63.00	
<b>Olympic medalist</b>	1st to 3rd place	72	61.49
<b>Olympic Non-medalist</b>	4th place & above	45	62.70
<b>Total participants</b>	all places	119	62.48

Table 2. Average LTQ scores based on Olympic Games participation, highest placement.

scores for each country were also calculated, but serious consideration had to be given to the number of participants from each group, as they significantly influenced the average LTQ score, not offering a valid conclusion. Further study with similar number of participants from each country should be conducted before drawing any conclusions based on the cultural differences between countries and even continents (see table 3).

<b>Country represented at the Olympic Games</b>	<b>nr. of participants</b>	<b>Average LTQ score</b>
Australia	2	62.50
Barbados	1	60.00
Brazil	3	62.66
Canada	2	64.50
France	1	70.00
Germany	16	58.81
Jamaica	1	62.00
Hungary	4	59.50
Netherlands	2	61.00
Panama	1	68.00
Poland	1	63.00
Romania	59	63.22
Russia	1	54.00
Slovakia	1	52.00
Spain	2	66.50
Suriname	1	67.00
Sweden	5	57.60
USA	13	61.23
No Country	2	59.00

Table 3. Average LTQ scored based on Country represented at the Olympic Games.

Eleven different sports from the summer Olympic Games were represented in this study including swimming, rowing, artistic gymnastics, handball, fencing, track and field, canoe-sprinting, boxing, cycling, judo, and triathlon. Most of the Olympic athletes surveyed competed in individual sports like swimming (n=43), the sport in which the researcher achieved two Olympic medals, and artistic gymnastics (n=14), while team sports were represented through rowing (n=25)

and handball (n=11). Table 4 showcases the number of participants from each sport represented in this study and the average LTQ scores obtained by each group. It is important to note the great differences between the number of participants in each sport which directly influenced the average score obtained in the LTQ. The highest average LTQ score was achieved by the athletes (n=7) who competed in athletics (65.71), while the lowest

score was obtained by the one BMX athlete (57.00), as seen in table 4.

While the surveyed Olympians' LTQ scores were analyzed in various groups based on gender, age, sport, Olympic Games participation, and highest placement, the researcher took a closer look at individual LTQ scores as well. As the average LTQ score obtained by all surveyed Olympian was (62.48), the individual scores spread from a low score of (32.00) to the maximum possible points of (70.00). The most frequent

LTQ score (n=16) obtained by the surveyed athletes was

the 70, which represents the highest possible score, followed by the score of 64 which was recorded by 11 athletes, as seen in table 5.

The data collected from each of the fourteen leadership traits such as articulate, perceptive, self-confident, self-assured, persistent, determined, trustworthy, dependable, friendly, outgoing, diligent, conscientious, sensitive, empathic, measured by the LTQ were analyzed to identify specific traits that the Olympians considered having greater importance. The

Sports	nr. of participants	Average LTQ score
Athletics	7	65.71
Boxing	2	60.50
Canoe	4	62.70
BMX	1	57.00
Fencing	8	59.00
Gymnastics	14	63.00
Handball	11	61.00
Judo	1	63.00
Rowing	25	62.83
Swimming	43	61.14
Triathlon	1	64.00
No sport	2	61.50

Table 4. Average LTQ scored based on the sport performed at the Olympic Games.

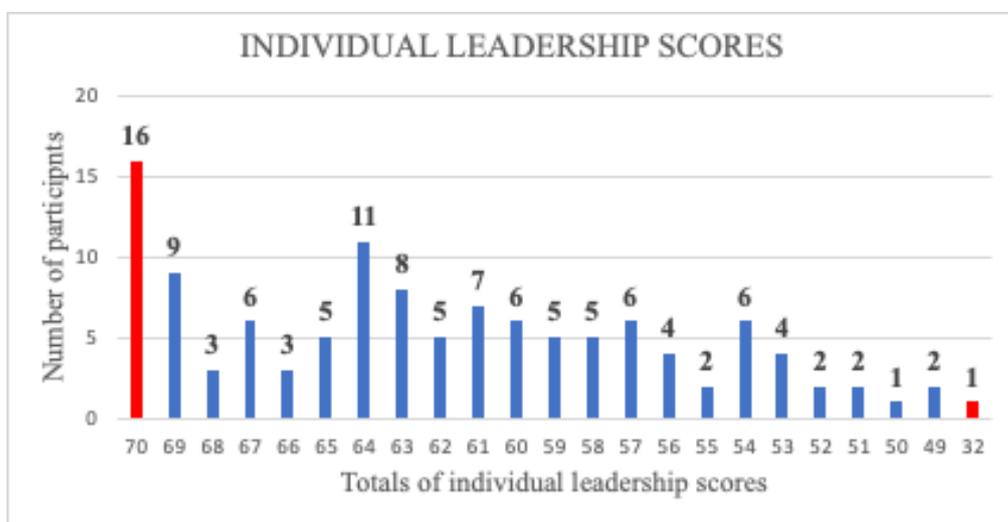


Table 5. Spread of the Individual LTQ scores.

LEADERSHIP TRAIT	1=strongly disagree	2=disagree	3=neutral	4=agree	5=strongly agree	M	Median	Mode
Leader is Articulate	1	0	2	42	75	4.58	5	5
Leader is Perceptive	2	0	7	37	73	4.5	5	5
Leader is Self-Confident	2	1	2	41	73	4.53	5	5
Leader is Self-Assured	0	11	16	43	48	4.08	4	5
Leader is Persistent	0	0	10	43	66	4.47	5	5
Leader is Determined	0	1	8	39	71	4.51	5	5
Leader is Trustworthy	1	0	2	15	101	4.81	5	5
Leader is Dependable	1	0	6	36	76	4.56	5	5
Leader is Friendly	1	3	25	44	48	4.12	4	5
Leader is Outgoing	0	6	31	38	45	4.02	4	5
Leader is Conscientious	1	0	14	39	65	4.4	5	5
Leader is Diligent	0	0	5	32	82	4.65	5	5
Leader is Sensitive	2	5	17	51	45	4.1	4	4
Leader is Empathic	0	2	11	49	57	4.35	4	5

Table 6. Spread of Answers and Mean, Median, Mode, and Standard Deviation for each LTQ Score to All the Leadership Trait Questions.

most categorical answer of strong agreement (n=116) among all survey participants (n=119) was related to the trustworthiness of the leader. One hundred and one (101) Olympic athletes strongly agreed that that this leadership trait was the most important of them all, with 15 agreeing.

Being self-assured and friendly were the two questions that offered the most balanced answers from the Olympic athletes. Out of a total of 119 surveyed, only 91 Olympic athletes agreed or strongly agreed that being self-assured is an important trait of a leader, but 16 were neutral and 11 disagreed about the importance of a leader to be confident. The leader's ability to be self-assured was the trait that the surveyed Olympians disagreed with the most (n=11).

The most neutral answers (n=31) received regarding the leader being outgoing, not considering it an important trait, while 82 surveyed athletes agreed (n= 38) and strongly agreed (n=45), and six athletes disagreed.

To further analyze the differences to each of the LTQ questions the mean, median, mode, and standard deviation were calculated for each of the 14 questions. Table 6 showcases the standard deviation for the data received for each of the LTQ questions, clearly reflecting the diversity of answers especially about the importance of the leader's ability to be self-assured (SD= 0.96), outgoing (SD= 0.92), and sensitive (SD= 0.91), while showing small variation to the trustworthiness (SD= 0.54), (see Table 6).

## **Discussion**

Olympic athletes who possess exceptional personal and leadership traits have difficulty

transitioning from competitive athletes to post competitive life after many years dedicated to high performance. Identifying these remarkable leadership traits empowers the athlete to find professional success post competitive athletic life. Out of the 179 Olympians contacted, 119 valid responses were received, representing almost equally both genders and a wide age from 18-year-old to participants over 60-years-old.

The leadership scores obtained by the Olympic athletes highlight certain characteristics that support the major traits recognized by previous research. The highest number of athletes (n=101) strongly agreed that integrity or trustworthiness is an important trait of a leader, making it the most agreed upon quality alongside being articulate when adding the favorable answers consisting of 4 = agreed and 5 = strongly agreed answers. Being articulate, which represents the leader's ability to communicate effectively with his/her followers, received the most combined agreed (n=42) and strongly agreed (n=75) answers for a shared (n=117) out of the total 119 possible answers. These data align with the conclusions drawn by Parr, Lanza, and Bernthal (2016) that certain personality traits that positively affect the person's leadership with the top three most dominant classes of leaders being the power players, protocol followers, and the creative communicators, who have similar emotional control and work ethic. The most dominant class, the power players, show emotional stability, friendly, and open to new ideas that make them more appealing to the followers, while the protocol followers are emotionally stable and hard workers, but due to a lack of proper skill sets are not able to define and execute strategies that would impact the future of the company. The creative communicators

excel in their relationships with their followers but lack diligence in developing and implementing winning strategies (Parr et al., 2016). Most Olympic athletes surveyed agree that being able to effectively communicate the established goals, and the steps that need to be done to achieve these goals are essential traits of a successful leader as the vision and motivation necessary is clearly stated.

While the sample of Olympians surveyed was relatively large and balanced regarding gender and age groups, certain favoritism has emerged. The researchers Olympic background and connection to the sport of swimming resulted in being the most represented sport (n=43), alongside her native country of Romania being the most represented (n=59).

### **Future research**

Future research should widen the population surveyed to include athletes from Asia and Africa to see if there are any differences in LTQ scores among surveyed Olympic athletes, as cultural differences could be another variable that might directly influence the athletes' leadership characteristics as gender roles are clearly defined in certain societies. By extending the range of individual sports represented including more athletes who competed in team sports could offer an opportunity to analyze if any differences exist in the LTQ score between the two groups, offering a deeper look into how leadership is viewed differently based on collaboration between teammates for team sports or having to rely solely on individual strengths to succeed in the individual sports.

When considering the athletes highest placement at the Olympic Games and their

LTQ scores, those who placed second obtained the lowest LTQ scores of the entire population surveyed. Future research should investigate what factors influence the silver medalists' LTQ scores, implicitly their own perception of leadership, and on the opposite spectrum, what makes an athlete who did not make the finals at the Olympic Games, achieving 13th place such a confident leader.

Furthermore, the leadership scores of athletes that have been assigned leaders of a team such as a captain or occupy certain leadership positions in their teams and sports, should be compared to those of their team mates to see if any quantifiable differences exist as these leaders are assigned not emerged naturally.

Lastly, gaining a better understanding of why the leader's ability to be self-assured is not as important as other leadership characteristics should also be explored as the Olympians are usually perceived as always confident in their abilities to succeed.

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