# Attribution of success and failure of medal winnings in 10 sports branches of KONI Surakarta at the Porprov Central Java XVI 2023 at Pati Raya

Atribución del éxito y el fracaso de las medallas obtenidas en 10 ramas deportivas de KONI Surakarta en Porprov Central Java XVI 2023 en Pati Raya

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**Abstract.** This research purpose was examined the role of luck, task difficulty, effort, and ability in attribution of success and failure in winning medals in 10 sports branches of KONI Surakarta at the Porprov Central Java XVI 2023 at Pati Raya and determined the differences between athletes in 10 different sports branches. *Exploratory qualitative* with sample of 132 athletes (athletics (n = 11), Tarung Derajat (n = 15), kempo (n = 13), shooting (n = 11), swimming (n = 12), archery (n = 18), wushu (n = 14), equestrian (n = 18), karate (n = 13), muaythai (n = 7)). Data on failure reasons in the form of luck, task difficulty, effort, ability using questionnaires and semi-structured interviews and medal achievements were collected. Each interview was recorded, transcribed, and analyzed. Independent t-test and one-way Anova were used to determine differences in attribution. The results showed that luck (t=3.471, p=0.001, ES=0.64) and task difficulty (t=3.177, p=0.002, ES=0.60) were found as reasons for failure, while effort (t=3.625, p=0.000, ES=0.69) and ability (t=3.869, p=0.000, ES=0.73) were found as reasons for success. The conclusion is that attribution plays a role in the success and failure of medal achievements. However, there are other factors resulting from semi-structured interviews that training preparation, physical preparation, mental control, and team coordination as reasons for success. While injuries, lack of playing experience, inability to handle pressure, stress, and panic as reasons for failure. There are also factors such as wind direction and body posture for archery, and rider-horse relationship for equestrian sports.

Keywords: Evaluation, Medals, Porprov

Resumen. El propósito de esta investigación fue examinar el papel de la suerte, la dificultad de la tarea, el esfuerzo y la habilidad en la atribución del éxito y el fracaso en la obtención de medallas en 10 ramas deportivas de KONI Surakarta en el Porprov Central Java XVI 2023 en Pati Raya y determinar las diferencias entre los atletas en 10 ramas deportivas diferentes. Cualitativo exploratorio con una muestra de 132 atletas (atletismo (n = 11), Tarung Derajat (n = 15), kempo (n = 13), tiro (n = 11), natación (n = 12), tiro con arco (n = 18), wushu (n = 14), equitación (n = 18), karate (n = 13), muaythai (n = 7)). Se recopilaron datos sobre las razones del fracaso en forma de suerte, dificultad de la tarea, esfuerzo, habilidad mediante cuestionarios y entrevistas semiestructuradas y logros de medallas. Cada entrevista fue grabada, transcrita y analizada. Se utilizaron pruebas t independientes y Anova unidireccional para determinar las diferencias en la atribución. Los resultados mostraron que la suerte (t=3,471, p=0,001, ES=0,64) y la dificultad de la tarea (t=3,177, p=0,002, ES=0,60) se encontraron como razones para el fracaso, mientras que el esfuerzo (t=3,625, p=0,000, ES=0,69) y la habilidad (t=3,869, p=0,000, ES=0,73) se encontraron como razones para el éxito. La conclusión es que la atribución juega un papel en el éxito y el fracaso de los logros de medallas. Sin embargo, hay otros factores resultantes de entrevistas semiestructuradas que incluyen la preparación del entrenamiento, la preparación física, el control mental y la coordinación del equipo como razones para el éxito. Mientras que las lesiones, la falta de experiencia de juego, la incapacidad para manejar la presión, el estrés y el pánico como razones para el fracaso. También hay factores como la dirección del viento y la postura corporal para el tiro con arco, y la relación jinete-caballo para los deportes ecuestres.

Palabras clave: Evaluación, Medallas, Porprov

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## Introduction

Initially, sports started as a leisure activity but now it has developed into an industry that has become a sector with a significant influence on the economy in a country or region. In fact, with the existence of sports events, it has an impact on increasing the economy due to sports tourism, sales and trade of sports products, construction and maintenance of sports venues, organizing sports events, marketing, and advertising. Thus creating various job and business opportunities (e.g, engineers and developers, sports coaches and doctors, sports journalists and commentators, retailers of sports goods and equipment) (Shasha, Abbasi, & Sohail, 2023).

There are various types of sporting events, such as the Central Java Porprov. This event is specifically held for Central Java participants, for 2023 it will be held in Pati Raya. In each sporting event, the top three winners will

receive medals such as gold for first place, silver for second place, and bronze for third place, and in the XVI Central Java Porprov in 2023, 28 gold medals, 30 silver medals, and 46 bronze medals were won with a total of 104 medals, but this number decreased when compared to the XV Central Java Porprov in 2018 which won a total of 116 medals. Having many talents with a strong spirit to make their region proud, many young people are unhappy with these statistics, because successful participation in a sporting event is usually measured by winning medals (Shasha, Abbasi, & Sohail, 2023).

Currently, improving individual and organizational performance has become one of the main goals of every active and living organization, one of which is KONI Surakarta. Winning medals according to target and increasing medals indicated that the performance of athletes and organizations has increased. However, what happened was the opposite, the target for winning medals was not

achieved and the medals also decreased. This shown that the performance of athletes and organizations has decreased. Meanwhile, Abdolmaleki et al (2015) explained that the optimal performance of an organization was related to the effectiveness and efficiency of the organization itself. Various efforts need to be made so that the organization has effective performance and becomes successful and can survive and advance in a competitive world. Optimal strategy setting is very important in determining the success or failure of performance (Whitehead, et al., 2018). Abdolmaleki et al (2015) believe that performance evaluation required organizational-oriented behavior; therefore, performance evaluation is an important trend for all jobs regardless of their level and complexity.

KONI Surakarta failure to achieve the medal target and decline in medals at the 2023 Central Java Porprov XVI event, the participating delegations need to be evaluated. Through evaluation, the factors that contribute to sports performance can be identified (D'Isanto et al., 2019). One of them is related to attribution theory which explains that luck, task difficulty, effort, ability are factors provided by individuals to explain the success or failure (Weiner, 1985). Attribution theory can be classified into two dimensions: locus of control/causality (internal-external) and stability (stableunstable). From the attribution category, ability and effort are under personal control and can be considered internal factors, while task difficulty and luck during performance do not depend on personal control and are defined as external factors. Moreover, both athlete ability and task difficulty tend to be stable factors, while effort and luck are unstable factors.

González-Boto et al (2006), explained that winners attribute ability and effort as the reasons behind their success while losers make attributions primarily to luck and task difficulty. In line with this, Sheppard (2019), explained that failure is the inability to meet performance standards related to goals, failure also indicates a lack of superior performance. The importance of studying attribution is based

on the premise that attribution is related to one's expectations about what they will do in the future, and one's affective response to the outcome of the achievement task. This idea suggests that understanding attributions for success and failure is important to understanding athlete behavior in performance settings because attributions influence an athlete's self-conceptualization. The reason for using this attribution theory is because it is carried out when there has been a win or loss in competitive sports, then the subject is asked to state the cause of the outcome through an assessment on a scale. Therefore, the research purpose was examined the role of luck, task difficulty, effort, and ability in attribution of success and failure in winning medals in 10 sports branches of KONI Surakarta at the Porprov Central Java XVI of 2023 at Pati Raya and determined the differences between athletes in 10 different sports branches.

### Material and methods

## Research methodology and procedures

The research was used exploratory qualitative research design. The researcher conducted a semi-structured interview study, and followed by a survey.

### Research sample

The research samples were KONI Surakarta athletes who participated in the 2023 Central Java Porprov XVI Pati Raya, totaling 132 athletes from 10 different sports. They were 21.38±6.17 years old, 165.26±8.04 cm of height, 59.48±11.35 kg of weight, 21.68±3.12 kg/m2 of BMI, and had 6.48±3.71 years of playing experience, Table 1 presents the demographic data of the sports participating in this research. Ethical approval was obtained from Ethics Committee of Sebelas Maret University Surakarta before the study took place. The research purpose has been explained and written consent was obtained from each sample before the study took place.

Table 1. Participant data

Sport Branch	Age (year)	Body Height (cm)	Body Weight (kg)	BMI (kg/m²)	Playing Experience (Year)
Sport Branch	(mean±SD)	(mean±SD)	(mean±SD)	(mean±SD)	(mean±SD)
Athletics (n=11)	22.00±4.05	168.14±7.67	61.09±17.17	21.36±4.31	6.69±3.79
Tarung Derajat (n=15)	$18.53\pm2.72$	$164.13\pm10.49$	$57.46 \pm 10.87$	21.22±2.68	2.84±1.85
Kempo (n=13)	$22.31\pm4.53$	165.54±9.15	58.12±8.20	21.15±2.12	9.82±4.37
Shooting (n=11)	24.36±11.58	163.27±10.43	52.99±6.47	19.86±1.54	6.27±4.58
Swimming (n=12)	18.92±3.99	$165.75 \pm 4.07$	59.96±6.74	$21.81\pm2.03$	5.10±1.13
Archery (n=18)	17.50±2.15	$166.78\pm6.76$	67.39±13.64	$24.06 \pm 3.68$	6.85±1.89
Wushu (n=14)	19.93±3.56	$163.71\pm6.58$	55.40±5.91	$20.71\pm2.34$	8.39±3.37
Equestrian (n=18)	27.11±8.72	163.52±9.66	57.63±12.13	$21.51\pm3.80$	6.97±4.35
Karate (n=13)	21.38±3.36	164.85±5.89	61.92±11.80	$22.65 \pm 3.05$	5.39±2.46
Muaythai (n=7)	22.43±3.69	169.29±7.25	61.16±10.56	21.21±2.41	6.33±4.27
Total (n=132)	21.38±6.17	165.26±8.04	59.48±11.35	21.68±3.12	6.48±3.71

#### Tests used in the research

After the 2023 Central Java Porprov XVI competition, subjects filled out a questionnaire containing demographic data (age, height, weight, and playing experience), medals won in the 2023 Central Java Porprov XVI competition, and questions related to possible reasons for winning and not winning medals based on the attribution theory of luck, task difficulty, effort, and ability used a Likert importance scale (table 2). In addition to filling out the questionnaire, subjects were also interviewed about the reasons for their success and failure according to the attribution theory of luck, task difficulty, effort, ability using semi-structured interviews. Winners (winning medals) and losers (not winning medals) answered four questions for attribution assessment (table 2) (González-Boto et al., 2006).

Table 2.

Questior	maire questions				
	Attribution assessment for losers (did not winning medals)				
1	To what extent do you feel that your/your team's lack of ability was a factor in				
1	not winning a medal?				
2	To what extent do you feel that not winning a medal was due to your/your				
	team's lack of effort?				
3	To what extent do you feel that not winning a medal was due to your/your				
3	team's bad luck?				
4	To what extent do you feel that not winning a medal was due to your opponent				
+	playing very well?				
Attribution assessment for winners (winning medals)					
5	To what extent do you feel that your/your team's ability was a factor in winning				
3	a medal?				
6	To what extent do you feel that winning a medal was due to your/your team's				
0	effort?				
7	To what extent do you feel that winning a medal was due to your/your team's				
/	good luck?				
0	To what extent do you feel that winning a medal was due to your opponent not				
8	playing very well?				

(González-Boto et al., 2006)

#### Statistical data

Each interview was recorded, transcribed and analyzed using content analysis. Interview transcription was done verbatim by the researcher. This technique consists of three steps: pre-analysis, data organization, and results and interpretation (Benites et al., 2016). It involved identifying and categorizing specific content patterns, themes or codes of data, providing valuable insights and interpretations for the research study. Likert scale data were collected and presented as means and standard deviations. In addition, independent t-tests to determine whether attributions differed based on medal results with attribution scores for each item used as the dependent variable, as well as one-way ANOVA to analyze different attribution factors in winners and losers when considered for different sports were conducted using SPSS version 17.0 software. All data were normally distributed using the kolmogorov smirnov normality test. Significance was accepted at the 5% level.

## Result

## Medal acquisition data

Of the 132 athletes who participated in the 2023 Central Java Porprov XVI competition, 44 athletes did not get medals and 88 athletes did get medals (table 3).

Table 3. Medal acquisition

Sport Branch	Get medals	Did not get medals		
Athletics (n=11)	9	2		
Tarung Derajat (n=15)	6	9		
Kempo (n=13)	12	1		
Shooting (n=11)	6	5		
Swimming (n=12)	5	7		
Archery (n=18)	10	8		
Wushu (n=14)	10	4		
Equestrian (n=18)	12	6		
Karate (n=13)	12	1		
Muaythai (n=7)	6	1		
otal (n=132)	88	44		

# The reasons for success and failure in medal winnings

Overall, there were statistically significant differences in the four attribution factors between winners (who won a medal) and losers (who did not win a medal) (Table 4). Luck (t=3.471, p=0.001, ES=0.64) and task difficulty (t=3.177, p=0.002, ES=0.60) were found to be the reasons for failure to win a medal, while effort (t=3.625, p=0.000, ES=0.69) and ability (t=3.869, p=0.000, ES=0.73) were found to be the reasons behind their success in winning a medal (Figure 1).

Table 4.

Mean, SD, and differences between winners and losers

Attribution	Winners (M ± SD)	Losers (M ± SD)	t	Sig	ES
Luck	3.88±1.80	5.05±1.88	3.471	0.001*	0.64
Task difficulty	$4.08\pm1.98$	5.18±1.65	3.177	0.002*	0.60
Effort	$4.70\pm2.03$	$3.41\pm1.73$	3.625	0.000*	0.69
Ability	4.57±1.84	$3.30\pm1.67$	3.869	0.000*	0.73

\*significance at p < 0.05

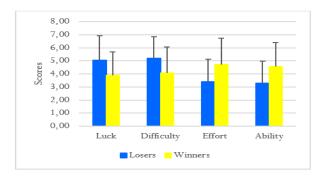


Figure 1. Comparison of attribution reasons (mean and SD) between winners and losers

# The reasons for success and failure in medal winnings in different sports

When the importance of different attribution factors was considered for each different sport, the results found that there were statistically significant differences in each sport for attribution factors. Losers did have higher luck and task difficulty scores. Losers in athletics, tarung Derajat, shooting, swimming, and wushu felt that task difficulty was the most important failure factor when competing in the 2023 Central Java Porprov XVI event. Luck was also considered important as the first failure factor for losers in kempo, archery, equestrian, karate, and muaythai when competing in the 2023 Central Java Porprov XVI event (table 5 and figure 2). Meanwhile, winners do have higher ef-

fort and ability scores. Winners in the shooting and equestrian sports felt that ability was the most important success factor when competing in the 2023 Central Java Porprov XVI event. Effort was also considered important as the first success factor for winners in the athletics, tarung Derajat, kempo, swimming, karate, and muaythai sports when competing in the 2023 Central Java Porprov XVI event. Meanwhile, winners in the archery and wushu sports considered that both ability and effort were equally important as success factors when competing in the 2023 Central Java Porprov XVI event (table 6 and figure 3).

Table 5.

Mean SD and differences in lowers' attributions for each spor

Attribution	Sport Branch	N	Mean±SD	F	Sig	ES
Luck	Athletics	2	8.00±1.41	5.036	0.000*	0.45
	Tarung Derajat	9	4.44±1.42			
	Kempo	1	4.00±.			
	Shooting	5	$4.60\pm1.14$			
	Swimming	7	$2.86\pm1.07$			
	Archery	8	$5.50\pm1.77$			
	Wushu	4	$5.00\pm1.41$			
	Equestrian	6	7.17±1.17			
	Karate	1	6.00±.			
	Muaythai	1	6.00±.			
Task difficulty	Athletics	2	8.50±0.71	5.011	0.000*	0.45
	Tarung Derajat	9	$5.00\pm1.66$			
	Kempo	1	3.00±.			
	Shooting	5	$5.20 \pm 0.84$			
	Swimming	7	3.57±1.13			
	Archery	8	$5.25\pm1.04$			
	Wushu	4	5.25±0.96			
	Equestrian	6	$6.83\pm1.17$			
	Karate	1	3.00±.			
	Muaythai	1	5.00±.			
Effort	Athletics	2	6.00±1.41	4.594	0.001*	0.42
	Tarung Derajat	9	$3.00\pm1.50$			
	Kempo	1	3.00±.			
	Shooting	5	$3.00\pm1.00$			
	Swimming	7	$1.43 \pm 0.54$			
	Archery	8	$3.75\pm1.67$			
	Wushu	4	$3.00\pm1.41$			
	Equestrian	6	5.17±1.17			
	Karate	1	4.00±.			
	Muaythai	1	6.00±.			
Ability	Athletics	2	$6.50\pm0.71$	5.208	0.000*	0.46
	Tarung Derajat	9	$3.00\pm1.66$			
	Kempo	1	1.00±.			
	Shooting	5	$3.20\pm0.84$			
	Swimming	7	1.57±1.13			
	Archery	8	$3.25\pm1.04$			
	Wushu	4	3.25±0.96			
	Equestrian	6	$4.83\pm1.17$			
	Karate	1	3.00±.			
	Muaythai	1	6.00±.			

<sup>\*</sup>significance at p < 0.05

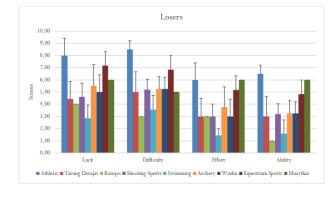


Figure 2. Comparison of attribution reasons (mean and SD) for losers in each sport  $\,$ 

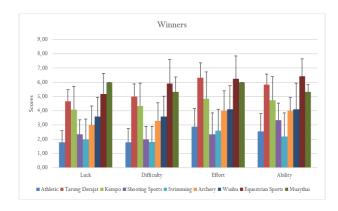


Figure 3. Comparison of attribution reasons (mean and SD) for winners in each sport.

Mean, SD, and differences in winners' attributions for each sport

Attribution	Sport Branch	N	Mean±SD	F	Sig	ES
Luck	Athletics	9	1.78±0.83	9.385	0.000*	0.46
	Tarung Derajat	6	$4.67\pm0.82$			
	Kempo	12	$4.08\pm1.62$			
	Shooting	6	$2.33\pm1.03$			
	Swimming	5	$2.00\pm1.41$			
	Archery	10	$3.00\pm1.33$			
	Wushu	10	$3.60\pm1.35$			
	Equestrian	12	5.17±1.47			
	Karate	12	$5.00\pm1.60$			
	Muaythai	6	$6.00\pm0.00$			
Task difficulty	Athletics	9	1.78±0.97	11.327	0.000*	0.51
	Tarung Derajat	6	5.00±0.89			
	Kempo	12	4.33±1.61			
	Shooting	6	$2.00\pm0.89$			
	Swimming	5	$1.80\pm1.10$			
	Archery	10	3.30±1.25			
	Wushu	10	$3.60\pm1.43$			
	Equestrian	12	5.92±1.68			
	Karate	12	5.67±1.67			
	Muaythai	6	5.33±1.03			
Effort	Athletics	9	2.89±1.27	7.985	0.000*	0.42
	Tarung Derajat	6	$6.33\pm1.03$			
	Kempo	12	$4.83\pm1.90$			
	Shooting	6	2.33±1.51			
	Swimming	5	$2.60\pm1.52$			
	Archery	10	$4.00\pm1.41$			
	Wushu	10	4.10±1.66			
	Equestrian	12	6.25±1.60			
	Karate	12	$6.08\pm1.83$			
	Muaythai	6	$6.00\pm0.00$			
Ability	Athletics	9	2.56±1.24	8.343	0.000*	0.43
- 9	Tarung Derajat	6	5.83±0.75			
	Kempo	12	4.75±1.66			
	Shooting	6	3.33±1.21			
	Swimming	5	2.20±1.64			
	Archery	10	4.00±0.94			
	Wushu	10	4.10±1.85			
	Equestrian	12	6.42±1.24			
	Karate	12	5.50±1.62			
	Muaythai	6	5.33±0.52			

<sup>\*</sup>significance at p < 0.05

# Reasons for medal success and failure based on semi-structured interviews

Success-effort

Athletes feel that to win a medal, effort is very important. But it needs to be done with a combination such as intensive training, physical, mental, and good team coordination. This is in accordance with the following interview results:

"The athlete's success wins a medal is not only about bad luck but also about effort for the match" (Response from one of the winners of the swimming)

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"Physical aspect is very important. Mental readiness is also needed, and I am sure that my mentality is 90% ready". (Response from one of the karate winners)

"Because there is a desire to get a medal, so I put in all the effort. I can do by training as preparation" (Response from one of the winners of the tarung Derajat)

"Cohesiveness, mutual support, and understanding the character of each team member play a big role" (Response from one of the athletics winners)

"In addition to personal preparation and maximum effort when competing, coordination of team management and coaches is a factor in getting a medal" (Response from one of the kempo winners)

"Winning a medal depends on personal will and effort. Thorough preparation and good mentality are very important" (Response from one of the muaythai winners)

Success-ability

Athletes feel that through training, their abilities will increase. Therefore, training camps before the match are needed. This is in accordance with the following interview results:

"Thorough preparation, discipline, and consistency in training are very important to face equal opponents, especially when playing against senior opponents" (Response from one of the shooting winners)

"It is important to follow the coach's program. Even though the opponent plays well, confidence in one's own preparation and talent development through training is the main key" (Response from one of the equestrian winners)

"Ability is one of the main factors that can affect the results in a competition such as good technique and strategy" (Response from one of the archery winners)

"Having good technique is important". (Response from one of the wushu winners)

Failure-luck

Luck refers to the achievement is considered to have happened by luck. Athletes feel that just doing training is not enough, luck is needed. In addition, some people think that wind direction and body posture also affect their defeat as conveyed by archery athletes, or because of unhealthy body conditions due to injury. This is in accordance with the following interview results:

"Maybe because I was unlucky and it wasn't my time to get a medal" (Response of one of the kempo losers)

"Yes, for example the wind direction that makes the arrow change direction, also body posture" (Response of one of the archery losers)

"If sports are definitely a match, there must be a luck factor" (Response of one of the shooting losers)

"I felt unlucky when competing in Kumite 67kg which made me fail to qualify for the semifinals. But I also had a problem with an injury to my thumb which made it less strong to clench" (Response of one of the karate losers)

"Actually it was maximum, but luck can also be another factor. Because I have been doing the training program very

consistently, every day for about 6 months. But still haven't got a medal". (Response from one of the muaythai losers)

Failure-task difficulty

Task difficulties felt by athletes such as their inability to face opponents who have more playing experience, lack of concentration, and other factors such as the horse used in the match were conveyed by equestrian athletes. This is in accordance with the following interview results:

"For beginners like me, I don't have enough ability to face more senior opponents" (Response of one of the athletics losers)

"I feel out of reach with my opponent. I saw the opposing team inviting an outside coach who made better performance " (Response of one of the tarung derajat losers)

"Yes, because I met senior athletes yesterday, so it was difficult to be better than them" (Response of one of the swimming losers)

"Lack of concentration in myself during the race" (Response of one of the wushu losers)

"Because in equestrianism, it is not only seen from the rider but also the horse factor used in the match. Because in the match not only the athlete but also the horse, so we should have a good relationship with the horse" (Response of one of the equestrian losers)

#### Discussion

This study found that both losers and winners have different attribution factors that cause them to win or lose medals when competing in the 2023 Central Java Porprov XVI event. Winners consider the importance of ability and effort to win medals in the competition at the 2023 Central Java Porprov XVI event, while losers attribute the reason why they did not win medals because they did not have good luck and task difficulty in the competition at the 2023 Central Java Porprov XVI event. This shows that winners give reasons for their victory based on internal locus of control while losers give reasons for their failure based on external locus of control as in the study presented by Bukowski & Moore (1980). A study also showed that winning was associated with more internal and controllable causes found in Australian and Japanese male athletes (Aldridge & Islam, 2012).

For different sports, attributions to medal-winning and non-medal-winning factors differ significantly. The differences between winners and losers provide bias evidence of a self-serving in them (Bukowski & Moore, 1980). Stoeber & Becker (2008) explained that striving for perfection is related to expectations of success and self-serving attributions, these attributions are inversely related to fear of failure. Conversely, negative reactions to imperfection are positively related to failure. Effort to achieve perfection in sports is associated with adaptive patterns of positive motivational orientation and self-serving attributions, which can help athlete performance.

Conversely, negative reactions to imperfection are related to maladaptive patterns of negative motivational orientation, which tend to damage athlete performance.

The research findings are consistent with previous research that the attribution factors considered more important for success are athlete's effort and ability (González-Boto et al., 2006). Athletes feel that their victory is due to the efforts they have made so far, such as undergoing training camps before the competition, as well as the abilities that are always developed during training camps. Although victory sometimes also be caused by the task difficulty felt by the opponent because they are not maximizing their ability and effort. On the other hand, training, physical, mental control, and coordination are also conveyed by athletes as the reasons they managed to win medals. As explained by Greenleaf, Gould, & Dieffenbach (2001) that the main factors that are considered to have a positive influence on an athlete's performance include mental skills and preparation, multifaceted preparation, physical preparation, and coaching. Gould et al (1999) in their study also explained that teams that meet/exceed expectations, participate in training programs, have team support, utilize mental preparation, and are very focused and committed. Athletes use coping strategies that focus on performing optimally under pressure, facing difficulties, reducing pressure to achieve results, and directing the team in carrying out tasks during the match (Vieira et al., 2024).

Likewise, for losers, if they lose they tend to blame external conditions such as not having good luck as the reason they failed to get the targeted medal. This is because they consider failure to be a shameful event that destroys dreams and kills motivation. In this condition, coaches need to encourage their athletes by controlling internal factors such as effort and ability. Every time they fail or lose, athletes have the opportunity to increase their training level to improve their ability. On the other hand, Cowden & Worthington (2019), explain that failure refers to an experience that follows the perception of an athlete's inability to achieve competitive performance criteria and gives rise to the feeling that someone is making their own mistakes in a disproportionate amount to not being optimal in their efforts. This is in accordance with Rejeski & Lowe (1980) explained that failure is related with a lack of ability and performance that is not as expected, largely due to the perception of task difficulty.

On the other hand, injuries experienced by athletes are given as reasons for failure. As explained by Greenleaf, Gould, & Dieffenbach (2001) that the main factor considered to have a negative influence on an athlete's performance is injury. Injuries hinder training, have a negative impact on their Olympic performance, are physically frightening obstacles because they are painful. For the task difficulty felt by athletes is their inability to face opponents who have more playing experience and lack of concentration. As explained by Gould et al (1999) in their study that teams that fail to meet expectations experience problems with

lack of experience and encounter problems related to concentration and commitment. Gould et al (1999) explained that lack of experience is caused by a lack of in-depth understanding of the game, lack of follow-up mental skills training, and inability to handle pressure and distractions at the Olympics. While lack of concentration is due to being unable to cope with game stress and panic. There are other reasons given by athletes in archery that wind direction and body posture affect failure, while equestrian athletes consider horses also affect failure.

Related to posture, Barrera et al (2020) found that in the archery assertiveness test it only increased in the early age group (under 15 years), while in cadets there was no change in the post-test. It is possible that static postural balance training optimizes postural and visuomotor control patterns at an early age (under 15 years) compared to the cadet group, so that throwing accuracy is improved. Related to wind direction, Park (2012) explained that the selection and performance of different arrows in the wind can be a significant differentiator between competitors in outdoor archery competitions. Lateral displacement due to wind (wind drift) has two components: the first is because the arrow aligns itself with the resultant airflow, and the second is because of the lateral component of the arrow's aerodynamic drag. Park (2020) in his study also showed that archers should use small-diameter arrow shafts with high density to minimize wind drift. Even for the best arrows, the drift for a side wind of 3 m/s was greater than four score rings for a recurve bow at a target distance of 70 m with a target surface of 1220 mm diameter and almost two score rings for a compound bow at a target distance of 50 m with a target surface of 800 mm diameter. In relation to horse riding, a study by Tufton, Kentzer, & Kingsley (2023) showed that the quality of the human-horse relationship is considered by humans to be important for performance and welfare, and is central to creating an effective and successful partnership in equestrian sports.

## Conclusion

The conclusion is that effort and ability were found to be the reasons behind success in getting medals, while luck and task difficulty were found to be the reasons behind failure to get medals. Losers in athletics, tarung Derajat, shooting, swimming, and wushu felt that task difficulty was the most important failure factor while luck was considered important as the first failure factor for losers in kempo, archery, equestrian, karate, and muaythai. Winners in shooting and equestrian felt that ability was the most important success factor. Effort was also considered important as the first success factor for winners in athletics, tarung Derajat, kempo, swimming, karate, and muaythai. Meanwhile, winners in archery and wushu considered that both ability and effort were equally important as success factors. The study concluded that attribution plays a role in the success and failure of medal winning. However, there are other factors resulting from semi-structured interviews that training

preparation, physical preparation, mental control, and team coordination are the reasons for success. While injuries, lack of playing experience, inability to handle pressure, stress, and panic are the reasons for failure. There are also factors such as wind direction and body posture for archery, and rider-horse relationship for equestrian sports.

### Recommendations

This research used a limited sample, namely only at regional events, so the results cannot be generalized. Due to the limitations of this study, further researchers are advised to conduct research for different events or based on different genders. So that it can enrich the research results as new findings for the future.

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## **Conflicts of Interest**

The authors declare no conflicts of interest.

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