## Potential Participants Before and After Undergoing Training Program for the Boccia National Training Center

# Saddan Pramana Putra<sup>1</sup>, Rony Syaifullah<sup>2</sup>, Islahuzzaman Nuryadin<sup>3</sup>, Slamet Riyadi<sup>4</sup>

<sup>1,2,3,4</sup> Sports Science Study Program, Faculty of Sports, Universitas Sebelas Maret

## Email: saddanp2@student.uns.ac.id<sup>1</sup>, ronysyaifullah@staff.uns.ac.id<sup>2</sup>, mase.ior2004@staff.uns.ac.id<sup>3</sup>, slametriyadi70@staff.uns.ac.id<sup>4</sup>

## Abstrak

Tujuan penelitian ini adalah untuk mengetahui calon peserta sebelum dan sesudah menjalani program pelatihan di Boccia National Training Center. Jenis penelitian yang digunakan dalam penelitian ini adalah penelitian deskriptif kuantitatif. Metode deskriptif kuantitatif merupakan penelitian kuantitatif yang bentuk deskripsinya bersifat numerik (statistik). Artinya penelitian tersebut berhubungan dengan deskripsi dengan angka statistik. Dari pengujian perbedaan dengan analisis statistik uji t berpasangan diperoleh nilai thitung antara hasil pretest dan posttest lebih besar dari nilai ttabel dengan N = 11, db = 11 - 1 = 10 dengan taraf signifikansi 5% sebesar 2,228 sehingga dapat disimpulkan H0 ditolak, sehingga antara pretest dan posttest terdapat perbedaan yang signifikan pada akurasi keterampilan lempar boccia setelah menjalani program pelatnas boccia. Besarnya perbedaan tersebut ditunjukkan dari persentase kenaikan sebesar 23,413%. Calon peserta menunjukkan adanya perbedaan yang signifikan pada kemampuan akurasi lempar boccia setelah menjalani program pelatnas boccia. Besarnya perbedaan ditunjukkan dari thitung = 6,605 > ttabel = 2,228 dan sig = 0,000 < 0,05 serta persentase kenaikannya sebesar 23,413%.

## Kata Kunci : Calon Peserta, Program Pelatihan, Boccia

## Abstract

The purpose of this study was to determine the potential participants before and after undergoing training program for the Boccia National Training Center. The type of research used in this research is quantitative descriptive research. The quantitative descriptive method is a quantitative research in which the form of description is numerical (statistical). This means that the research is related to the description with statistical numbers. From testing the difference with paired t-test statistical analysis, the tcount value between the pretest and posttest results is greater than the ttable value with N = 11, db = 11 - 1 = 10 with a 5% significance level of 2.228, so it can be concluded that H0 is rejected, so between the pretest and posttest there is a significant difference in the accuracy of boccia throw skills after undergoing the boccia national training program. The magnitude of the difference is shown from the percentage increase of 23.413%. Potential participants showed a significant difference in boccia throwing accuracy skills after undergoing the boccia national training program. The magnitude of the difference is shown from the percentage increase of 23.413%.

Keywords: Potential Participants, Training Program, Boccia

## INTRODUCTION

Boccia is a disabled sport designed for athletes who are severely impaired in exercise capacity, such as cerebral palsy (Kasih et al., 2020). Athletes with cerebral palsy and those with muscular dystrophy disorders can play the sport of Boccia (Physiotherapy & Meeting,

2022) To play Boccia, the required field is a field with a hard surface similar to badminton (Manurizal, 2016). Every athlete who plays Boccia, plays by bringing his ball closer to the white target ball which is usually called the jack ball, this is the goal of this game. Because they try to bring the ball they throw closer, athletes must have accuracy, coordination, courage to strategize, concentration, interaction with others, and emotional control (Zainuddin et al., 2022).

Pelatnas or National Training Center is one way to form a good national team, where players from various clubs are called and join the training camp held by the national team (Dzulhidayat, 2022b). During the training camp process the players will stay together for a long time to follow all the training programs and team building that will be given by the coach (Hervi & Qoriah, 2021). This is shown so that the players are ready to face the competition and form cohesiveness within the team (Wicaksono & Sapuguh, 2022).

Pelatnas Boccia is a pre-competition period where an Indonesian National Paralympic Committee (NPC) boccia athlete trains specifically for an upcoming event (Fitri, 2020). Athletes will usually train at a specialized boccia venue, where they have several other athletes and coaches who can assist them in various forms of training including various throwing techniques to win the game (Aryanti, 2021). National boccia training can last up to several months before the competition begins (Ita et al., 2021). NPC Indonesia managers or administrators often recruit additional coaches and players selected from regional clubs to join the Pelatnas to provide training and new opponents as stimulating and challenging training (Prof et al., 2021).

Recently, Boccia athletes underwent a training program in the national training camp (Pelatnas) organized by the Indonesian NPC board (Pradana, 2019). This national training camp was held in preparation for the 2023 ASEAN Paragames in Phnom Penh, Cambodia and the 2023 ASIAN Paragames in Hangzhou, China. Pelatnas Boccia is a pre-competition period where an Indonesian National Paralympic Committee (NPC) boccia athlete trains specifically for the upcoming event (Fitri, 2020). Athletes will usually train at a specialized boccia venue, where they have several other athletes and coaches who can assist them in various forms of training including various throwing techniques to win the game (Dzulhidayat, 2022). National boccia training can last up to several months before competition begins.

One important aspect to support the success of athletes' sporting achievements is the existence of a good training program (Wani, 2018). A good training program is a program that is prepared in accordance with knowledge and conditions in the field (Susanto & Lismadiana, 2016). Therefore, to compile an exercise program, careful planning is needed. Exercise planning aims as a coach's guide to the athlete's best performance in a competition, the expected peak performance is to improve the athlete's performance or performance to the maximum (Chan, 2012).

When carrying out training, training evaluation is important to highlight that all athletes will have qualifications and experience after undergoing training (Sugiart, 2022). Therefore, it is important for athletes to receive professional training and guidance to develop their skills and function effectively (Sari et al., 2020). As a result, national training camps organize training programs that help athletes to improve their skills effectively (Dongoran et al., 2020). The final stage of training is training evaluation, which plays an important role in measuring training outcomes, but this aspect is generally neglected (Setyawan & Sahrah, 2012).

Training programs must be evaluated to determine whether they should be continued or not. In addition, training evaluation is necessary for policymakers to be able to make the right decisions, such as stopping inefficient programs and expanding efficient programs (Aulia, 2010). In addition, evaluation identifies areas in training that require further improvement and can provide insight into methods to improve training programs (Prathevi et al., 2010). Therefore, the training process must be evaluated to determine the effectiveness of the various components of the training and development program (Saputra, 2019).

This study discusses the Potential of Participants (potential) Before and After Undergoing Training Program Pelatnas Boccia, The purpose of training is to help coaches, coaches, and sports teachers in order to apply the conceptual training that is owned so that it can help reveal the potential of athletes in achieving optimal performance (Syahroni et al., 2020). As such, athletes' training and preparation routines should largely be associated with generating strategies that support improved motor control, resulting in greater consistency in successive tactical demands to maintain their throwing accuracy (Gao et al., 2023).

#### METHODS

The type of research used in this research is quantitative descriptive research. The quantitative descriptive method is a quantitative research in which the form of description is numerical (statistical). This means that the research is related to the description with statistical numbers.

This research design uses a survey. Survey research design is a quantitative research procedure conducted to obtain a description of attitudes, behaviors, and characteristics of the population obtained through samples in the population (Abdullah, 2015). This study uses the SOAP-M model to analyze the evaluation of the Pelatnas Boccia training program.

The place of implementation of this research was carried out at Pelatnas (National Training Center) Boccia NPC Indonesia. Research Time The research was conducted for 3 months. To assess the potential of boccia athletes, researchers used the boccia player accuracy protocol. Three distances were determined on the court, namely 3, 6 and 9 meters from the boundary line of the box. The center point of the top line of boxes 2 and 5 was used as a parameter. Each player had to position themselves in boxes 3 and 4 (in that order) and direct their throws sideways to the right if they were in box 4 and to the left if they were in box 3.

## RESULTS

**Table 1. Description of Potential Prestest and Posttest Data** Potential Ν Mean SD Category Meant Different 7.20 Pretest 11 22.91 Moderate 5.36 Posttest 11 28.27 7.09 Moderate

Based on the table, the 11 samples of boccia athletes who underwent the national training program showed that the potential pretest throw accuracy was in the moderate category with an average of 22.91 and a standard deviation of 7.20. Potential posttest also shows a moderate category with an average of 28.27 and a standard deviation of 7.09, with an average difference of 5.36.

Table 2. Summary of Potential Data Normality Test Results								
Potential	Absolute	Asymp. Sig	Summary					
		(2- tailed)						
Pretest	0.160	0.942	Normally distributed					
Posttest	0.132	0.990	Normally distributed					

From the results of the normality test carried out, the absolute value is obtained < 0.391 which is the rejection limit number of the 5% Kolmogorov Smirnov significance level (N (11) = 0.391). When viewed from the asymp. sig (2-tailed) value shows> 0.05. Thus it can be concluded that the potential pretest and posttest data are normally distributed.

Potential	Ν	Mean	SD	Mean Different	t- Count	sig	% Improvement
Pretest	11	22.91	7.20	5.36	6.605	0.000	23.413%
Posttest	11	22.91	7.09				

From testing the difference with paired t-test statistical analysis, the tcount value between the pretest and posttest results is greater than the ttable value with N = 11, db = 11 - 1 = 10 with a 5% significance level of 2.228, so it can be concluded that H0 is rejected, so between the pretest and posttest there is a significant difference in the accuracy of boccia throw skills after undergoing the boccia national training program. The magnitude of the difference is shown from the percentage increase of 23.413%.

Boccia is a precision sport that requires excellent coordination and control of movements of the upper extremities. The sport of boccia can be played individually, in pairs or teams (threes), with men and women on the same team or even competing against each other.

Regardless of the athlete's functional class, Paralympic boccia is characterized as a sport where technique and tactics are causally linked with precision. Players take turns in consecutive throws to approach a designated target, which could be a target (white) ball or any other ball present on the field of play. As such, athletes' training and preparation routines should largely be associated with generating strategies that support improved motor control, resulting in greater consistency in consecutive tactical demands to maintain their throwing precision. The research findings showed that between the pretest and posttest there was a significant difference in boccia throwing accuracy skills after undergoing the boccia national training program. The magnitude of the difference is shown from the percentage increase of 23.413%.

## DISCUSSION

Boccia can be played individually, in pairs, or in teams with 3 members. In pairs or team matches, both male and female athletes can play together in the same team(Love et al., 2020). During the match, each athlete has 6 balls in one half. The match starts with the jack thrown first, then continues with the first 2 color balls played, namely 1 ball from the athlete who throws the jack and 1 ball from the opponent's side. Then, the color ball farthest from the jack will play first or throw the color ball back to get close to the jack. The thrown color ball continues up to 6 balls. After that, opposing athletes begin to throw their remaining color balls. When all athletes have thrown 6 color balls, the athlete will be awarded points based on the decision of the referee, who has identified the closest color ball rather than the color ball belonging to the opponent closest to the jack. The winner of the match is determined based on the highest number of points when the game has finished. If there are 2 teams with the same number of points, then there is 1 additional round to determine the winner (Haris et al., 2020).

The basic throwing techniques specific to Boccia are unique to each player due to their specific capacities and limitations. There are 3 basic techniques in throwing a boccia ball including throwing underhand, throwing overhand, and throwing using a ramp. In addition to the throwing techniques that every boccia athlete needs to master, there are also game strategies including blocking, defeating a block, and playing the circle (Haris, 2022).

Not long ago, Boccia athletes underwent a training program in the national training center (Pelatnas) organized by NPC Indonesia management. NPC itself is an institution responsible for gathering, coaching, training, and forming qualified disability-specific sports athletes and is responsible for coordinating every disability activity at the regional, national, and international levels (Rahmawati et al., 2020). NPC Indonesia is a sports achievement organization for people with disabilities which is the only forum for coaching and organizing

sports for people with disabilities in Indonesia and is authorized to foster people with disabilities. NPC is expected to raise the achievements of boccia athletes to the world level (Łosień et al., 2018).

Training concentration is an organized period during which personnel or athletes participate in a rigorous and focused training schedule to learn or improve skills (Bakhtiar &; Ballard, 2015). Athletes usually take advantage of training centers to prepare for upcoming events and in competitive sports, to focus on developing skills and strategies to defeat their opponents (Affiza, 2022).

## CONCLUSION

Potential participants showed a significant difference in boccia throwing accuracy skills after undergoing the boccia national training program. The magnitude of the difference is shown from tcount = 6.605> ttable = 2.228 and sig = 0.000 < 0.05 and the percentage increase of 23.413%.

## REFERENCES

- Abdullah, P. M. (2015). Living in the world that is fit for habitation: CCI's ecumenical and religious relationships. In *Aswaja Pressindo*.
- Affiza, S. M. B. P. (2022). Faktor Pendukung Psychological Well-Being Pada Atlet Difabel Berprestasi. 2005–2003, *8.5.2017*, הארץ.
- Aryanti, S. (2021). Dampak Pariwisata Provinsi Papua Pada Penyelenggaraan Pon Xx. In *Refleksi PON XX Dan Peparnas XVI Papua*.
- Aulia, N. (2010). Penilaian Kebermanfaatan Program Pos Gizi Di Desa Pondok Jaya Kecamatan Sepatan Kabupaten Tangerang Tahun 2010. *Desember*, 1–118.
- Bakhtiar, S., & Ballard, R. J. (2015). *Teori Action, Method, Strength Condition dan Penerapannya dalam Pembinaan Prestasi Tenis.*
- Chan, F. (2012). Strength Training (Latihan Kekuatan). Cerdas Sifa.
- Dongoran, M. F., Kalalo, C. N., & Syamsudin. (2020). Profil Psikologis Atlet Pekan Olahraga Nasional (PON) Papua Menuju PON XX Tahun 2020. *Journal Sport Area*, 5(1), 13–21. https://doi.org/10.25299/sportarea.2020.vol5(1).4621
- Dzulhidayat. (2022a). Bimbingan Atlet Difabel Netra Berprestasi Cabang Olahraga Lempar Lembing Dan Lari Di Balai Rehabilitasi Sosial Penyandang Disabilitas Sensorik Netra. 8.5.2017, 2003–2005.

Dzulhidayat. (2022b). Pengalaman dan Makna Berdiri di Podium Pada Kejuaraan Internasional di Kalangan Atlet Panjat Tebing Indonesia. 2005–2003, 8.5.2017, הארץ (2020). Diagmilia Kagan Diri Pada Atlet Diaghilitana Dahuah Kajian Kualitati

- Fitri, W. (2020). Dinamika Konsep Diri Pada Atlet Disabilitas : Sebuah Kajian Kualitatif i.
- Gao, Y., Zhao, J., Qin, C., Yuan, Q., Zhu, J., Sun, Y., Lu, C., Federal, U., Cear, D. O., Ci, C. D. E., Agr, N., Ci, E. M., Alimentos, T. D. E., Lopes, S., Oliveira, G. O. D. E., Afifah, I., & Sopiany, H. M., Psicologia, P. D. E. P. E. M., Orrico Junior, M., Santos, H. D. S., ... Augusto, K. V. O. N. Z. (2023). Pengembangan Model Latihan Pembebanan Untuk Meningkatkan Kekuatan Otot Statis Dan Keseimbangan Statis Atlet Panahan Oleh: *Aleph*, *87*(1,2), 149–200.
- Haris, M. Al. (2022). Manajemen Pembinaan Atlet Boccia Cerebral Palsy Di National Paralympic Committee Indonesia. Titafi Xxxv.
- Haris, M. Al, Doewes, M., & Liskustyawati, H. (2020). Development of Boccia Cerebral Palsy's National Athlete Achievement in the Indonesian National Paralympic Committee. Budapest International Research and Critics in Linguistics and Education (BirLE) Journal, 3(2), 784–794. https://doi.org/10.33258/birle.v3i2.940
- Hervi, A., & Qoriah, A. (2021). Survei Manajemen Olahraga Petanque Pada UKM Petanque Unnes Kota Semarang. *Indonesian Journal for Physical Education and Sport*, 2(1), 230–234.
- Ita, S., Kusuma, M. J., Womsiwor, D., Qomarrullah, R., Putra, M. F. P., Kurdi, Putra, I. P. E. W., Ibrahim, Syam, M. S., Hasan, B., & Rumbewas, S. T. (2021). *Master plan pembinaan prestasi olahraga disabilitas papua*.

- Kasih, A. M., Hidayatullah, M. F., & Doewes, M. (2020). Ketercapaian pelaksanaan program pembinaan prestasi olahraga boccia dengan menggunakan evaluasi CIPP di Pelatnas Boccia NPC Indonesia tahun 2019/2020. Seminar Nasional KeIndonesiaan V Tahun 2020 "Negara Dan Tantangan Kenegaraan Kontemporer," 2(1), 247–252.
- Łosień, T., Mędrak, A., Plaskacz, P., Bajerska, I., Reut, M., Dragon, E., Polko, M., & Cebula, A. (2018). The influence of boccia on self-esteem and increasing the functional capabilities of disabled people. *Journal of Education, Health and Sport*, 8(8), 1099– 1105.
- Manurizal, L. (2016). Kontribusi Kekuatan Genggaman dan Kelenturan Pinggang terhadap Ketepatan Service Slice Atlet Tenis PTL UNP. *Jurnal Ilmiah Edu Research*, *5*(1), 33– 40.
- Physiotherapy, A., & Meeting, S. (2022). Annual Physiotherapy Scientific Meeting Proceeding. Titafi Xxxv.
- Pradana, D. F. (2019). Profil team pelatnas paracycling Indonesia tahun 2018.
- Prof, P., Dlis, F., Pd, M., Malang, C., & Rw, R. T. (2021). *i Editor: Khoshshol Fairuz Tata Sampul: Khoshshol Fairuz Tata Isi: Nurul Aini Diterbitkan oleh: Facebook: Penerbit Kertasentuh Instagram: penerbitkertasentuh.*
- Rahmawati, D., Wiyanto, A., & Setyawan, D. A. (2020). Manajemen National Paralympic Committee (NPC) dalam pembinaan prestasi atlet penyandang disabilitas. *Edu Sportivo: Indonesian Journal of Physical Education*, 1(2), 97–102. https://doi.org/10.25299/es:ijope.2020.vol1(2).5661
- Saputra, H. (2019). Evaluasi Program Pelatihan Desain Pembelajaran Bagi Dosen Universitas Terbuka. JURNAL SeMaRaK, 2(2). https://doi.org/10.32493/smk.v2i2.2933
- Sari, S., Chan, D., & Halik, A. (2020). Jurnal Bimbingan Penyuluhan Islam, Vol. 02, No. 02 Juli-Desember 2020. 02(02), 302–324.
- Setyawan, N. F. B., & Sahrah, A. (2012). Peningkatan Organizational Citizenship Behavior Pada Karyawan Melalui Pelatihan Kerjasama. *Insight*, *10*(1), 17–36.
- Sugiart, R. (2022). Holistic journal of sport education. 1(2), 29–34.
- Susanto, N., & Lismadiana, L. (2016). Manajemen program latihan sekolah sepakbola (SSB) GAMA Yogyakarta. *Jurnal Keolahragaan*, *4*(1), 98. https://doi.org/10.21831/jk.v4i1.8133
- Syahroni, M., Pradipta, G. D., & Kusumawardhana, B. (2020). Analisis Pembinaan Prestasi terhadap Manajemen Olahraga Sekolah Sepak Bola (SSB) Se-Kabupaten Pati Tahun 2019. *JOSSAE Journal of Sport Science and Education*, *4*(2), 85–90. https://doi.org/10.26740/jossae.v4n2.p85-90
- Wani, B. (2018). Evaluasi Program Pembinaan Prestasi Cabang Olahraga Tinju Pada Pusat Pembinaan dan Latihan Olahraga Pelajar NTT. *Jurnal Ilmiah Pendidikan Citra Bakti*, *5*(1), 35–43.
- Wicaksono, H. P., & Sapuguh, I. (2022). Sistem Pendukung Keputusan Pemilihan Pemain Terbaik Team Esport Divisi Game Mobile Legend Bang-Bang Menggunakan Metode Saw-Topsis. 10(1), 73–83.
- Zainuddin, M. S., Usman, A., Kamal, M., Abduh, I., & Wahyudi, A. S. B. S. E. (2022). Analisis Keterampilan Olahraga Petanque Sulawesi Selatan. *Tadulako Journal Sport Sciences and Physical Education*, *10*(1), 1–9.