

# A Study on the Training Load, Recovery, and Game Performance among Telic and Paratelic Basketball Athletes

Kritika Khandelwal<sup>1\*</sup>, Bhawna Chahar<sup>1</sup>, Pradeep Singh Chahar<sup>2</sup>

<sup>1</sup>Department of Business Administration, Manipal University Jaipur, Jaipur, 303007, Rajasthan, India

<sup>2</sup>Department of Physical Education, Banaras Hindu University, Varanasi, 221005, Uttar Pradesh, India

Received September 4, 2022; Revised December 2, 2022; Accepted December 22, 2022

## Cite This Paper in the Following Citation Styles

(a): [1] Kritika Khandelwal, Bhawna Chahar, Pradeep Singh Chahar, "A Study on the Training Load, Recovery, and Game Performance among Telic and Paratelic Basketball Athletes," *International Journal of Human Movement and Sports Sciences*, Vol. 11, No. 1, pp. 124 - 133, 2023. DOI: 10.13189/saj.2023.110115.

(b): Kritika Khandelwal, Bhawna Chahar, Pradeep Singh Chahar (2023). A Study on the Training Load, Recovery, and Game Performance among Telic and Paratelic Basketball Athletes. *International Journal of Human Movement and Sports Sciences*, 11(1), 124 - 133. DOI: 10.13189/saj.2023.110115.

Copyright©2023 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

**Abstract** Telic and paratelic states of psychological wellbeing are differentiated by choice of goals. Training, load, and recovery of basketball players are solely dependent on the game's performance to a great extent. Background training is the best training needed to enhance the competitive advantage of the individual. In the working environment or in sports, money is responsible for acting as an external variable. If an individual is fond of earning money more than mental satisfaction, then it will be problematic for an individual to proceed with the best result. The primary quantitative analytic method has been considered for the research, which shows convenience sampling. IBM SPSS statistical analysis has been taken into consideration in this scenario. Four statistical steps have been conducted for this research: frequency distribution, correlation, linear regression and Cronbach alpha. The mean value indicates that frequency distribution has the highest value range in this context. The study is statistically significant because the value of Cronbach's alpha is 0.983, which shows a high level of internal consistency of variables.

**Keywords** Telic and Paratelic, Basketball Players, Motivation, Game Performance, Training Load, Recovery

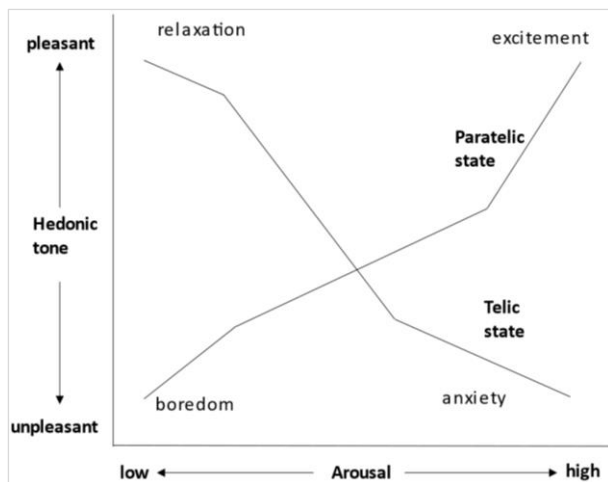
---

## 1. Introduction

In recent years, game performance of an individual or team got increased attention understood to qualitative and quantitative information from athletes, especially basketball players. Training, load, and game performance are more or less dependent on the thinking and the learning perspective of the psychological well-being of athletes. The performance of athletes is crucial and reflects their desire to enhance career effectiveness. A wide range of factors is included in team sports and training load. Different training loads are available in this scenario, such as *game-based conditioning, general conditioning, and offensive and defensive skills*. The individual characteristics of players become influenced by the training load to a spacious assortment. Characteristics of an individual have been influenced by their game performance to a great extent. Psychological traits of individuals are essential in this context, such as telic and paratelic forms. These two states of mind are entirely different from each despite both of these being met as a motivational state of mind [1]. A study conducted in this context shows that the telic state of mind is more pleasant than the paratelic state of mind.

### 1.1. Background of Training, Game Performance, and Load for Telic and Paratelic Basketball Players

As mentioned by Ortega *et al.* [2], basketball is considered a team sport that involves some intermittent efforts. In recent times, most elite players in a team have been exposed to congested figures due to the high number of matches. These features are responsible for the enhancement of complex problems of being fatigued. On the other hand, the gaps in match schedules for a long time might be detrimental to decreasing their game performance.



(Source: Transforming the Mind [3])

**Figure 1.** Telic and paratelic dominance for game performance

As figure 1 showed there is wide range of differences present in telic and paratelic states. In the case of the telic state, motivation such as means-end motivation might have proceeded with some essential goals, imposed goals, and goals that are not oriented [4]. In the case of paratelic goals, goals need to be chosen by an individual in an accessible manner. In the case of time motivation, the telic state becomes observed to be planned and consists of pleasure of anticipation. On the contrary, players of paratelic state have the pleasure of sensation.

Enhancement of the game performance is essential and needs to be managed by proper guidance and training programs.

If proper guidance and training programs are absent, a player might lose motivation. Loss of motivation is detrimental to the career of a player. In this regard, proper training is required for physical well-being because physical well-being is no longer valid if an individual or a player has no self-faith [5]. Load is two types in this context such as internal load and external load. Internal load in the case of telic and paratelic sports individuals represents a reaction of physiology faced by a stimulus and can be measured by heart telemetry.

On the contrary, external load indicates mechanical and total locomotor stress produced by activities. Some parameter for players includes *i) cover of distance per*

*minute ii) percentage of high-intensity action or %HIA.* These two essential activities are needed for proceeding with the best outcome in the future.

An individual's mind state operates in oppositional pairs, which means elicitation of action proceeded by one state and suppressed to its associated opposing state [6]. For players with a daily training load, the *telic state* is defined as a mental state in which one conceives self is pursuing an important goal and that individual plays a subsidiary to achieve that goal to a spacious assortment.

The life situation of players and their persuasion or perspectives indicate a wide range of limitations imposed on them, and the majority of players have thought to win a match. Therefore, it can be said that the problem has arisen due to the enhancement of complex problems related to the training. If players are appropriately trained in this context, there will be a high chance of solving this problem. In other words, it can be said that players are only fond of money, and they have a minimal desire to win matches. These types of complexity have been observed in players who gained a high position or in the case of players who have nothing to give or lose [7]. Hence, it can be said that players' thinking and learning perspectives need to be equal in this context to engage them more with the game accurately. As per the views of [8], game demands and training depend on all players' combination process and isolation. It means the predominant modification of training demand depends on the thinking and the learning perspective game stability. The minds of athletes can be changed by improvisation techniques imposed by coaching staff. Moreover, there will be no compromise of game intensity.

A study conducted by Sansone *et al.* [1] indicates that contextual factors affect athletes' training perception, which is observed to influence the training program of more devoted athletes. Specifically, the game's location is the main in this scenario that affects weekly training loads. In the case of paratelic basketball players, the presence of information regarding contextual factors is more meaningful and evidenced. In fact, in the case of basketball players, loads of training are considered to change the game schedule, incorporation of season phase, and time of playing. At last, it can be said that a comprehensive training picture of players' performance is required in this context for proceeding with the best outcome.

There are many physical variables present in this context, which shows that those are important for the improvement of the game performance of players in this context. While considering a load of training only, the use of external and internal or both might be able to provide valuable data regarding the requirements of monitoring and analysis. In this context, it has been observed that the sRPE method is considered to be one of the best methods for a study that is required for changing the condition of variables [6]. Apart from that, the accelometry method is another important type of training that might couple with the sRPE method and can gain advantages among paratelic and telic

basketball players. This reason says that external load monitoring is an approach that coaches and minimizes the number of injuries to achieve the best performance.

## 2. Materials and Methods

The material and method of a study are crucial and need to be well performed for proceeding with the best outcome. This research has proceeded with a convenience sampling process which is a non-probability sampling in this scenario. Primary data collection with the quantitative format has been used for this study, and data have been collected from basketball players of the Jaipur district. Age and year of experience in basketball have been taken as the demographic data [9]. Apart from that, seven questions have been prepared in the form of a five-point Likert scale states 1- Strongly agree, 2- Agree, 3- Neither agree nor disagree, 4- Disagree, 5- Strongly disagree [10]. A total of 51 responses have been collected for understanding the role of game, training, and performance load of telic and paratelic states. Questionnaires have been made to reflect the role of game load, performance, and training on telic and paratelic basketball players. After completing the questionnaire, the multifaceted nature of personal motivation has been included in this context to proceed with the best outcome. Multifaceted nature is used to analyze some critical aspects of an individual's telic and

paratelic state. After collecting data, analysis has done by IBM SPSS software by importing an excel file. Four statistical analyses have been considered in this scenario: frequency distribution, linear regression, correlation, and Cronbach alpha. Therefore, it is evident that internal consistency and linear relationship of variables have been reflected throughout this study.

## 3. Results

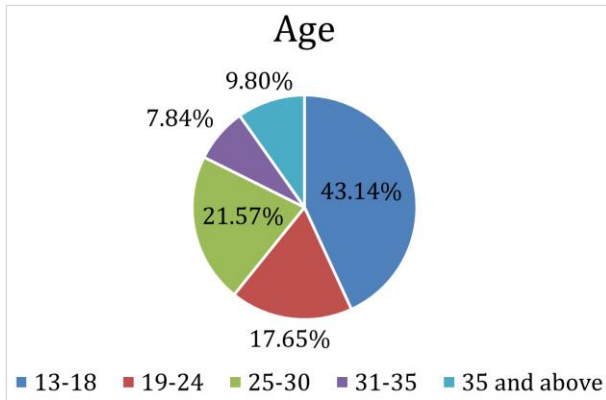
### 3.1. Frequency Distribution

This table discusses the frequency distribution of the given variable. According to Kenkmann [11] ideas, the frequency distribution of a variable is responsible for the analyzing distribution of a variable within a given interval. That means it reflects the length and responses of variables. In the case of demographic data, the mean value of variables is **2.24 and 1.75**. In the case of questions devoid of demographic questions, the highest mean value is observed to be **2.45** in the case of subjective question number 4. Skewness value of the present study is considered to be **0.769, 1.750, 0.998, 0.691, 0.812, 0.679, 0.799, 1.034, 0.940**. The kurtosis value of the present frequency distribution analysis is the highest in the case of question number 2, indicated by 3.457 (refer table 1).

**Table 1.** Frequency distribution of variables

Statistics										
		Age	Experience in sports	Individuals high in self-efficacy attempted to choose a more difficult motor task to enhance their performance. Agree or disagree?	Sport produced a consistent improvement in hedonic tone with increases in positive emotions and decreases in negative emotions. Agree or disagree	Pride is an autic-mastery emotion associated with competitiveness, winning, and dominance in sports. Agree or disagree?	Basketball requires constant team interaction and explosive changes in the direction and speed of movement. Agree or disagree?	The effect of sport on stressors appears to be contrary to the positive effects on hedonic tone obtained for the somatic and transactional emotions. Agree or disagree?	Sports activities in basketball provide the optimal motivation for enhancing the personality and game performance of the players	Perfect training, Enhanced game performance are beneficial for the psychological wellbeing of telic and paratelic players. Agree or disagree?
N	Valid	51	51	51	51	51	51	51	51	51
	Missing	0	0	0	0	0	0	0	0	0
Mean		2.24	1.75	2.25	2.27	2.12	2.45	2.25	2.04	2.16
Median		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Mode		1	1	2	1	1	2	1	1	2
Skewness		.769	1.750	.998	.691	.812	.679	.799	1.034	.940
Std. Error of Skewness		.333	.333	.333	.333	.333	.333	.333	.333	.333
Kurtosis		-.571	3.457	.308	-.192	-.028	-.319	-.339	.147	.985
Std. Error of Kurtosis		.656	.656	.656	.656	.656	.656	.656	.656	.656
Sum		114	89	115	116	108	125	115	104	110

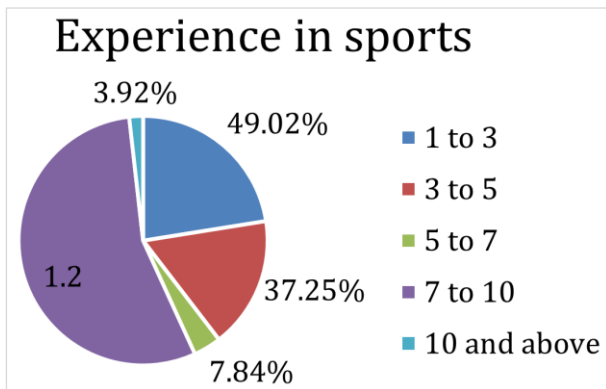
(Source: Self-developed in SPSS)



(Source: Self-developed in SPSS)

**Figure 2.** Pie chart distribution of Age

This image reflects the distribution of demographic variables. Overall, two demographic data, such as age (as shown in figure 2) and experience of individuals (as shown in figure 3), have been considered for the study. Analysis shows that basketball players have an age distribution segmented into five consecutive values. Among those, **43.4%** is the highest in the case of people at the age of 13-18. The least amount is present in the case of the age distribution of 31-35, indicated by **7.84%**.



(Source: Self-developed in SPSS)

**Figure 3.** Pie chart distribution of experience of individual

This image in Figure 3 is a pie chart distribution of variables that shows people have experience in basketball is 1-3 years. Fewer people have experience of 7-10 years and above. People with 1-3 years of experience have a range of **49.02%**, and people with 3-5 years of experience have a range of **37.25%**.

### 3.2. Correlation

Table 2 discusses Pearson correlation analysis, which indicates a linear relationship between variables to a great extent [12]. Ranges of Pearson correlation are highest in the case of question 3 and question 5, indicated by the **0.964** Pearson correlation value. It can be observed in this study that all of the variables have a linear relationship with each other [13]. If a variable moves in the direction of a single plane, then it will make moving another variable in this scenario.

### 3.3. Linear Regression

Table 3 discusses the present study's linear regression, which more or less depends on the ANOVA and model summary. Model summary and ANOVA are both responsible for analyzing the value of one variable based on understanding the value of another variable [14]. Three predictor values decide dependent variables in this scenario as shown in Table 3. The regression value of the variable is considered to be **37.671**, and the residual value is **5.074**. **The total value is 42.745. Mean value of the variable is 12.557.** In the sig column, the value is considered to be 0.000, which shows that the value is statistically significant. The R-value of the variable is **0.939**, and the R square value is 0.881, with the adjusted R square value of **0.874**.

### 3.4. Cronbach Alpha

Table 4 is Cronbach alpha testing that is important for analyzing the internal consistency of variables. Cronbach alpha of variables is **0.983**, with the number of standardized items being **0.983** [15]. The above table shows a high range of internal consistency variables in this scenario.

### 3.5. Item Total Statistics

Item total statistics of variable has been discussed in this context, consisting of scale mean for item deleted and scale variance if item deleted. The value of the scale deleted means is observed to be the highest in the case of question number 3, indicated by **6.98**. Scale variance is indicated in this context by **12.020** (refer Table 5). Moreover, item-total statistics calculation is one of the main themes needed for analyzing the distribution of statistical values about the corrected correlation.

**Table 2.** Pearson correlation analysis

Correlations								
		Individuals high in self-efficacy attempted to choose a more difficult motor task to enhance their performance. Agree or disagree?	Sport produced a consistent improvement in hedonic tone with increases in positive emotions and decreases in negative emotions. Agree or disagree	Pride is an autic-mastery emotion associated with competitiveness, winning, and dominance in sports. Agree or disagree?	Basketball requires constant team interaction and explosive changes in the direction and speed of movement. Agree or disagree?	The effect of sport on stressors appears to be contrary to the positive effects on hedonic tone obtained for the somatic and transactional emotions. Agree or disagree?	Sports activities in basketball provide the optimal motivation for enhancing the personality and game performance of the players	Perfect training, Enhanced game performance are beneficial for the psychological wellbeing of telic and paratelic players. Agree or disagree?
Individuals high in self-efficacy attempted to choose a more difficult motor task to enhance their performance. Agree or disagree?	Pearson Correlation	1	.935**	.926**	.943**	.949**	.940**	.934**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	51	51	51	51	51	51	51
Sport produced a consistent improvement in hedonic tone with increases in positive emotions and decreases in negative emotions. Agree or disagree	Pearson Correlation	.935**	1	.949**	.947**	.956**	.936**	.886**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	51	51	51	51	51	51	51
Pride is an autic-mastery emotion associated with competitiveness, winning, and dominance in sports. Agree or disagree?	Pearson Correlation	.926**	.949**	1	.917**	.964**	.947**	.885**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	51	51	51	51	51	51	51

Table 2. Continued

Basketball requires constant team interaction and explosive changes in the direction and speed of movement. Agree or disagree?	Pearson Correlation	.943**	.947**	.917**	1	.948**	.915**	.935**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	51	51	51	51	51	51	51
The effect of sport on stressors appears to be contrary to the positive effects on hedonic tone obtained for the somatic and transactional emotions. Agree or disagree?	Pearson Correlation	.949**	.956**	.964**	.948**	1	.944**	.890**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	51	51	51	51	51	51	51
Sports activities in basketball provide the optimal motivation for enhancing the personality and game performance of the players	Pearson Correlation	.940**	.936**	.947**	.915**	.944**	1	.884**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	51	51	51	51	51	51	51
Perfect training, enhanced game performance is beneficial for psychological wellbeing of telic and paratelic players. Agree or disagree?	Pearson Correlation	.934**	.886**	.885**	.935**	.890**	.884**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	51	51	51	51	51	51	51
**. Correlation is significant at the 0.01 level (2-tailed)								

(Source: Self-developed in SPSS)

**Table 3.** Linear regression (Model summary and ANOVA)

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.671	3	12.557	116.315	.000 <sup>b</sup>
	Residual	5.074	47	.108		
	Total	42.745	50			

(Source: Self-developed in SPSS)

**Table 4.** Cronbach Alpha test

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.671	3	12.557	116.315	.000 <sup>b</sup>
	Residual	5.074	47	.108		
	Total	42.745	50			

(Source: Self-developed in SPSS)

**Table 5.** Item total statistics

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Individuals high in self-efficacy attempted to choose a more difficult motor task to enhance their performance. Agree or disagree?	6.84	11.615	.955	.914	.978
Sport produced a consistent improvement in hedonic tone with increases in positive emotions and decreases in negative emotions. Agree or disagree	6.82	11.628	.967	.939	.975
Pride is an autic-mastery emotion associated with competitiveness, winning, and dominance in sports. Agree or disagree?	6.98	12.020	.949	.913	.980
Basketball requires constant team interaction and explosive changes in the direction and speed of movement. Agree or disagree?	6.65	11.553	.956	.923	.978

(Source: Self-developed in SPSS)

## 4. Discussion

Results from the analysis indicate that the distribution between variables is high and consists of short recovery cycles. There is no contextual factor that is needed for the recovery. A positive reply got from respondents, including a discussion related to self-efficacy. High responses of people have been observed, especially regarding team interaction. In the case of both telic and paratelic basketball players, the first and foremost crucial aspect directly

depends on the self-efficacy level [16]. For instance, a basketball player with a paratelic mindset will not proceed with any training needed for their development [17]. In addition to that, telic basketball players will be more devoted to their play because they desire to increase their competitive advantages.

It has been evident from the study that the telic basketball players have a high range of advocacy and self-efficacy in this scenario. They can perform better in their area for increasing advantages [18]. Therefore,



ironically, paratelic individuals can think that they achieved all things and do not need permission to do work. Arrogance is high in this context in the case of paratelic basketball players [19]. Moreover, it is observed that there is a high level of internal consistency between variables. Hence, team interaction is needed for a spacious assortment. Activities of the movement in the basketball need to be adequately analyzed in the light of hedonic tone, which is beneficial for building the competitive advantage to a spacious assortment.

Optimal motivation for enhancing the game performance is associated with good thinking and learning perspectives to a spacious assortment. This thinking and the learning perspective must need to align some common goals in which telic and paratelic basketball players will practice together, devoid of any ego and some other aspects. These questions have a high range of linear relationships indicated by the correlation value in this scenario. In the end, a healthy and favorable response can be observed in the case of the last question, which is known as the dependent variable of the study. Training is essential because paratelic players might be out of their basic form, and to bring back their form, proper training is needed to a great extent.

Apart from that, it is also essential that the thinking perspective of individuals needs to be analyzed to provide sufficient response with positive effects on psychological well-being. It is further associated with the stress factor because an individual's stress might be observed to be increased if they lack motivation. Motivation from coaches acts as a tonic to a player by which he can develop a good strategy for fighting against the adverse psychological condition. In many regions of India, it is clear that players who have lost motivation are no longer valid to increase their skills in this scenario. From the above discussion, it is clear that explosive changes in the training part are not highly recommended but need to be changed according to the direction of winning scale and dominance over another team. The winning scale of a team is considered the key performance indicator that describes the productivity of the team.

## 5. Conclusions

It is evident from the present study that telic and paratelic basketball players have a degree of differences in this context which has been examined by the result and analyzed from the discussion. A combination of individuals on the winning scale is considered the key performance indicator in this scenario. Moreover, it can be said that statistical analysis is accurate and sufficient for providing helpful information in this scenario. Moreover, the interaction between the team is a proper variable that is essential for increasing the competitive advantages of players in fighting against the adverse situation. This study has discovered some critical aspects of training, load, and

game performance, highlighting some particular patterns such as the presence of intrinsic and extrinsic motivation and some other aspects. Hence, it can be said that firstly environment needs to be favorable for an individual in this context for proper development.

---

## REFERENCES

- [1] Sansone P, Ceravolo A, Tessitore A. External, internal, perceived training loads and their relationships in youth basketball players across different positions. *International Journal of Sports Physiology and Performance*. 2021 Sep 27;17(2):249-55. DOI: 10.1123/ijsp.2020-0962
- [2] Pino-Ortega J, Rojas-Valverde D, Gómez-Carmona CD, Bastida-Castillo A, Hernández-Belmonte A, García-Rubio J, Nakamura FY, Ibáñez SJ. Impact of contextual factors on external load during a congested-fixture tournament in elite U<sup>18</sup> basketball players. *Frontiers in Psychology*. 2019;1100. <https://doi.org/10.3389/fpsyg.2019.01100>
- [3] Transforming the Mind, (2022) *Telic and Paratelic States*. Trans4mind.com. Retrieved May 12, 2022, from <https://trans4mind.com/transformation/transform4.2.htm>
- [4] Kerr JH. The multifaceted nature of participation motivation in elite Canadian women rugby union players. *International Journal of Sport and Exercise Psychology*. 2021 Jan 2;19(1):74-89. <https://doi.org/10.1080/1612197X.2019.1611904>
- [5] Svilar L, Castellano J, Jukić I. Load monitoring system in top-level basketball team: Relationship between external and internal training load. *Kinesiology*. 2018 Jun 21;50(1):25-33. DOI:10.26582/k.50.1.4
- [6] Karhulahti VM. Esport play: Anticipation, attachment, and addiction in psycholudic development. Bloomsbury Publishing USA; 2020 Jun 11.
- [7] Boulosa D, Casado A, Claudino JG, Jiménez-Reyes P, Ravé G, Castaño-Zambudio A, Lima-Alves A, de Oliveira Jr SA, Dupont G, Granacher U, Zouhal H. Do you play or do you train? Insights from individual sports for training load and injury risk management in team sports based on individualization. *Frontiers in physiology*. 2020 Aug 21; 11:995. <https://doi.org/10.3389/fphys.2020.00995>
- [8] Williams MN, Fox JL, O'Grady CJ, Gardner S, Dalbo VJ, Scanlan AT. Weekly Training Demands Increase, but Game Demands Remain Consistent Across Early, Middle, and Late Phases of the Regular Season in Semiprofessional Basketball Players. *International Journal of Sports Physiology and Performance*. 2021 Oct 26;1(aop):1-8. DOI: 10.1123/ijsp.2021-0078
- [9] Hunt LM, de Voogd KB. Are good intentions good enough?: Informed consent without trained interpreters. *Journal of general internal medicine*. 2007 May;22(5):598-605. DOI: 10.1007/s11606-007-0136-1
- [10] Shin T, Smyth TB, Ukimura O, Ahmadi N, de Castro Abreu AL, Ohe C, Oishi M, Mimata H, Gill IS. Diagnostic accuracy of a five-point Likert scoring system for magnetic resonance imaging (MRI) evaluated according to results of

- MRI/ultrasonography image-fusion targeted biopsy of the prostate. *BJU international*. 2018 Jan;121(1):77-83. DOI: 10.1111/bju.13972
- [11] Kenkmann T. Update of the Terrestrial Impact Crater Record: Crater Discovery Statistics, Size, and Age Frequency Distributions. *Large Meteorite Impacts and Planetary Evolution VI*. 2019 Sep; 2136:5013. Retrieved from: <https://www.hou.usra.edu/meetings/lmi2019/pdf/5013.pdf>
- [12] Edelmann D, Móri TF, Székely GJ. On relationships between the Pearson and the distance correlation coefficients. *Statistics & Probability Letters*. 2021 Feb 1; 169:108960. DOI:10.1016/j.spl.2020.108960
- [13] Mapetu JP, Kong L, Chen Z. A dynamic VM consolidation approach based on load balancing using Pearson correlation in cloud computing. *The Journal of Supercomputing*. 2021 Jun;77(6):5840-81. <https://doi.org/10.1007/s11227-020-03494-6>
- [14] Maulud D, Abdulazeez AM. A review on linear regression comprehensive in machine learning. *Journal of Applied Science and Technology Trends*. 2020 Dec 31;1(4):140-7. <https://doi.org/10.38094/jastt1457>
- [15] Bujang MA, Omar ED, Baharum NA. A review on sample size determination for Cronbach's alpha test: a simple guide for researchers. *The Malaysian journal of medical sciences: MJMS*. 2018 Nov;25(6):85. doi: 10.21315/mjms2018.25.6.9
- [16] Zarrouk LA, Fruchart E. The relationship between purposiveness and information integration: The effect of metamotivational states on cognitive rules in sport. *European Review of Applied Psychology*. 2021 Sep 1;71(5):100689.
- [17] Nelson MJ, Gaudl SE, Colton S, Deterding S. Curious users of casual creators. In *Proceedings of the 13th International Conference on the Foundations of Digital Games 2018 Aug 7* (pp. 1-6). DOI:10.1145/3235765.3235826
- [18] Hudson J, Males JR, Kerr JH. Introducing a basic psychological performance demand model for sport and organisations. *Coaching: An International Journal of Theory, Research and Practice*. 2019 Jul 3;12(2):147-61. <https://doi.org/10.1080/17521882.2019.1574848>
- [19] Nagy KZ, Tóth K, Gyömbér N, Tóth L, Bánhidi M. Motives underlying water sport tourist behaviour: a segmentation approach. *World Leisure Journal*. 2021 Jan 2;63(1):109-27. <https://doi.org/10.1080/16078055.2021.1888002>