



BWF WORLD COACHING CONFERENCE 2025

Paris, France

29 - 30 August 2025

 bwf.sport

 bwf.sport/development





Cristian Luque Manjón

Training Load Management:
Strategies to optimize
performance and manage fatigue

The ultimate goal of any sports coach and athlete is to produce a winning or personal best performance at a specific time, preferably in competition.

(Borresen et al, 2009)

Prescribe optimal training programs that prevent both under and overtraining and increase the chance of achieving desired performances.

Optimising training first involves quantifying what the athlete is currently doing.

Secondly, it needs to be established whether the athlete is adapting favorably to certain levels of exertion.

External load objective measures of the work performed by the athlete during training or competition.

Internal load is measured by assessing the internal physiological and psychological response to the external load.

QF



ZHENG Si Wei
HUANG Ya Qiong

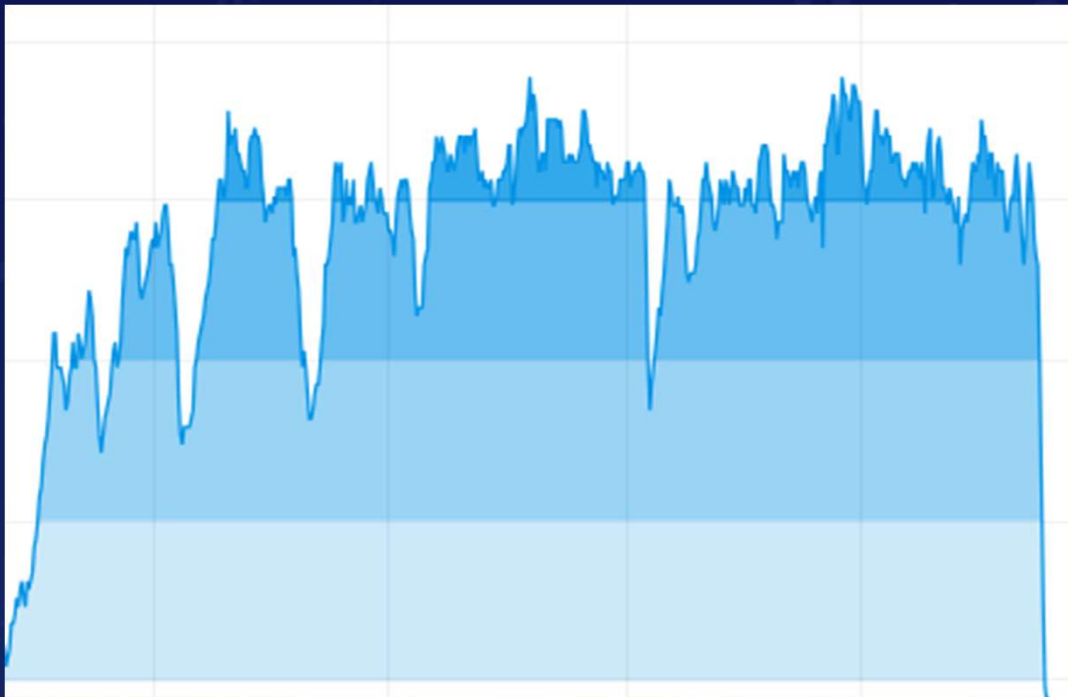
11 21 17



KIM Won Ho
JEONG Na Eun

✓ 21 18 21

🕒 0:58



His time in heart rate zone 4 was 22 minutes higher than his typical average during badminton sessions.

QF



ZHENG Si Wei
HUANG Ya Qiong

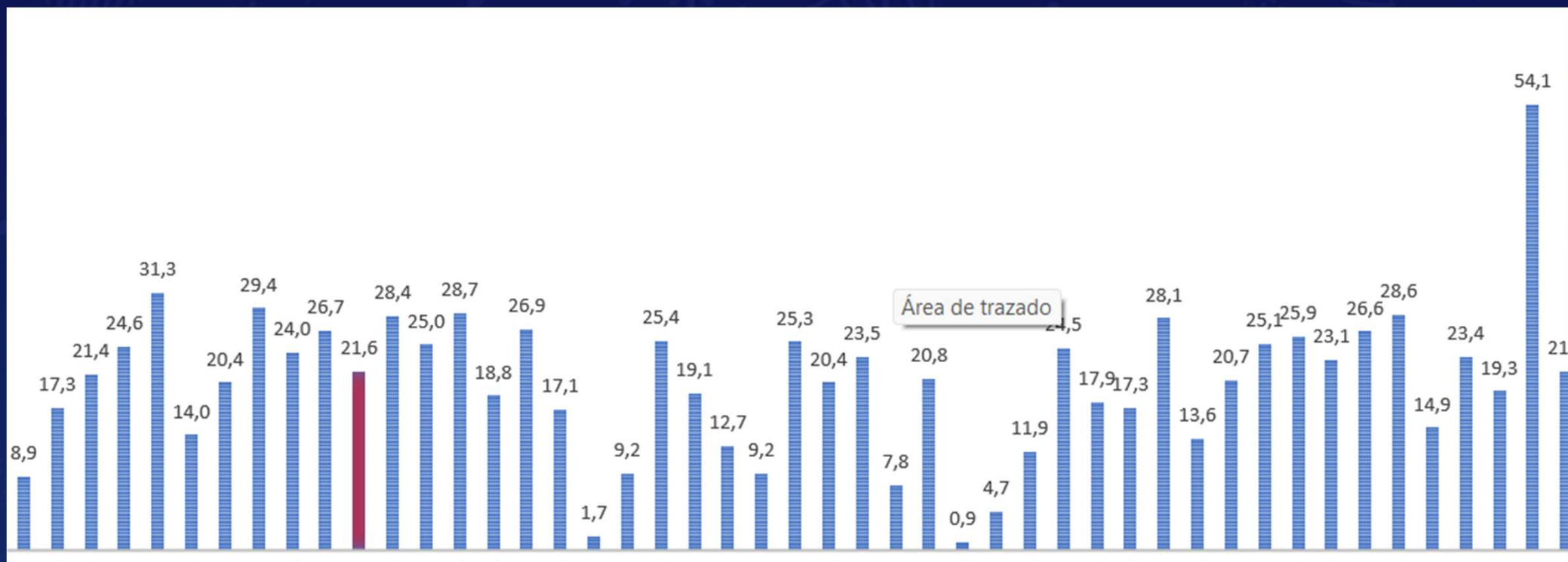
11 21 17



KIM Won Ho
JEONG Na Eun

✓ 21 18 21

🕒 0:58



QF



ZHENG Si Wei
HUANG Ya Qiong

11 21 17



KIM Won Ho
JEONG Na Eun

✓ 21 18 21

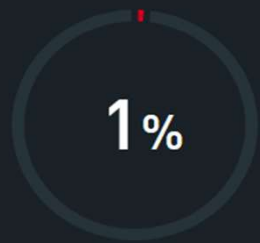
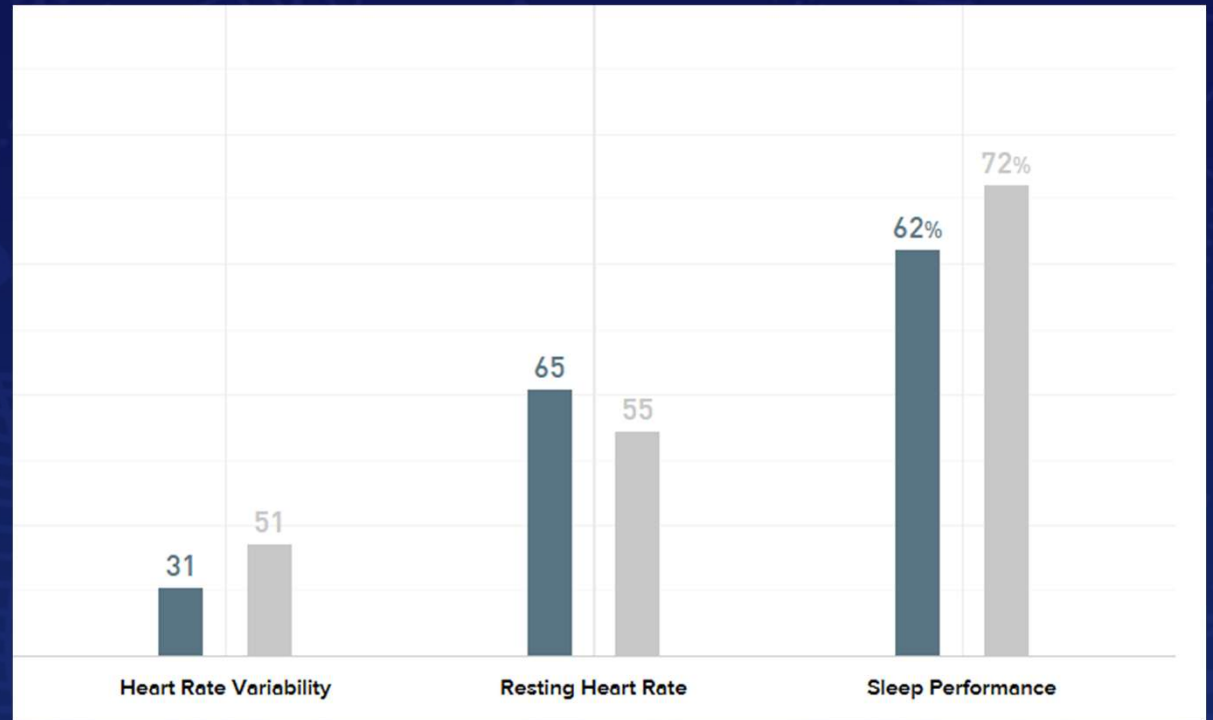
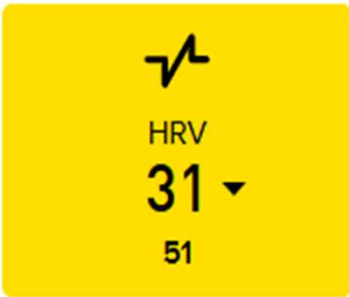
🕒 0:58



HRV
31
51



Resting HR
65
55



Recovery

Sleep Performance

62%

6:39

Hours of Sleep

10:48

Sleep Needed



Final



ZHENG Si Wei
HUANG Ya Qiong

✓ 21 21



KIM Won Ho
JEONG Na Eun

8 11

🕒 0:39



HRV

26 ▾

52



Resting HR

88 ▲

55



Recovery

Sleep Performance

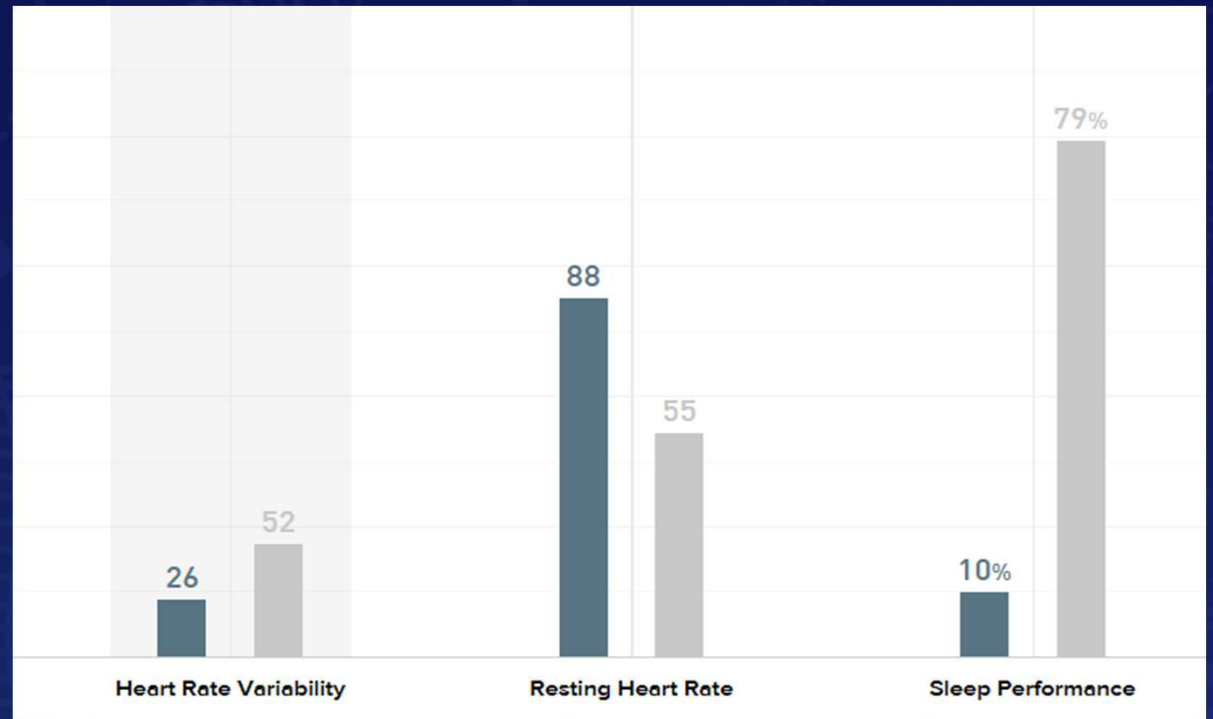
10%

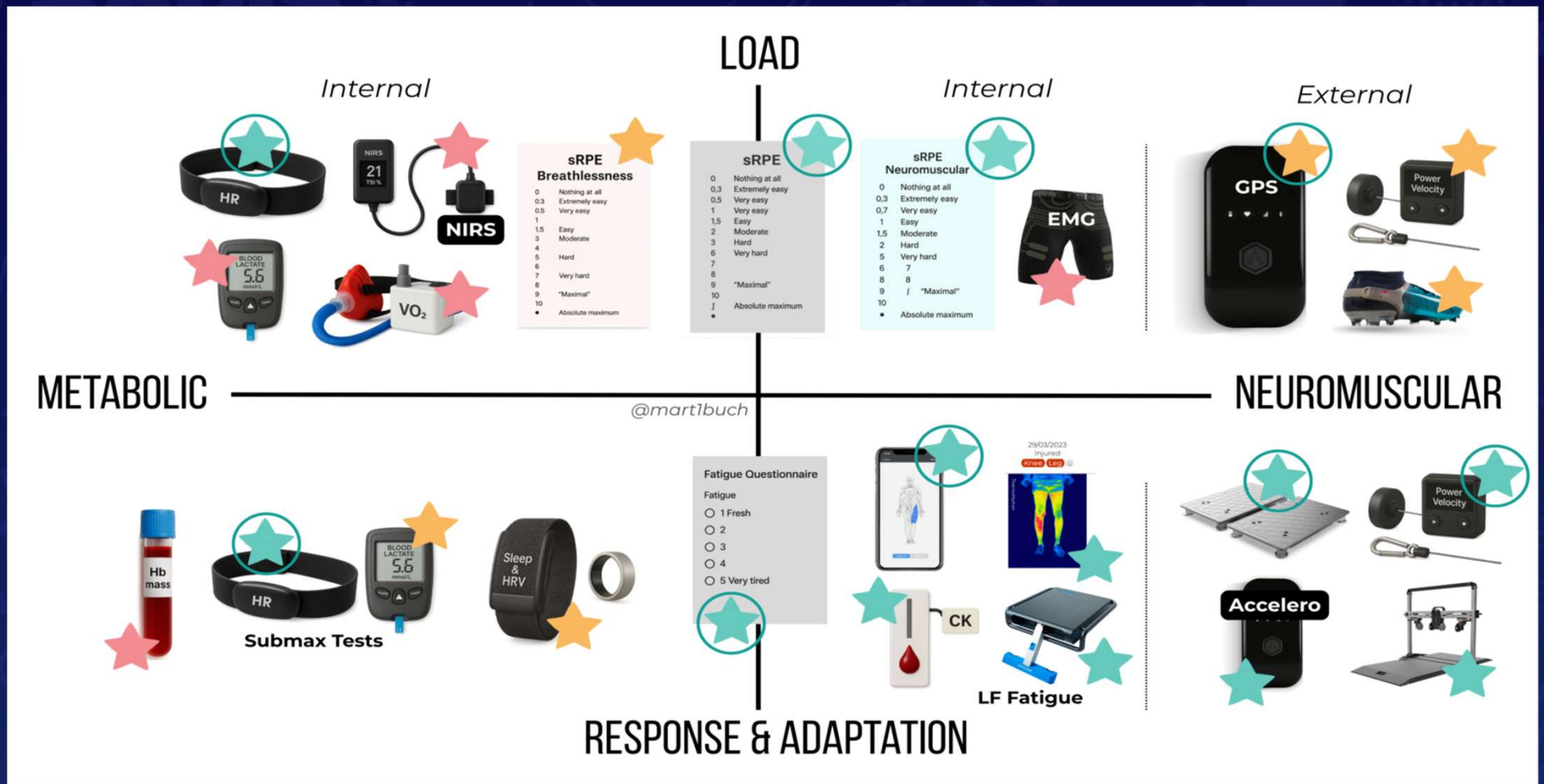
0:47

Hours of Sleep

7:53

Sleep Needed





Buchheit, M., & Hader, K. (2023). Data everywhere, insight nowhere: A practical quadrant-based model for monitoring training load vs. response in elite football.

Monitoring Training Load in Badminton

Why Does It Matter?

Ranking week: 4/24/2014

Export

Men's Singles

More

Country Filter: All Filter

Rank	Country	Player	Member ID	Points	Tournaments	Confederation	Country
1	MAS	LEE Chong Wei	50152	100523	13	Asia	Malaysia
2	CHN	CHEN Long	75787	75455	10	Asia	China
3	DEN	Jan O JORGENSEN	54431	65868	16	Europe	Denmark
4	JPN	Kenichi TAGO	63707	64195	13	Asia	Japan
5	INA	Tommy SUGIARTO	14587	62348	15	Asia	Indonesia
6	CHN	DU Pengyu	55380	57010	11	Asia	China
7	CHN	WANG Zhengming	23736	55890	13	Asia	China
8	THA	Boonsak PONSANA	11959	55588	16	Asia	Thailand
9	KOR	SON Wan Ho	54346	54690	16	Asia	Korea
10	VIE	NGUYEN Tien Minh	14107	51177	14	Asia	Vietnam

Men's Doubles

More

Country Filter: All Filter

Rank	Country	Player	Member ID	Points	Tournaments	Confederation	Country
1	INA INA	Hendra SETIAWAN Mohammad AHSAN	51074 52749	83180	11	Asia	Indonesia
2	DEN DEN	Mathias BOE Carsten MOGENSEN	50292 51304	75932	15	Europe	Denmark
3	JPN JPN	Hiroyuki ENDO Kenichi HAYAKAWA	54026 54527	72675	16	Asia	Japan
4	KOR KOR	KIM Gi Jung KIM Sa Rang	39276 84007	60919	13	Asia	Korea
5	TPE TPE	LEE Sheng Mu TSAI Chia Hsin	52931 13189	59012	14	Asia	Chinese Taipei
6	CHN CHN	LIU Xiaolong QIU Zihan	11777 47277	56860	14	Asia	China
7	MAS MAS	Thien How HOON TAN Wee Kiong	15697 52071	56590	14	Asia	Malaysia
8	INA INA	Marcus Fernaldi GIDEON Markis KIDO	26394 50420	55320	13	Asia	Indonesia
9	KOR KOR	LEE Yong Dae YOO Yeon Seong	52774 52273	51180	7	Asia	Korea
10	ENG ENG	Chris ADCOCK Andrew ELLIS	70333 54413	50266	14	Europe	England

@lukeluke32

Ranking week: 4/30/2024

Export

Men's Singles

More

Country Filter: All Filter

Rank	Country	Player	Member ID	Points	Tournaments	Confederation	Country
1	DEN	Viktor AXELSEN	25831	98715	15	Europe	Denmark
2	CHN	SHI Yu Qi	57945	92184	19	Asia	China
3	INA	Jonatan CHRISTIE	73442	89211	20	Asia	Indonesia
4	DEN	Anders ANTONSEN	91554	87754	20	Europe	Denmark
5	JPN	Kodai NARAOKA	62063	82815	21	Asia	Japan
6	CHN	LI Shi Feng	95476	81598	21	Asia	China
7	INA	Anthony Sinisuka GINTING	95661	79701	20	Asia	Indonesia
8	THA	Kunlavut VITIDSARN	64032	78598	20	Asia	Thailand
9	IND	PRANNOY H. S.	83950	75847	20	Asia	India
10	MAS	LEE Zii Jia	81561	69856	24	Asia	Malaysia

Men's Doubles

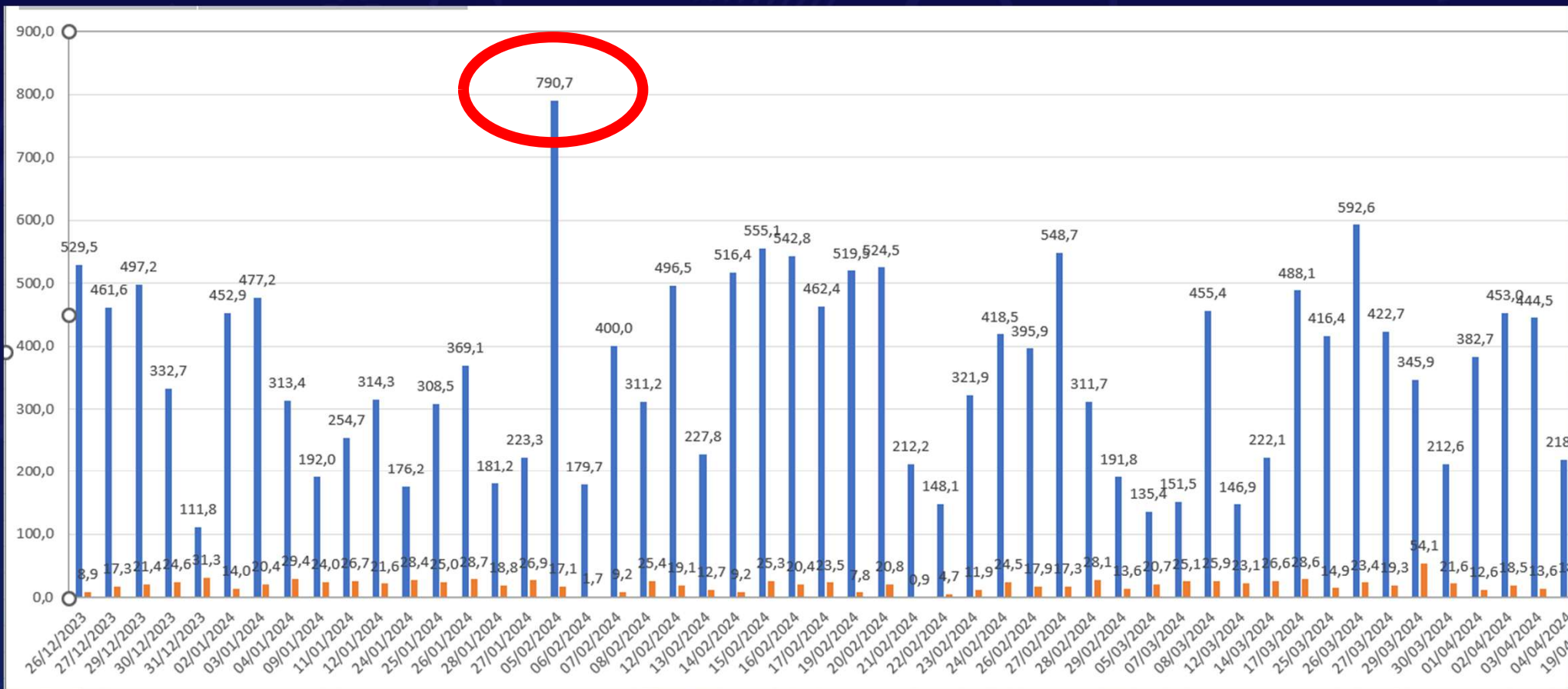
More

Country Filter: All Filter

Rank	Country	Player	Member ID	Points	Tournaments	Confederation	Country
1	CHN CHN	LIANG Wei Keng WANG Chang	90531 55414	98849	18	Asia	China
2	KOR KOR	KANG Min Hyuk SEO Seung Jae	77262 66513	97261	23	Asia	Korea
3	IND IND	Satwiksairaj RANKIREDDY Chirag SHETTY	72435 70500	96353	17	Asia	India
4	DEN DEN	Kim ASTRUP Anders Skaarup RASMUSSEN	92980 44414	92724	22	Europe	Denmark
5	MAS MAS	Aaron CHIA SOH Woi Yik	56203 99389	92264	21	Asia	Malaysia
6	JPN JPN	Takuro HOKI Yugo KOBAYASHI	81657 67903	84362	20	Asia	Japan
7	INA INA	Fajar ALFIAN Muhammad Rian ARDIANTO	88876 91130	79968	21	Asia	Indonesia
8	CHN CHN	LIU Yu Chen OU Xuan Yi	93367 58241	73858	21	Asia	China
9	INA INA	Muhammad Shohibul FIKRI Bagas MAULANA	91440 79658	72179	23	Asia	Indonesia
10	TPE TPE	LEE Yang WANG Chi-Lin	69448 96514	71008	28	Asia	Chinese Taipei

@lukeluke32





NEUROMUSCULAR RISK FACTORS

NEUROMUSCULAR FATIGUE

PRE_ACTIVATION
MECHANISM
ALTERATION

TRUNK
STABILIZATION
DEFICIT

MUSCLE STIFFNESS

ACTIVATION OF THE HIP
MUSCULATURE

POSTURAL
STABILITY

ALTERED MUSCLE CO-
ACTIVATION

MEDIO-LATERAL MUSCLE
IMBALANCES

POSTERIOR CHAIN STRENGTH

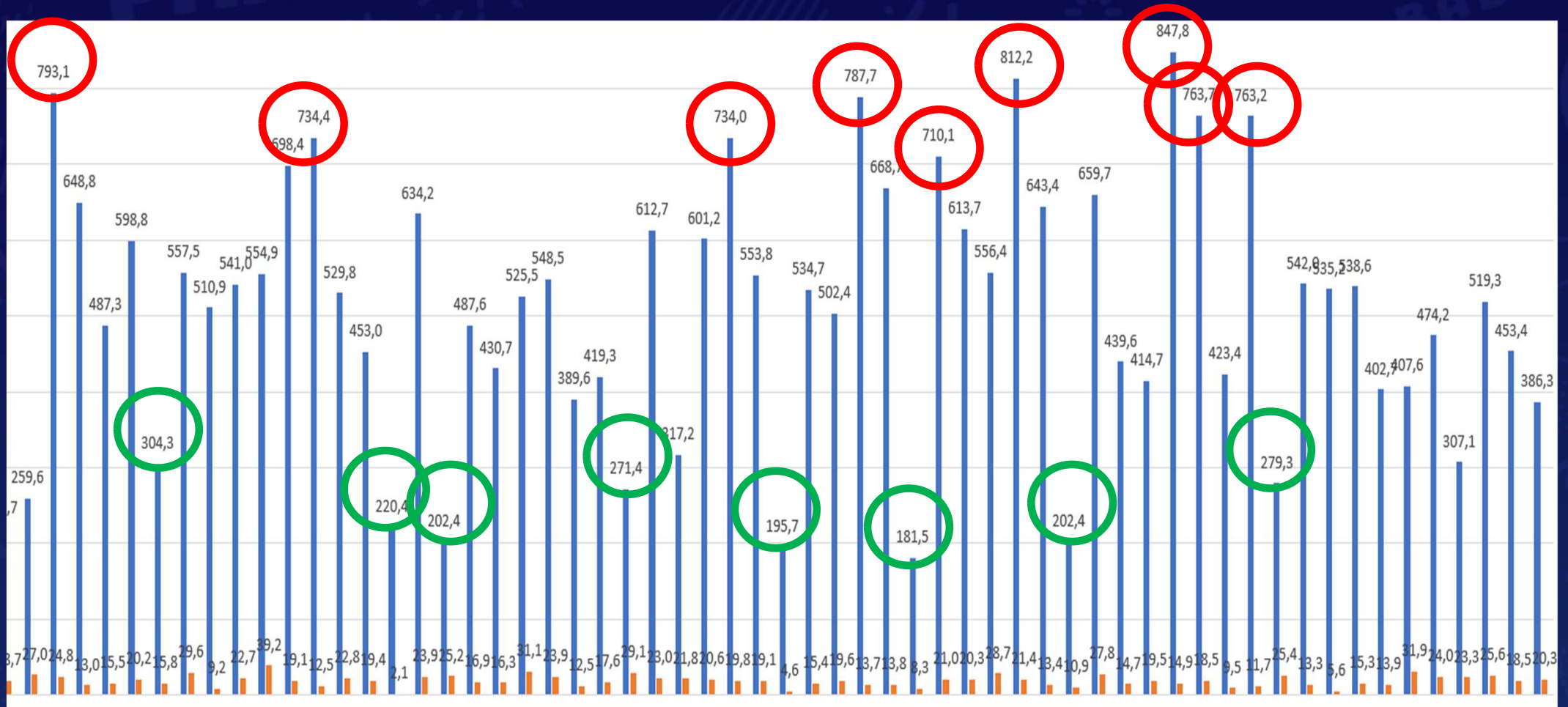
FRONTAL PLANE
PREDOMINANCE IN KNEE
CONTROL STRATEGY

PERONEAL REACTION
TIME

ALTERED
PROPRIOCEPTIVE
SENSITIVITY

NEUROMUSCULAR
IMBALANCE BETWEEN
DOMINANT-NON-DOMINANT
LEG



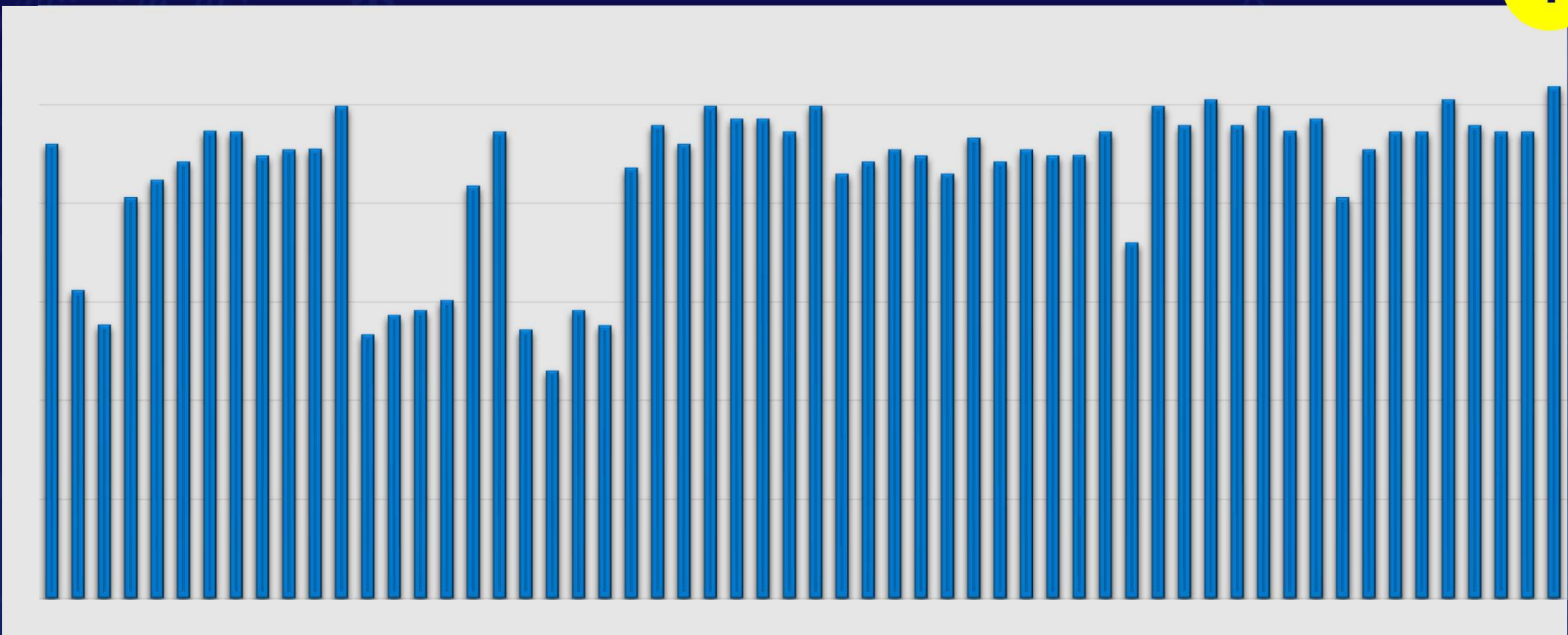




PARIS

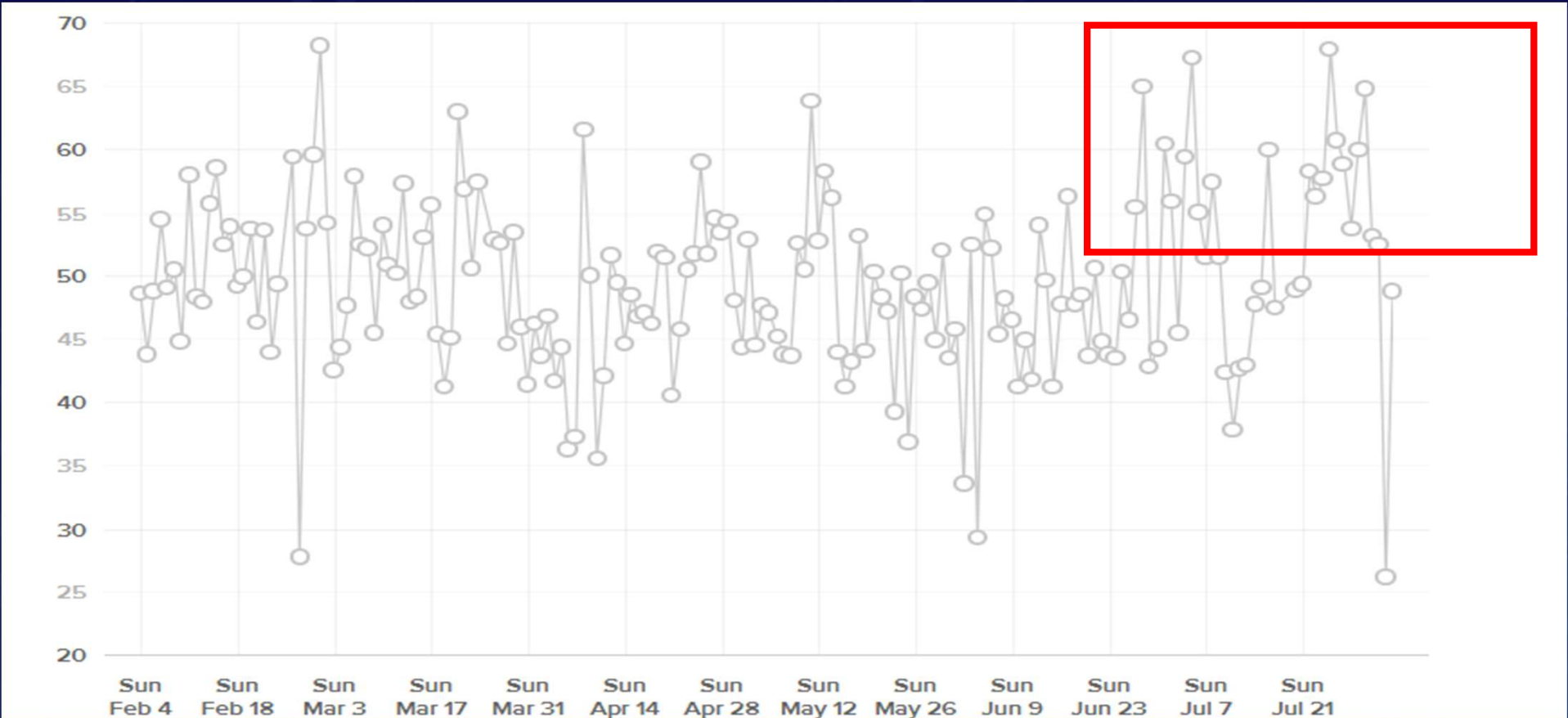
BADMI

1



PARIS

BADMI



You can't improve what you don't measure,
but not everything that can be measured
matters, and not everything that matters
can be measured.

- ✓ Monitoring training and response is essential to optimise performance, reduce injury risk, and support individual adaptation.
- 💡 It doesn't require expensive tools - a notebook, RPE scale, jump app, or daily check-in can already offer valuable insights.
- 🧠 Not all that can be measured matters, and not all that matters can be measured.
- 👁️ The coach's eye and regular conversation remain irreplaceable tools.

At the end of the day, the most powerful measurement tool we have might be the simplest one:

HOW DO YOU FEEL TODAY?

The background is a dark blue field filled with a repeating pattern of white and light blue icons and text. The icons include badminton rackets, shuttlecocks, and stylized representations of the Paris skyline and the year 2025. The word 'PARIS' and 'BADMINTON' are scattered throughout the pattern in various orientations and sizes.

THANK YOU