

ATHLETE MONITORING

for University's Sports Officer

28 September 2021
8.30am – 4.30pm

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Faculty of Sports Science & Coaching
Sultan Idris Education University



SCHEDULE

Course: Athlete monitoring for university's sports officer.

Organizer: Bahagian pembangunan Sumber Manusia.

Venue: <https://upsi.webex.com/upsi/j.php?MTID=m1c8793e446e01b241d36699523f44295>

Instructor: Nur Ikhwan Mohamad (FSSKj)

Time	Activity	Notes
8.30-9.30	Online Lecture	
10.30-12.30	Online Practical Session	If possible: Measurement tape, smart phone, laptop. Ready to go live (on camera & mic)
2.30-3.30	Online Lecture	
3.30-4.30	Online Assessment	



CODE OF PRACTICE

“Provide **physical exercise and training prescription** for the purpose of **reducing risk of injury and increase performance**, via **systematic and evidence based practice**. It is within the responsibilities of the strength and conditioning professionals to **determine training objectives, perform need analysis, develop training plan, develop training program, do performance monitoring, determine effectiveness and perform modification for further enhancement**”

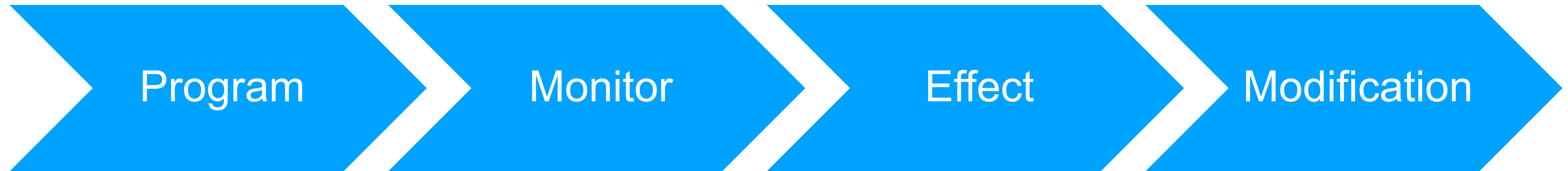
(Nur Ikhwan Mohamad, Ali Md. Nadzalan & Muhamad Hafiz Zainol, 2019)⁽⁷⁾



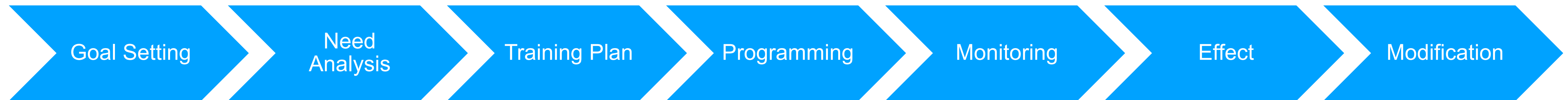
Why performance monitoring?



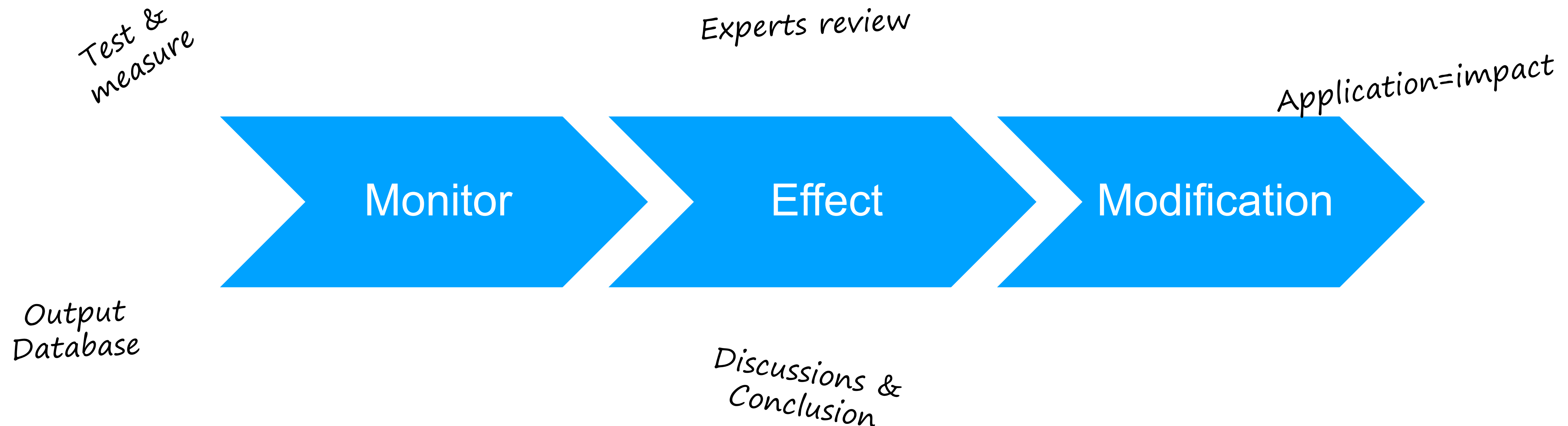
Why performance monitoring?



Why performance monitoring?



Why performance monitoring?



Head Coach Strength & Conditioning Coach Medical

Performance monitoring IS a research process

Managers

Sports Officer

Is this YOU?

Sports Scientist

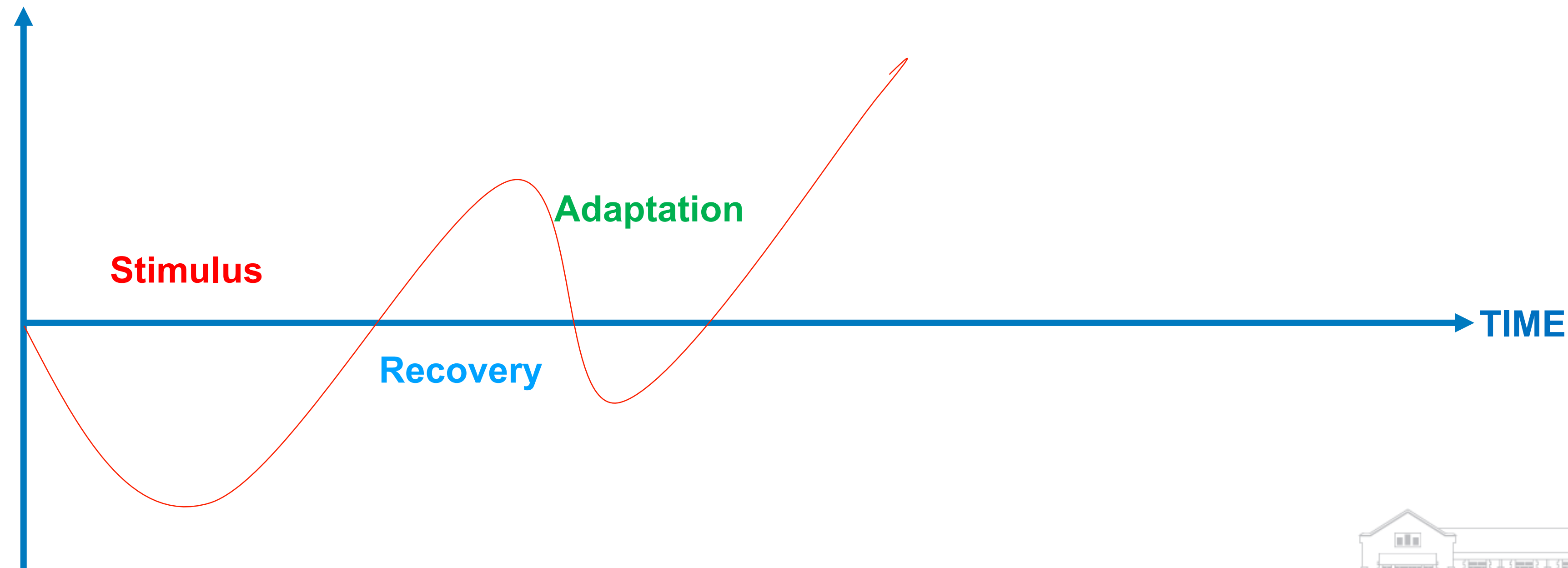
Yup, this is ME

** This is not an exhaustive list or depict proper sports science based structure of a sports team or performance monitoring set-up. Basically any setup should be unique and tailored specifically to the needs and capabilities of related team and its organization.*



Stimulus-Responses-Adaptation

PERFORMANCE



***Basics:**

1. Component of Fitness
2. Energy System
3. Principles of training
4. Exercise techniques

Interpretation based on Selye, H. (1946). The general adaptation syndrome and the diseases of adaptation. *The journal of clinical endocrinology*, 6(2), 117-230 ⁽⁹⁾.



FORCE (N)

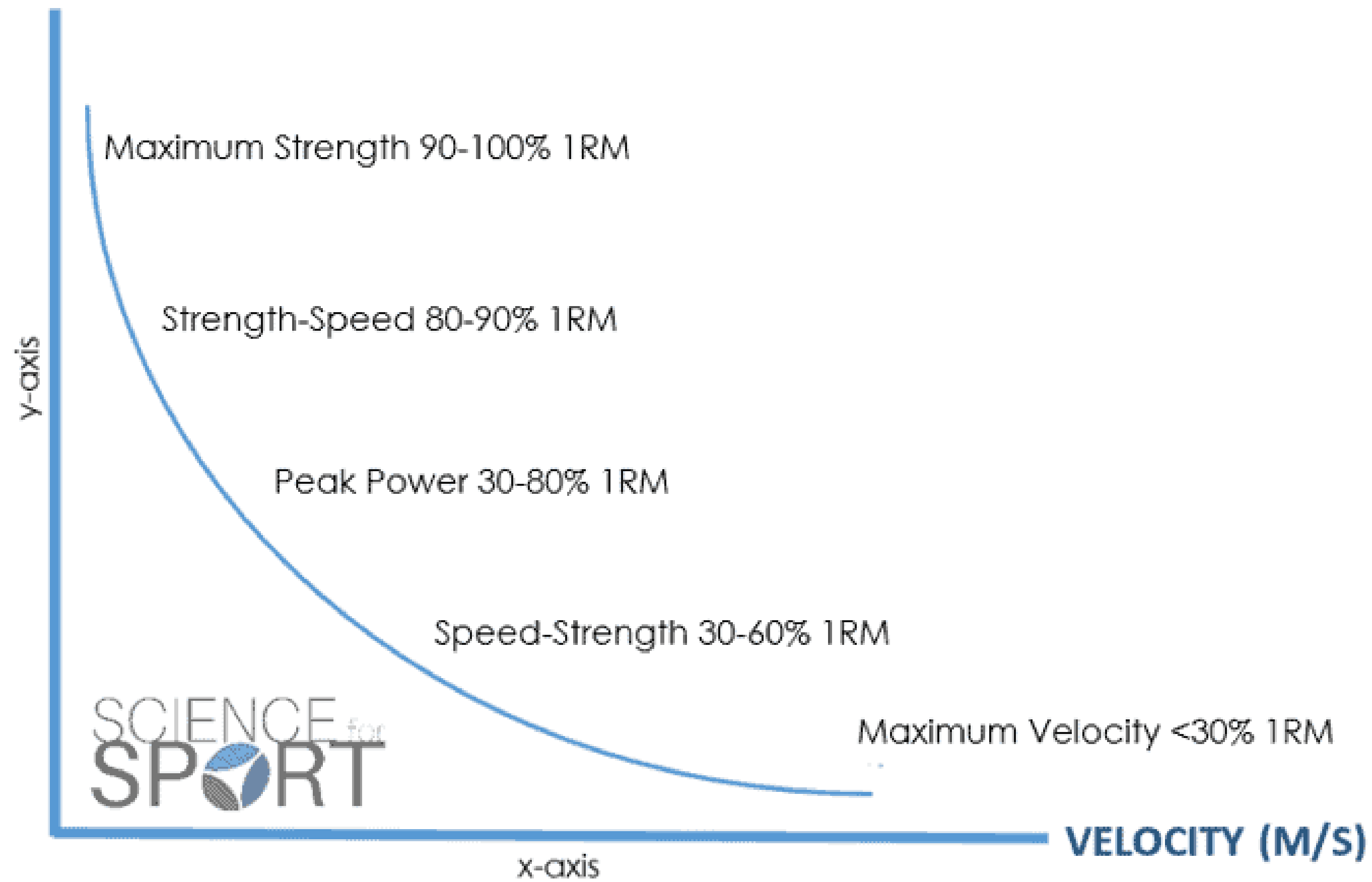


Figure 1. The Force-Velocity Curve

Source: <https://www.scienceforsport.com/force-velocity-curve/>



PERFORMANCE MONITORING

BACKGROUND & NEED ANALYSIS

Athlete's Profile

Coach's Profile

PAR-Q

Declaration & Consent

GOAL SETTING

Microcycles

Mesocycles

Macrocycles

BASIC ASSESSMENT

Height

Weight

Girth Measurement

MCS

Mobility

Force-Velocity Profile

1RM Lift Profile

VO2 max Profile

SPORTS SPECIFIC ASSESSMENT

Skill/Technical Based Profile (if needed)



TEST:TRAIN:TEST

1. Stimulate, get response, get recover and re-apply stimulus.
2. Interval based test and training.
3. Combined speed, strength, endurance and SKILLS as much as possible.



References

1. Nur Ikhwan Mohamad. (2014). [Pemantauan prestasi dan penyelidikan dalam latihan kekuatan dan suaian fizikal](#). Penerbit UPSI.
2. Nur Ikhwan Mohamad, Ali Md Nadzalan & Muhamad Hafiz Zainol. (2019). [Suaian fizikal taktikal bomba dan penyelamat](#). Penerbit UPSI.
3. Nur Ikhwan Mohamad, Muhammad Raffizan Omar & Raiza Sham Hamezah (2014). Tapisan kompetensi pergerakan untuk latihan kekuatan. Penerbit UPSI.
4. Norhafizah Hamzah. (2021, October). [Pengalaman menggunakan jam pintar pantau prestasi larian](#). Celik Fizikal, Bil.1, pp. 16.
5. Nur Ikhwan Mohamad. (2017). Pantau prestasi latihan anda dengan sRPE. <https://www.nurikhwan.com/post/2017/11/11/pantau-prestasi-latihan-anda-dengan-srpe>
6. <https://www.nurikhwan.com/podcast>
7. Madarsa, N. I., Mohamad, N. I., Abd Malek, N. F., Chinnasee, C., & Nadzalan, A. M. (2021, February). [Profiling and Relationship between Sprint Time and Cardiovascular Fitness during In-Season's Training among Professional Soccer Players](#). In Journal of Physics: Conference Series (Vol. 1793, No. 1, p. 012058). IOP Publishing.



THANK YOU

