

Postgraduate Scholarship Information Sheet (Advert)

Scholarship Project Title	The acute and chronic effects of plyometric jump training on female GAA players.
Advert Reference number	SETU_2024_104
Supervisor(s)	Dr Paul Byrne (SETU Carlow) Dr Richard Bolger (SETU Waterford) Dr Jeremy Moody (Cardiff Metropolitan University, UK) Prof Rodrigo Ramirez-Campillo (Universidad (University) Andres Bello, Chile)
Research Group	HealthCore
Department /School/Faculty	Department of Health and Sport Sciences / Faculty of Science
Duration	4 Years/48 Months
Status: Full-time / part-time	Full Time
Funding information	SETU 2024 Presidents Scholarship Programme
Value of the scholarship per year for four years	Stipend: €18,500 per annum Fees of €5,750 per annum Research costs- €2,000/€3,000 per annum
Closing date and time	17th July 2024@ 4PM Irish Time
Interview date	To be confirmed
PhD commencement date	To be confirmed

Project Key Words: (enter 3 to help advertise on online platforms) Plyometric exercise, female athletes, Gaelic games

Post summary

To date the body of literature on plyometric jump training on females is limited (Pardos-Mainer et al., 2021). Furthermore, to the best of our knowledge there is no research that has been conducted on female GAA players at club and inter-county level. This is a major limitation in terms of Sport Science and Strength and Conditioning Practitioners having guidelines available to them to design safe and effective plyometric programmes. This project will provide state of the art programming guidelines to assist in developing efficient, effective, and safe programme guidelines for female GAA players. These guidelines will benefit the Gaelic Athletic Association and potentially be included in their coach development programme. Compared to other training methods, plyometric training offers several advantages, such as the need of minimal equipment to be safely and effectively implemented; a single session can last a brief period of time (e.g., 30-40 mins); and has been shown to improve a variety of physical fitness characteristics (E.g., balance, strength, jumping, change of direction and sprinting). Moreover, the athlete develops an understanding of how to use their body in relation to gravity to maximise training responses and adaptations.

The original and innovative aspects of this proposed project include comparing different protocols to measure reactive strength; estimating the reliability of the above-mentioned performance tests; assessing the effect of a single session of plyometric training and responses over several time frames and how these female

athletes adapt to this form of training. In addition, the reliability studies shall provide normative data. An innovative approach will be the use of a force plate to gain an understanding of the neuromuscular functioning of these female athletes.

Thus, the aim of this project is to examine the acute and chronic effects of plyometric jump training on balance, strength, jump, change of direction and sprint performance in female GAA players.

Knowledge & Experience

Essential

- A minimum of a 2:1 in a sport or health related undergraduate science degree (E.g. Sports and Exercise Science, Athletic Therapy and Training, Strength and Conditioning etc.)

Desirable

- An MSc in a relevant discipline area.
- Previous experience working with team and individual sports (Work experience as part of their undergraduate training or subsequent experience).
- Experience in athlete performance testing and monitoring.
- An interest and experience in women's team and/or individual sport.
- Experience communicating research to non-scientific audiences.

Skills & Competencies

Essential

- Applicants whose first language is not English must demonstrate on application that they meet [SETU's English language requirements](#) and provide all necessary documentation. See Page 7 of the Code of Practice
- In order to be **shortlisted for interview**, you must meet the SETU English speaking requirements so please provide evidence in your application.

Desirable

- Research experience.
- Design and analysis of experimental intervention methodologies.

Further information

For any informal queries, please contact Dr Paul Byrne on email: paul.byrne@setu.ie.

For queries relating to the application and admission process, please contact the Postgraduate Admissions Office researchadmissions@setu.ie or telephone +353 (0)59 9175203.

For queries relating to the funding programme, please email scholarships2024@setu.ie

University Website <https://www.setu.ie/>

Application procedure

Download the [Research Postgraduate Application Form](#) from here and return the completed application to researchadmissions@setu.ie quoting **advert reference code from the above table** in the email subject line.

Please note that paper submissions will not be accepted.

The University may decide to interview only those applicants who appear from the information they provided, to be the most suitable in terms of experience, qualifications and other requirements of the post.

The University will short-list and interview those applicants who provide the most suitable information in terms of experience, qualifications and other requirements relevant to the scholarship.

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