

Functional Movement Training in Young GAA Players



My name is Conor Cantwell and in July 2014 I decided to enter a project into BT Young Scientist and Technology Exhibition during Transition year. I started the project with a friend of mine Conor Flynn. Initially we did not have any idea what we would do the project on so we sat down and looked at both our interests I am very interested in sport science particularly

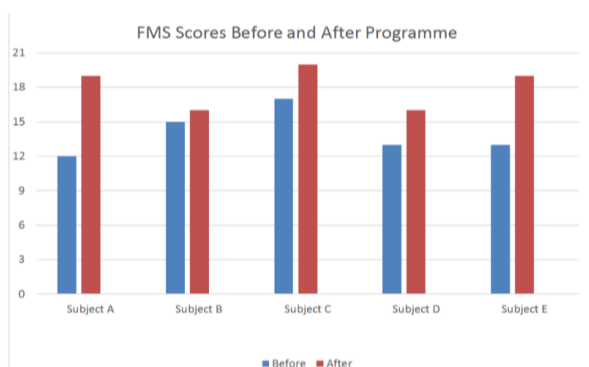
biomechanics and the role it plays in athletic performance. Conor Flynn plays hurling at both club and inter-county level so our two interests had us look at the GAA. We wanted to investigate the injury crisis within the GAA which has in recent years has spiralled out of control particularly in young players. So we decided we would investigate how at risk young GAA players were to injury. We researched into how to test players risk of injury and we decided the best way to test risk of injury was by using Grey Cooks Functional Movement Screen. We contacted local physiotherapist and international athlete Eoin Evarard who

taught us how to screen players using the functional movement screen. We researched into the functional movement screen and found lots of research to show anyone who scored 14 or less out of the maximal score of 21 was at risk to injury or a performance decrement. So with this information we decided to screen our school CBS Kilkenny's Junior (U16) hurling team and from this we found 54% of the players in the squad were at risk of injury, which was very alarming. So



after screening the junior team we decided to see if we could reduce the player's risk of injury by carrying out a ten week intervention programme. Unfortunately we could only get five players to commit to the programme as the player's did not see this as an important issue. When we tested the 5 players at the start of the 10 weeks 60% of them were at risk of injury. The players then met up once a week for an hour a week in a local fitness studio which were given access to throughout the 10 weeks. The players came in every week for a one hour session which targeted their mobility issues the test had shown up which were

putting the players at risk of injury. The players were all given individualised programs as not everybody has same mobility issues, so we individualised the programmes to suit the player's needs. The players also performed 10- 15 minutes of mobility work on a daily basis throughout the 10 weeks. At the end of the ten weeks we retested the players and found there to be significant improvement with all players above 14 and no longer at risk of injury.





From here we entered our project in 2015 BT Young Scientist and Technology Exhibition and Scifest in Waterford Institute of Technology where we received first place and qualified for Scifest national finals which took place in Marino Institute last November where we received an excellence in STEM award. I then decided to enter the

project in PE Expo 2016 where I picked up first prize in the Performance and Sport psychology category and was announced as overall winner I will now present the project to PE students in University of Limerick and at the Irish PE Teachers conference in Cork later this year.

We also created a [website](#) and [Facebook](#) page to educate players and coaches of how to implement more efficient training methods for their players. The website content such as instructional videos of corrective exercises and blogs from professional sports coaches and

GAA players such as [Cillian Buckley](#) (Kilkenny hurler), [Mathew Donnelly](#) (Tyrone footballer) and former Kilkenny hurler [Richie Doyle](#) who had to retire from the game because of an on ongoing hip problem. The website also contains access to an educational booklet which we made where we created our own method of testing mobility based on Functional Movement

Screen less equipment and time is needed to carry out the test making it cost effective and time saving. We also have a Facebook page which we use to interact with players and their coaches to share relevant articles regarding injury prevention.

[Youtube Video from BT Young Scientist](#)

