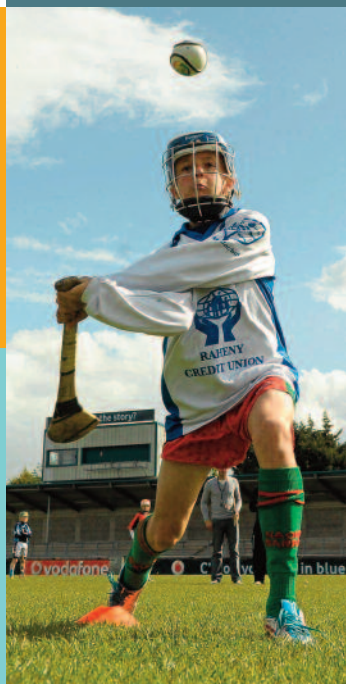




UNIVERSITY of
STIRLING



GAA SUPER GAME CENTRE

RESEARCH REPORT

PREPARED BY THE UNIVERSITY OF STIRLING
FOR THE GAELIC ATHLETIC ASSOCIATION

2015

'HERE,
YOU'RE ALL
GOOD ENOUGH
TO PLAY'

GAA Super
Game Centre
Player





SPECIAL THANKS

The University of Stirling would like to recognise and thank the following members of the GAA Super Game Centre National Steering Group Committee:

- Pat Daly, GAA Director of Games Development & Research
- Aideen Howlin, GAA Games Development Participation Coordinator
- James Kelly, Laois
- Gerry Spellman, Galway
- Jeffrey Lynskey, Galway
- Eoin Ryan, Limerick
- Vinnie Walsh, Waterford
- John Quinn, Waterford
- Eoin Breathnach, Waterford
- Eddie Bouabbse, Athlone
- Garry Sammon, Athlone
- Liam Og Gormley, Sligo
- Ross Donovan, Sligo
- Orlaith Curran, Dublin
- Frank Hannify, Kildare
- Noel Mooney, Kildare
- Jamie Campbell, Fermanagh
- Gregory Walsh, Belfast

The Super Game Centre National Steering Group would like to thank the following students:

- Gary Killion, Dublin City University
- Dale Larkin, Dublin Institute of Technology
- Adam Keating, Marino Institute of Education
- Luke McFadden, Marino Institute of Education
- Damien McCallion, Marino Institute of Education

The University of Stirling would like to thank Liam O Neill (GAA President 2012 – 2015) as well as members of the following GAA Committees for supporting this project:

- National Games Development Committee
- National Hurling Committee
- National Research Committee

RESEARCH TEAM



Daragh Sheridan

Daragh Sheridan is a PhD student in the School of Sport in the University of Stirling and is currently a professional member of the Irish Institute of Sport. He was the research lead for the project. Contact d.m.sheridan@stir.ac.uk



Dr. Pete Coffee

Dr. Pete Coffee is an international expert in sport psychology with expertise in social support and social identity in sport. He is a Senior Lecturer in the School of Sport, University of Stirling. Contact peter.coffee@stir.ac.uk



Professor David Lavalley

Professor David Lavalley is an international expert in sport psychology with expertise in the transitions experienced by athletes across their careers. He is a Professor in the School of Sport, University of Stirling. Contact david.lavalley@stir.ac.uk

TABLE OF CONTENTS

Reports Objectives	6
Executive Summary	7
GAA & University of Stirling - Research Partnership Collaboration (2012 – 2015)	9
GAA Super Game Centre National Steering Group	11
Pathway to Impact Step 1 - Youth Drop Out in the GAA	13
Pathway to Impact Step 2 - A Review of Evidence	15
Pathway to Impact Step 3 - Design & Test a Solution	17
Pathway to Impact Step 4 - Key Findings	20
Pathway to Impact Step 5 – 6 Key Recommendations	25
Appendix 1 – A Framework for Planning the Super Game Centre Pilot	26
Appendix 2 – Super Games Centre Games Modifications	27
Appendix 3 – Super Game Centre Coaching Process	28
References	29



REPORT OBJECTIVES

1 Describe the origin, objectives and key methodology associated with the Super Game Centre research

2 Present the key findings arising from the Super Game Centre research.

3 Recommend a set of immediate key actions that the GAA can take arising from the Super Game Centre research.

EXECUTIVE SUMMARY

A Way to Reverse GAA Drop Out

Safeguarding the Future of Gaelic Games

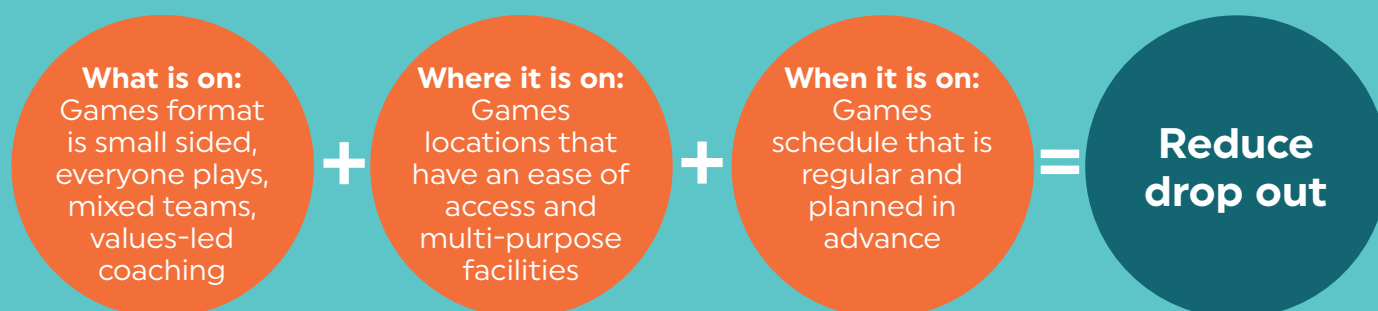
Drop out from youth sport participation is a global issue that has emerged to become a major public health concern around the world. The initial catalyst for this multi-year research effort stemmed from a trend within GAA participation which points to a substantial drop out (58%) between the ages of 12 to 22 years. The GAA have responded to this challenge by forming a collaborative partnership with a group of international leading experts from the University of Stirling.

An Evidence Based Approach

This report documents a positive and constructive response by the GAA to maximize youth participation further across their unique community reach. Over a 3-year period the research partnership has reviewed best practice youth initiatives and associated support practices from around the world in order to bring this cutting edge knowledge to the centre of a solution to youth drop out in the GAA. This evidence-based approach has underpinned the design of a new community based intervention called the GAA Super Game Centre (SGC). 430 male players aged 12 to 16 years from 10 counties attended a network of 10 SGCs, which led to 3,544 player visits during the pilot initiative. Players, parents and local coaches contributed to the collection of data over a 6-month process.

The GAA Super Game Centre – A Community Generator of Lasting Social Capital

The findings from the research have identified an innovative solution to reversing the drop out trend and increasing youth participation in the GAA. The Super Game Centre experience across 10 counties fostered greater levels of support (coaches, parents and teammates), motivation, friendship and commitment to the GAA. A key explanation for this impact relates to the following 6 'Play to Stay' values which emerged from our research: positive feedback, effort, belonging, enjoyment, empowerment, and respect. These values were derived from a review of best practice initiatives around the world. The significant results of the Super Games Centre intervention are best reflected in 3 critical success factors that, when delivered successfully, increase youth participation consequently reducing drop out in the GAA:



Six Key Recommendations

The following recommendations are designed to support the continued evolution of GAA Games Development Policy. The recommendations are focused on the continued growth and development of impact, which was generated during the SGC pilot process. Each recommendation is chronologically ordered in order to increase attention and focus around the immediate post pilot period. Key actions including the effective sharing of the research findings with key GAA stakeholders coupled with the creation of an agreed SGC roll-out strategy will be key to ensuring that the GAA reverse the current youth drop out trend by end of the current GAA strategy. The six key recommendations are as follows:

1. Share and discuss the implications of the research findings with all key GAA Games development personnel at a local, national and provincial level.
2. Develop a national rollout strategy for the SGC initiative that considers other key youth age groups (16 – 18 years and 18 – 21 years) and the development of a joined up network of SGCs that are connected to an overall national SGC site.
3. Devise and implement a SGC staff training programme for GAA Games Development personnel and GAA club volunteers who are involved in SGC delivery.
4. Devise and implement a quality assurance scheme that measures and monitors the SGC player experience.
5. Integrate the SGC research findings into existing GAA Grassroots to National Programme by continuing to evolve the existing GAA Player and Coach Development Pathways.
6. Realise the current GAA strategy participation objective and reverse the dropout trend by creating an upward growth profile in GAA youth participation.

A Dynamic Growth Focus

In total 69 GAA Clubs were connected to these 10 SGCs with 76% of all SGC participants having membership with a GAA club. Perhaps most significant from a GAA Club membership perspective, is the fact that 24% of all SGC participants were not a member of a GAA club. During the pilot players reported the development of skill and confidence as key factors in determining their desire to join and in some cases re-engage with their local GAA club. The SGC pilot has created the evidence that can radically transform the existing GAA participation continuum from childhood to adolescence and right into adulthood participation years. Current childhood participants in the GAA Go Games initiative can look forward to a programme of continued inclusive and meaningful games opportunities into their teenage years, while existing teenage players can enter into early adulthood with a desire and intention to continue participation into their adult years. This growth potential presents a unique opportunity for the leadership in the GAA to safeguard the future of their sport and leave a legacy impact on communities across Ireland.

GAA & University of Stirling - Research Partnership Collaboration (2012 – 2015)

Partnership Driven By Impact



A Partnership Approach

In May 2012, the University of Stirling presented a research project proposal to the GAA. The proposal focused on a 3-year plan to tackle drop out in the GAA. As part of the proposal the University of Stirling committed a Research Partnership Doctoral Scholarship under the supervision of Professor David Lavalley and Dr. Pete Coffee through their Research Impact Programme. The proposal was accepted by the GAA having identified the area as one which requires high quality research to address.

A Pathway to Impact Strategy

In September 2012, the GAA produced an internal report entitled 'Mobilising Forces, Modernising Structures & Moving with the Times'. The report highlighted the need for the GAA to safeguard and grow participant involvement in their organisation. The GAA Youth Participation Section was a central focus for the report due to the major fall-off in participation numbers between the ages of 10 to 22 years. This report provided a key gap analysis, which has shaped and guided the focus of the collaborative partnership between the GAA and the University of Stirling. As a result, in January 2013 Daragh Sheridan presented a pathway to impact strategy to the GAA. The strategy outlined an impact vision and a timetable of research activities over a 3-year period. The following impact vision was approved by the GAA:

‘THE KNOWLEDGE CREATED AND EFFECTIVELY SHARED DURING THE RESEARCH PARTNERSHIP WILL LEAD TO A GROUND BREAKING GAA YOUTH DEVELOPMENT POLICY FOCUSED ON THE LONG TERM AND WHOLE PERSON DEVELOPMENT OF YOUNG PEOPLE ACROSS COMMUNITIES IN IRELAND.’

Research Collaboration Partnership Impact Vision 2013

As part of this pathway to impact strategy the University of Stirling proposed and agreed the following research timetable (Figure 1) with the GAA:

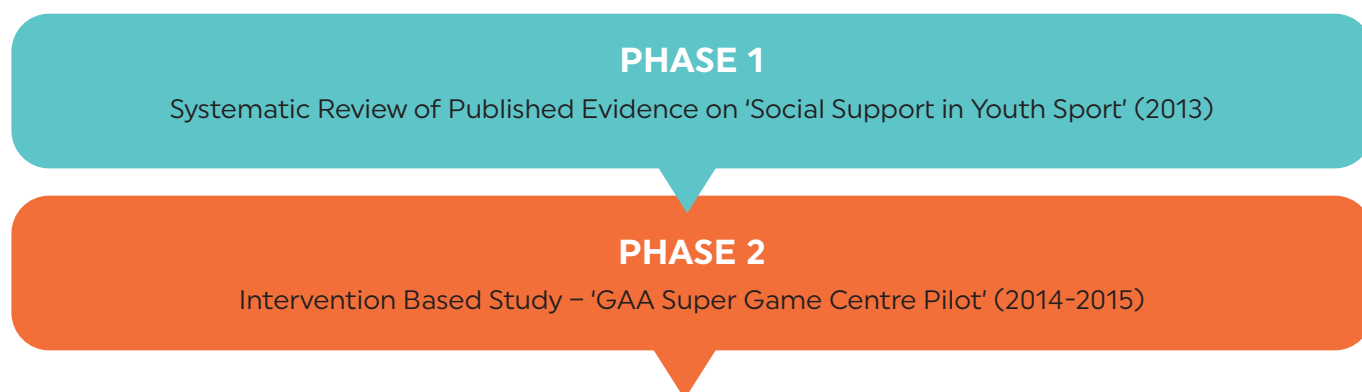


Fig (1) – GAA Super Game Centre – Research Programme Timeline

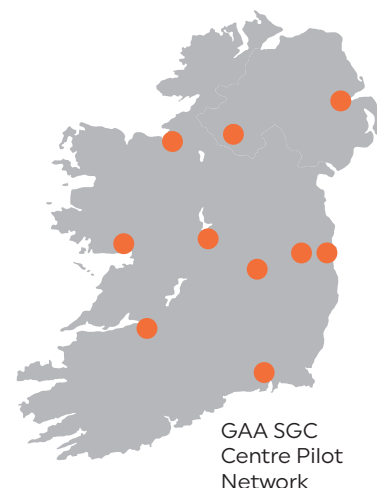
An Evidence-Based Approach – A Systematic Review of Social Support in Youth Sport (2013)

In May 2013, the University of Stirling presented the findings of a systematic review of social support in youth sport to the GAA. The research highlighted that coaches, parents and teammates provide the most evident and impactful forms in social support in a youth sport context. All 3-support providers emerged as significant contributors in shaping the intentions of youth participants to drop out of sport. The research also identified a range of key support behaviours (promotion of player effort and learning irrespective of ability) that coaches, parents and peers could employ in order to positively effect a player's motivation and sense of belonging to their sport. In addition to these core support considerations, the research also highlighted a range of stressors ('not getting game time; conflict with a coach; over preoccupation with winning'), which serve to negatively impact a player's motivation and intention to continue participation in sport. The research concluded with a set of recommendations designed to act on the findings. The main proposal recommendation advocated for the implementation of an intervention in order to enable the GAA to test a new way to increase participation in youth sport. This research informed the key features and underpinning theory for the GAA Super Game Centre Pilot and was subsequently published in one of the world's top psychology peer journals¹.

NATIONAL STEERING GROUP

GAA Super Game Centre National Steering Group

Our Pathway to Impact Journey



Mobilising a Force – One Common Vision

In March 2014, the University of Stirling and the GAA held their first national steering group for the GAA Super Game Centre Pilot Programme. The key purpose of the steering group was to advise and guide the delivery of GAA Super Game Centre intervention in accordance with best practice and the local GAA environment across 10 counties. The group contained 3 sub-groups (Figure 2), which effectively interacted in order to ensure that the pilot was aligned with GAA policy and best practice whilst ensuring that the pilot safely navigated key local factors that would be central to the success of a national pilot programme.



Fig (2) – The GAA SGC Steering Group – Collaboration Model

In April 2014, the Steering Group agreed the following impact vision, which served to provide the guiding purpose and focus for the group.

'BY MAY 2015, WE WILL HAVE CONNECTED WITH PLAYERS ACROSS 4 PROVINCES AND EFFECTIVELY TESTED THE GAA SUPER GAME CENTRE CONCEPT'

GAA Super Game Centre – National Steering Group Vision

The steering group also identified and agreed the following impact objectives:

1. A change in GAA policy where all youth players are provided with games opportunities and developmental experiences that are age and needs appropriate;
2. A change in the prevailing adult mindset concerning the participation needs and motives of GAA youth players;
3. A national large-scale roll out of GAA Super Game Centres in 2016.

Local GAA Grassroots Emersion

Over a period of 13 months, the steering group met on 14 occasions in six different centres around the country (Dublin, Laois, Galway, Westmeath, Fermanagh, Maynooth). During this period the steering group guided and advised on the timing and content of the GAA Super Game Centre Pilot. The pathway to impact is reflected in the timeline indicated below (Figure 3).



Fig (3) - GAA Super Game Centre National Pilot Steering Group – Key Milestones Map

The above timeline represents a key insight into the work of the GAA SGC steering group. The success of the SGC pilot is best reflected in the steering group's ability to navigate the pathway to impact and take the required steps at key stages during the pilot timeline. Five steps emerged from the pathway to impact, which now form the key structure of this research report.

Youth Drop Out in the GAA

Is there a problem warranting a solution?

The GAA – A Unique Presence in Community Life

The GAA is the largest sporting organisation in Ireland. There are over 20,000 teams registered with GAA clubs both in Ireland and abroad. Volunteering is the life and soul of every GAA community life. The GAA is unrivalled in terms of the number of volunteers that provide endless hours of service to run the association's many GAA clubs. As a result the GAA plays a unique role in shaping the health and well-being of local communities who participate in GAA Games.

An Internal Review

In September 2012, the GAA produced an internal report entitled 'Mobilising Forces, Modernising Structures & Moving with the Times'. The report reviews the GAA's Grassroots to National Programme (GNP). The GNP is the conceptual framework under the auspices of which all strategic objectives are delivered in a Games Development context. The report summarizes progress achieved to date and also highlights the obstacles preventing full implementation of the GNP. In this regard, the report contains a number of policy proposals across the child, youth and adult participation domains.

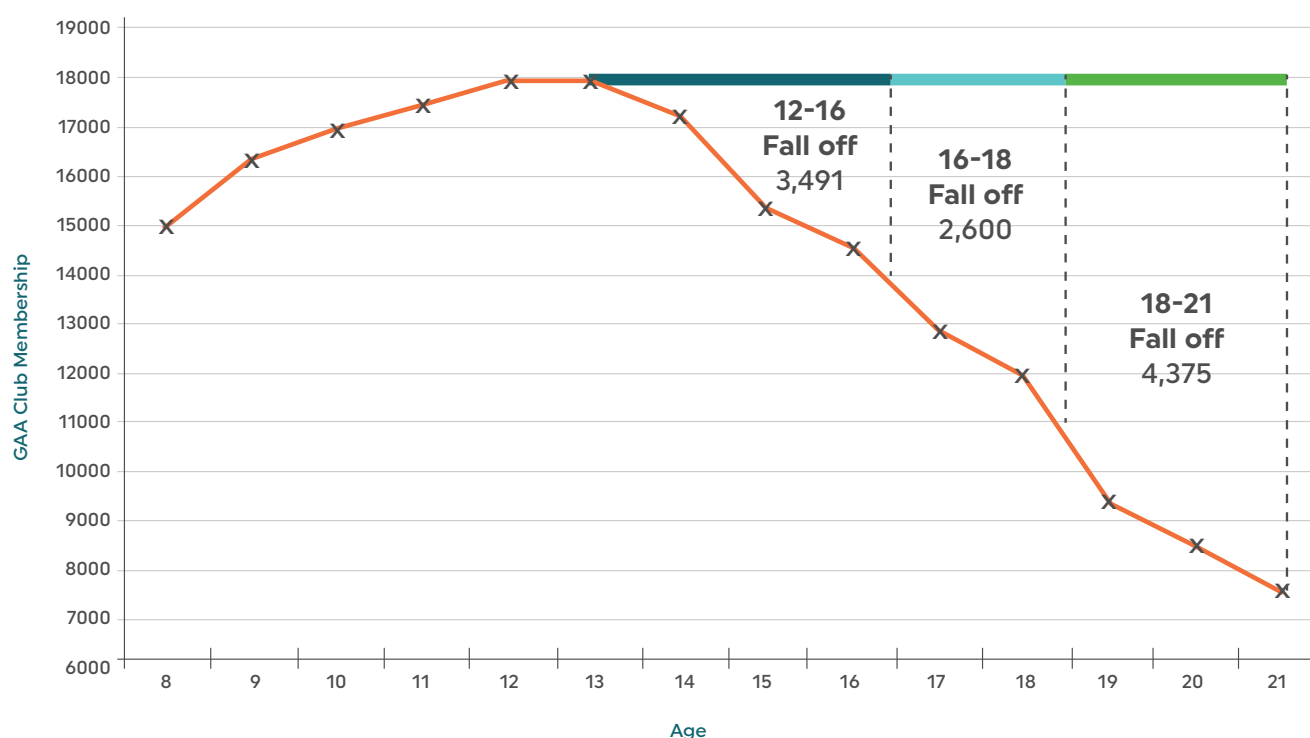


Fig (4) – GAA Club Membership Profile 2012 (Number of GAA Club Members vs Age)

Future Proofing Gaelic Games Participation

The report highlighted a key barrier to realizing the GNP objectives. This relates to a significant participation fall off between the ages of 10 – 22 years, equating to 10,466 players. The 58% fall-off rate (Figure 4) is in line with established trends worldwide. The report identified 2 key contributory factors, which were creating the conditions for drop out in the GAA:

- 1. Lack of a developmental ethos at some levels of the Association** – a culture of keeping the best and ignoring the rest which is a product of valuing the outcome (winning), over the developmental process (achieving one's full potential);
- 2. Inadequate competition frameworks** – too much emphasis on Championships - and the absence of a meaningful programme of regular and scheduled games.

The report called for the establishment of GAA Super Game Centres in order to provide players with a regular and meaningful programme of games that give rise to a more inclusive and developmental experience during adolescence. This recommendation is in line with another key report published 12 months later by the ESRI which highlighted prevalence of a high GAA drop out trend during the adolescent participant years and recommended that the GAA test and develop a solution to drop out.

An Evolving GAA Games Development Landscape

In 2004, the GAA launched the Go Games initiative in order to curb the trend of drop out between the ages of 7 to 11 years of age. Subsequent research conducted in Dublin City University in 2007 provided the evidence base for the Go Games initiative. The research looked at the activity patterns and responses of children when playing small-sided games and 15-a-side games. The study found that when participating in small-sided games the children worked harder (as measured by heart rate), had more touches on the ball (catches, passes, lifts and scoring attempts), and expressed a greater level of enjoyment and perceived competence as compared with participation in 15-a-side games. The GAA Go Games are now adopted as a best practice games format in GAA clubs and schools around Ireland. As a direct result of the Go Games programme, the number of children aged 10 – 12, registered as members of the GAA has increased from 39,778 players in 2010 to 51,768 players in 2011. The Go Games initiative is proof that the GAA has responded to the needs of participants and create an inclusive and enjoyable games experience designed to maximize participation potential.





A Review of Evidence

What do we know from existing evidence?

Sport – A Powerful Impact on Young People

Sport has a powerful impact on society. It provides a powerful context for promoting the health and well-being of youth². It enables young people to maintain healthy lifestyle patterns including continued physical activity and healthy nutrition³. Young people who participate also experience positive emotion, a sense of belonging, life satisfaction, and supportive peer relationships^{4, 5}. Moreover, sports participation is associated with increased academic achievement and decreased depression and suicidal ideation^{6, 7}.

Declining Sport Participation from Childhood to Adolescence – A Major Public Health Issue

Given the popularity and the benefits that may be derived from sport, it is perhaps surprising that there is a declining sport participation trend from childhood to adolescence and reduced participation in regular sport among youth⁹⁻¹¹. Research has highlighted drop out levels ranging from 30% to 55% with trends being replicated worldwide^{12, 13}. A portion of this dropout may reflect sampling of sports^{14, 15}, where children and youth are trying out or transferring between different sports. However, some of the dropout from sport may reflect dissatisfaction or negative experiences. The implications from this global drop out epidemic are quite stark from a health perspective. The potential for children to disengage from organised sport is understood to be a major predictor of the growing obesity crisis in Europe¹⁶. Moreover, being regularly active in childhood and teenage years is recognised to protect against obesity risk factors¹⁷.

Youth Sport Drop Out – Largely A Social Phenomenon

Research highlights many of the key interpersonal (coach relationship, focus on winning climate) and intrapersonal (perceived competence, autonomy, relatedness, conflict between sporting and non-sporting activities) factors shaping youth sport drop out¹⁸. Overall established correlates of youth sport drop out are largely social in nature and point to the importance of key social actors (coaches, parents and team mates) in positively impacting a participant's motivation to remain involved in sport. As highlighted previously, the role of creating and maintaining supportive relationships between players and key others (coaches, parents, teammates) is critical in ensuring that the support provided in this social fabric positively influences a player's motivation to remain involved in sport¹.

Prioritise the Participant - Re Engineer the Sport Experience

In order to counteract the youth drop out trend, research has called for the redesign of sport relevant environment in line with the needs of young participants¹⁸. Specifically this redesign of traditional sport participation experiences, involves a process of modifying traditional games environments by changing the sport structure, rules, facilities and equipment in order to make the participant the highest priority¹⁹. Examples of such changes include reducing a pitch size (facility), using a smaller ball (equipment) and the rule that everybody must play (regulation). In addition to these games specific changes, recent research has broadened its approach to explore the role of coaches, teammates and parents in shaping the climate for positive engagement in youth sport. An environment whereby coaches, parents and peers emphasize the value of effort, personal improvement and skill development successfully predicted sport continuation²⁰. Research has also explored the link between coach provided autonomy support (coach gives players options and choices), basic psychological need satisfaction (i.e. autonomy, competence and relatedness), soccer enjoyment, and intentions to drop out of soccer in the next season¹⁶. The study found autonomy support derived from the coach to predict increased basic need satisfaction, which in turn predicted increased enjoyment and decreased dropout⁴. Recent advances in the literature highlight the crucial role that coaches, parents and teammates play in creating the conditions for positive engagement in youth sport. As a result key organizations that are responsible for promoting and sustaining participation among youth should look to manipulate and optimise the social features of the sport context itself¹⁶.





Design & Test a Solution

How was the SGC pilot designed and executed?

The Pilot Design – A Planned Approach

The design of the GAA SGC acted on the key findings derived from the review of social support in youth sport and other previous research generated in an Irish context^{10, 21-22}. In selecting an appropriate design for the SGC intervention, the University of Stirling research team adopted a best practice framework for planning support interventions from the social support literature²³. The framework highlighted some key considerations, which enabled the Pilot Steering Group to agree a final SGC pilot programme. This framework is listed in Appendix 1. Central to this planning process was a key effort to understand the nature of the demands impacting young players who choose to drop out of the GAA. The central focus of the steering group was to ensure that the pilot created a GAA games environment that led to continued participation with the GAA.

Ethical Approval

In March 2014, the Ethics Committee at the University of Stirling granted ethical approval for the study. This approval was granted as a result of receiving an ethics application from the research team in February 2014.

Super Games Centre Intervention Goals – Our Research Questions

Having completed the planning phase for the SGC pilot, the following two research questions were identified:

1. What effect did the Super Games Centre have on the players?
2. How can the effect of the Super Games Centre be explained?

Super Game Centre – Key Support Features

Once the steering group completed the planning process and identified the research questions the following features of the SGC (Table 1) were agreed and readied for operationalization.

SGC Intervention Feature	Agreed Approach
Games Format	Small Sided; 10v10; 80m*40m Pitch; Short Warm Up (15 mins); 4*15 Min Games (60 Minutes); Modified Rules.
Coaching Approach	Valued Led – x6 GAA Play to Stay Values; No spot and fixing skills during the game; coaching process takes place at the start and end of the games period.
Session Duration	90 minute session: 15 minutes warm up; 4 15 minute games; 15 minute warm down
Session Timing	Varied based upon player feedback. 8/10 centres delivered their sessions on a Friday evening between 3.45pm and 7.30pm.
Session Frequency	24 weekly sessions from September 2014 – April 2015.
Location	Multiple purpose sports facility – secondary schools and universities

Table (1) - SGC Intervention Features: The Agreed Approach

Valued Driven Coaching Support - The GAA 'Play to Stay' Values

A central feature of the SGC pilot was the use of 6 values in shaping and creating the social experience within the SGC games environment. These best practice values (Figure 5) were identified from the systematic review of social support in youth sport as having a positive influence on youth engagement in sport. The purpose of the values was to serve as a key guide in determining a set of modifications to the games that would be tested in the intervention. These modifications listed in Appendix 2 served to assist SGC coaches in delivering key pitch side support in line with the coaching process identified in Appendix 3.



Fig (5) The GAA 'Play to Stay' Values

10 SGC Sites & Session Timings

Table 2 highlights all of the SGC provincial site locations and their respective session times.

SGC Site	SGC Session Timing
Connacht GAA Galway: Merlin Woods College, Doughiska, Galway City Sligo: Summerhill College, Sligo	Friday at 4pm Friday at 3.45pm
Leinster GAA Kildare: NUI Maynooth Dublin: Clanna Gael Fontenoys GAA Club, Ringsend, Dublin City Westmeath: Athlone IT Laois: Heywood College, Ballinakill, Co. Laois	Friday at 5pm Fridays at 5pm Friday at 6pm Wednesday at 4pm
Ulster GAA Antrim: Edmund Rice College, Glengormley, Belfast Fermanagh: Lake Land Forum, Broadmeadow, Enniskillen	Friday at 3.15pm Friday at 4pm
Munster GAA Waterford: National Hurling Centre, Carriganore, Waterford Limerick: NUI Limerick, Limerick	Friday at 6pm Friday at 5.30pm

Table (2) - SGC Locations and Session Timings

Data Collection Method

Over an 8-month period a team of data collectors collected two types of data from players, coaches and parents. In order to participate in the research pilot players filled in an informed consent form which both the player and their parent signed. Table 3 highlights the two main types of data collected over a six month period.

Data Type	Description
Quantitative	GAA SGC Player Questionnaire <ul style="list-style-type: none">• Key established, reliable and validated measures of social support, social identity, motivation and drop out (see Table 4);• Administered pre-intervention (September), mid-intervention (December) and post-intervention (April).
Qualitative	Group Interviews <ul style="list-style-type: none">• Semi-structured group interviews were completed with 22 parents, 29 players and 14 SGC coaches.• Completed at the end of the 24 week SGC programme (April; post-Intervention)

Table (3) - SGC Data Collection Profile

Key Variable Definitions

The following definitions of the terms were employed:

Drop Out	The degree to which a player intends to drop out from sport participation ²⁴ .
Perceived Available Support	Refers to a support recipient's subjective judgment that friends, family, teammates, and coaches would provide assistance if needed ²⁵ .
Received Support	Refers to the specific helping actions provided by friends, family, teammates, and coaches, usually during a specific time frame ²⁵ .
Social Identity	Refers to a player's sense of belonging and attachment to a group or team ²⁶ .
Intrinsic Motivation	Intrinsically motivated behavior is associated with satisfaction of three psychological needs ²⁷ . These needs are the need for autonomy, competence, and relatedness. Autonomy refers to a need to feel volitional in one's actions and to be the originator of these actions ²⁸ . Competence refers to a need for effective interaction with the environment in order to produce desired outcomes ²⁹ . Relatedness refers to feeling connected to and understood by others or fulfilling a sense of belongingness with other people ³⁰ .
Stressor	Refers to the environmental demands encountered by a person ³¹ .

Key Findings

What have we found?

Data Sample Profile

In total 430 players attended the 10 SGC sites around Ireland. The total number of SGC visits during this period was 3,544. Table 4 provides a profile of the players who completed the SGC questionnaire. In total, over 72,000 data entries were made during the collection of data from players.

Data Sample Indicator	Description
Total Sample Size	296 Players (Male Only)
Average Age	Average age = 13.08, SD = 1.4 (<10% >15 Years of Age)
Average GAA Playing Experience	6.04 years; 33.45% < 2 Years Experience
GAA Club Membership	Yes: 75.8%; No: 24.2%; 69 GAA Clubs connected to the 10 SGC centres

Table (4) - SGC Data Sample Profile

The 2 Research Questions Answered

The following findings are organized into two key questions concerning the effectiveness of the SGC experience over a 24-week intervention period. In each question there are two sources of data which are related to the research question, the first being the statistically significant results of the quantitative analysis based upon the SGC questionnaire. In addition to the questionnaire data, group interviews with players, parents and coaches were conducted separately to provide a rich insight into the key findings generated from the SGC questionnaire. Example quotes are provided.



What effect did the Super Games Centre have on the players?

Quantitative Results

- Player intentions to drop out from the GAA decreased
- Social support, basic need satisfaction and social identity all increased
- Stress encountered reduced

Qualitative Results

Increased Social Identity (GAA Belonging)

'WE'RE ALL WEARING ONE BADGE, THE JERSEY, THE GAA JERSEY. AND YOU DON'T HAVE TO...NOBODY'S LIKE A DIFFERENT CLUB. WE'RE ALL JUST THE ONE SCHOOL OR THE ONE GROUP. AND JUST PLAY TOGETHER AND MAKE FRIENDS WITH EVERYONE.'

SGC Player

Increased Intrinsic Motivation (Sense of Autonomy)

'PLAYERS OUT THERE ARE OUT THERE BECAUSE THEY WANT TO BE OUT THERE. THEY'RE NOT MADE TO BE THERE....IT'S ALL THEIR OWN CHOICE'

SGC Player

Reduced Intention to Drop Out

'IT IMPROVED HIS CONFIDENCE. IT IMPROVED HIM IN EVERY WAY. AND HE DID DECIDE TO GO BACK TO FOOTBALL.'

SGC Parent

Increased Social Support (Positive Feedback)

'IF YOU TAKE A SHOT AND IT MISSES AND THEN NO-ONE SAYS ANYTHING TO YOU, YOU CAN THEN GET DOWN LIKE YOU, MAKE SURE YOU PASS IT NEXT TIME. LIKE YOU WON'T GO FOR A SHOT AGAIN. BUT IF SOMEBODY GIVES YOU POSITIVE FEEDBACK YOU MIGHT GO FOR A SHOT AGAIN AND YOU MIGHT GET IT NEXT TIME.'

SGC Player

Increased Social Support (Increased Skill Development)

'SO JUST THE MORE MATCHES YOU'RE PLAYING, I THINK, THE BETTER YOU CAN GET. IF YOU'RE LIKE, LIKE STOPPING AND DOING TRAINING AND YOUR COACH IS LIKE EXPLAINING EVERYTHING AND YOU'RE NOT REALLY GETTING ENOUGH TIME. BUT IN HERE YOU GET TO JUST KEEP PLAYING AND PLAYING AND PLAYING AND GET MORE TOUCHES AND HITTING THE BALL FURTHER. LIKE YOU COME HERE ONCE. YOU MIGHT HIT IT THIRTY YARDS. AND THEN YOU COME HERE THE NEXT DAY AND YOU MIGHT GET THIRTY-FIVE. AND YOU CAN KEEP IMPROVING ALL THE TIME.'

SGC Player

How can the effect of the Super Games Centre be explained?

Quantitative Results

- High levels of social support buffered the negative effect of stress encountered on intentions to drop out
- Social support derived from the SGC experience reduced player intentions to drop out through increasing levels of social identity.

Team Equality

'EVERYONE'S EQUAL... AT THE SUPER GAME CENTRE. NO ONE'S DIFFERENT FROM EACH OTHER. EVERYONE'S DIVIDED UP EQUALLY AMONG EACH OTHER LIKE TO MAKE SURE THAT EVERYONE HAS THE BEST GAME AS POSSIBLE. EVERYONE HAS FUN.'

SGC Player

The Importance of Getting Game Time

'SO LAST YEAR I WAS VERY UNFIT AND I DIDN'T PLAY A MATCH AT ALL I DON'T THINK NOW FOR SURE. SO I FINALLY GOT SICK OF IT ANYWAY. I WAS GOING TO LEAVE.'

SGC Player

Reduced Expectation to Perform

'WHEN YOU GO TO YOUR CLUBS AND YOU GO TRAINING AND IT'S JUST CONSTANTLY HAS TO BE ALWAYS RIGHT. EVERYTHING HAS TO BE SPOT ON. YOU COME HERE LIKE IT'S JUST... AN ENJOYABLE WAY OF PLAYING FOOTBALL, YOU KNOW.'

SGC Player

Reduced Fear of Failure

'JUST LIKE NOT BEING AFRAID TO MESS UP, GET THE BALL, GO AGAIN.'

SGC Player

Inclusive Ethos

'HERE YOU'RE, YOU'RE ALL, YOU'RE ALL GOOD ENOUGH TO PLAY.'

SGC Player

Qualitative Results

Respect

'I WAS LOOKING FROM THE SIDELINES AND FROM THE SMALLEST GUY ON THE PITCH TO THE TALLEST GUY THEY LOOKED OUT FOR EACH OTHER. YOU KNOW THERE WAS SIZE DIFFERENTIAL, THERE WAS HEIGHT DIFFERENTIAL, THERE WAS WEIGHT DIFFERENTIAL... THEY ALL DID THE TACKLES AND ALL THE THINGS AND IT WAS ALL A BIT OF FUN.'

SGC Parent

Fitting Sports into Other Commitments

'YOU ARE TRAINING WITH THE CLUB MAYBE TWO NIGHTS A WEEK. AND THEN WE HAVE MUSIC ON WEDNESDAYS. SO IT KIND OF FITS IN THEN ON A FRIDAY CAUSE THERE'S NEVER ANYTHING ON.'

SGC Player

Increased Performance Expectation

'IN THE, IN THE CLUB SETTING IT'S MORE, IF YOU PLAY, TO PLAY YOU HAVE TO BE THE BEST. AND YOU HAVE TO BE THE FITTEST. AND YOU HAVE TO HAVE ALL THIS. IN CLUB IT'S ALL ABOUT WHOEVER'S BEST. AND HERE FITNESS ISN'T AN ISSUE CAUSE YOU PLAY A LOT. AND EVENTUALLY YOU WILL GET FIT. SO LAST YEAR I WAS VERY UNFIT AND I DIDN'T PLAY A MATCH AT ALL. SO I FINALLY GOT SICK OF IT ANYWAY. I WAS GOING TO LEAVE. BUT I CAME HERE NOW. I GOT A BIT MORE FITNESS AND A BIT MORE FOOTBALL AND EVENTUALLY NOW I GOT TO PLAY.'

SGC Player

Confidence to Take Risks

'WELL WHEN YOU MAKE LIKE A LONG PASS OR SOMETHING, YOU'D NEVER DO THAT IN A MATCH 'CAUSE IT'S TOO RISKY BUT YOU CAN DO IT HERE 'CAUSE THERE'S NO RISK INVOLVED... IF YOU DID THAT IN A MATCH LIKE MIGHT LOSE OR SOMETHING BUT IT'S GRAND HERE.'

SGC Player

Friendship Development

'THE BIG THING FOR ME WAS THE FRIENDSHIP. IT MADE HIM MORE AWARE OF THE OTHER CLUBS THAT ARE OUT THERE AS WELL. HE SEEMS TO KNOW A LOT MORE LIKE YOUNG LADS AROUND NOW. AND THEY KNOW EACH OTHER BY FIRST NAME.'

SGC Parent

Sideline Interaction

'IF I'M BEING SHOUTED AT EVERY WEEK, WHAT'S THE POINT IN GOING BACK? THERE'S NO REAL POINT IN ME GOING BACK IF I'VE JUST BEEN SHOUTED AT IF I MAKE A MISTAKE. AND NOT BEING MOTIVATED TO DO... IT BETTER NEXT TIME.'

SGC Player

Positive Feedback

'NOT BEING SHOUTED AT I TRIED AGAIN AND AGAIN TILL I GOT IT RIGHT.'

SGC Player

Key Emergent Themes

The data from the group interviews also highlighted 10 key emergent themes, which serve to provide a greater insight into the effectiveness of the SGC initiative beyond the two research questions identified at the start of the research study.

1. **Pre Intervention Promotion** - Highlight the importance of impacting a support recipients subjective judgment of the support initiative;
2. **Peer to Peer Promotion** - Peers sharing their experience for the purpose of creating an even greater shared experience;
3. **Skill Development** - Highlighting the role of positive feedback from both coaches and teammates in a player's building confidence to take risks in order to explore and develop their technical skills;
4. **Fitness Development** - Highlights the impact of having no rules on player position set up, player can roam freely and as a result cover distance on the field of play;
5. **Freedom to Explore** - Players are free to explore and interact with their peers in an open environment;
6. **Breaking Down Social Barriers** - Enabling young people to form local friendships in a non-competitive context;
7. **Inclusive Ethos** - Having a games format with clear guiding values and modified rules, which shape and create an inclusive social experience. The core belief that every player is equal and mixed games format (age & ability) can work;
8. **Ease of Access & Commitment** - Having a structure that doesn't demand competition level commitment allows for a player to retain a sense of belonging in the absence of regular attendance;
9. **The Parental Shield** - Parents protecting their children from drop out stress encountered by removing their children from participation in their sport;
10. **Confidence to Drop Back In!** - Using SGC experience to develop the resources (confidence, skills, friends) in order to re-engage with the GAA.

Discussion

SGC Growth Potential

The SGC pilot focused on male players aged 12–16 years. However as indicated in figure 4 we can see that the participation fall off trend rapidly increases between the ages of 18–21 years. The emergence of three age-categories indicates a significant opportunity for the SGC to provide games opportunities that meet the needs of players during these age groupings. The location of SGCs in secondary schools and 3rd level universities presents an ideal location for SGCs to thrive and prosper in close proximity to these significant age groups. Moreover, the SGC could also provide meaningful games experience to young female players who may have dropped out from GAA participation. Although data concerning female drop out in GAA is not available, research has highlighted an alarming trend in levels of physical inactivity amongst adolescent females¹⁰. This indicates another significant growth opportunity for the SGC to provide games opportunities to another key constituent.

Promotion of the SGC is another key factor that can impact the growth of players attending a SGC. The pilot highlighted the importance of assisting players to successfully appraise the available support that is contained within a SGC games experience. Promoting the SGC via a range of youth centred media outlets will be key in ensuring that players perceive the SGC as a positive growth promoting initiative. Peer to peer 'selling' of the SGC is a key form of promotion that was highlighted as significant growth driver during the pilot. As a result peer led promotion could form a central part of the effectively communicating SGC games opportunities to a youth participation audience.

SGC Entity – Agility and Absorption

The SGC pilot identified three critical success factors relating to increasing youth participation. The first factor relates to an inclusive games format that is driven by the six 'Play to Stay' values. The other two factors highlight the importance of location and timing concerning the operation of a SGC. These two factors enable the SGC to respond and absorb the key local forces shaping and impacting a player's decision to participate in sport. 7/10 SGC sites changed their session timing in order to meet the needs of players and reported a positive participation uptake in response. 2/10 SGC sites changed their locations and experienced a positive uptake in numbers immediately. Both examples demonstrate the SGC's ability to absorb the key local forces impacting participation in sport.

A Win-Win Linkage with GAA Clubs

In total 69 GAA Clubs were connected to the 10 SGCs with 76% of all SGC participants having membership with a GAA club. GAA club players used the SGC as an opportunity to get game time at a stage in the season when there were insufficient club activities of an organized nature. This served to help GAA clubs keep their players fit and their skills developed for the upcoming season. Perhaps most significant from a GAA Club membership perspective, is the fact that 24% of all SGC participants were not a member of a GAA club. During the pilot, players reported the development of skill and confidence as key factors in determining their desire to join and in some cases rejoin their local GAA club. This bodes well for the future in terms of integrating the existing GAA club network with a potential network of SGCs.

The 'Play to Stay' Values – Enabling a Supportive Environment

The above findings highlight the effectiveness of the SGC entity and indicate a range of successful features which have proven to positively impact players, coaches and parents. Perhaps the most significant feature of the SGC pilot relates to six 'Play to Stay' values and the role that they played in creating an inclusive games experience, and subsequently lead to intentions of players to not drop out. These best practice values manipulated the games environment and thus enabled a greater shared support responsibility to form between the coaches, players and parents. The consequence of this shared supportive environment led to a range of key supports being exchanged between coaches, players and parents during the pilot. In particular coaches were armed with a set of values which informed a set of innovative games modifications that had a significant effect on a player's experience. The presence of a coaching process backed by a set of values enabled coaches to facilitate a games environment which led to the creation of other subsequent peer related supports between the players. This highlights the role of the coach and the implications of having a clear coaching process in shaping and creating a 'support inducing' games climate. Such a finding can be used to educate and inform coaches of their role as support providers in a games context. In addition the values can be used by parents and players to form a clear expectation of what is to be expected from a coach in order to create and manage a games environment that is positive and growth promoting.

Key Recommendations

How can we move forward?

This report documents a positive and constructive response by the GAA to maximise youth participation further across their unique community reach. This reflects a continuous evolution of the development of GAA Games in line with the key principles of the GAA's Grassroots to National Programme (GNP). The following recommendations are designed to support the continued evolution of GAA Games Development Policy. In total six recommendations have been identified by the research team across three key time points. These recommendations take into account the GAA's new strategic plan (2015 – 2018), which has identified increasing participation as one of the six key strategic goals.

Short Term Focus (By November 2015)

Agree a National SGC Roll Out Strategy

1. Share and discuss the implications of the research findings with all key full time GAA Games development personnel at a local, national and provincial level.
2. Develop a national rollout strategy for the SGC initiative that considers other key youth age groups (16 – 18 years and 18 – 21 years) and the development a joined up network of SGCs that are connected to an overall national SGC site.

Quality Assure SGC Delivery

3. Devise and implement a SGC staff training programme for GAA Games Development personnel and GAA club volunteers who are involved in SGC delivery.
4. Devise and implement a quality assurance scheme that measures and monitors the SGC player experience.

Medium Term (By September 2016)

Evolve the GAA Player and Coach Development Pathway

5. Integrate the SGC research findings into existing GAA Grassroots to National Programme by continuing to evolve the existing GAA Player and Coach Development Pathways.

Long Term (By December 2018)

Reverse the Youth Drop Out Trend

6. Realise the current GAA strategy participation objective and reverse the dropout trend by creating an upward growth profile in GAA youth participation.

APPENDIX

1

A Framework for Planning the Super Game Centre Pilot

SGC Planning Factor	Key Consideration	Key Decision & Rationale
The SGC Support Team	<ul style="list-style-type: none"> Who is providing the support to the players in the SGC? Is this person from the existing local community or someone that is brought in outside of the community? 	<ul style="list-style-type: none"> Recruit local coaches from around the SGC location, as they will have existing knowledge and relationships with the players, parents and coaches in the community.
The SGC Players	<ul style="list-style-type: none"> How receptive are players who have dropped out to getting support? What is the nature and extent of their drop out stress? 	<ul style="list-style-type: none"> Players will be open to the SGC experience if we provide them with a regular programme of games in a supportive and positive atmosphere.
The Demands and Duration of the Stressor(s)	<ul style="list-style-type: none"> What are the visible stressors? 	<ul style="list-style-type: none"> Players drop out due to the following stressors: <ol style="list-style-type: none"> Not getting a game Getting shouted at during a game Having no say when playing Fitting sport in with other commitments The stressors heighten during the competitive club fixtures programme period.
The Support Needs Emerging from the Stressor(s)	<ul style="list-style-type: none"> Given the stressors, what needs emerge from the players? 	<ul style="list-style-type: none"> The following support needs were identified: <ol style="list-style-type: none"> Games opportunities where everyone plays; Get positive feedback from their coach and team mates; Feel a sense of belonging to the GAA; Have a say on the games activities; Session times are flexible and fit in with other commitments.
SGC Effect Mechanism	<ul style="list-style-type: none"> How will the SGC actually affect a players intention to drop out from the GAA? 	<ul style="list-style-type: none"> The SGC experience will provide players with a supportive games environment, which will reduce intentions to drop out through building motivation (a sense of competence, autonomy and relatedness) and a sense of belonging to the GAA. Duration – 24 weeks (September – April) in line with both school calendar and club fixture off season; Dosage – One SGC session per week – 90 minute session duration; Scope – Focusing players who have dropped out plus players who are not getting enough game time in their clubs;
The Characteristics of SGC Support	<ul style="list-style-type: none"> What are the support features of the SGC? 	<ul style="list-style-type: none"> Mutuality – 3 key 2 way relationships: SGC coaches and players, SGC coaches and parent; SGC players and their teammates.
SGC Intervention Goals	<ul style="list-style-type: none"> What the SGC intervention goals 	<p>Key Goals:</p> <ol style="list-style-type: none"> Profile the participation motives of the GAA youth players between the ages of 12 - 16 years – Targeting 400+ Participants (4 GAA Provinces); Assess youth player perceived and received supports derived from coaches during a coach education intervention; Track actual drop out and sport continuation over an 18 month period leading into the secondary school transition.

APPENDIX

2

Super Games Centre Games Modifications

6 Play to Stay Values	Potential Games Modifications
1. Positive Feedback 'All communication is positive and promotes growth'	<ol style="list-style-type: none"> Teams are given an extra point when players give positive feedback ("unlucky – head up"; "better luck next time"; "great effort") during a mistake situation or a breakdown in possession involving 2 or more players; At the end of the session each team is to identify the player from the opposite team who provided the most encouragement/support during the session.
2. Empowerment 'Players shape and own the games experience'	<ol style="list-style-type: none"> The PSL randomly nominates the team captain who then pick their team and set out their team formation before the commencement of the game. This leadership role is alternated at the start of each subsequent game with a new leader who gets to reset a formation and give instructions to his teammates; The PSL removes the referee from the games and asks players to referee their game amongst themselves by asking players to declare a foul if they have fouled an opponent.
3. Belonging 'Every player feels connected to the GAA'	<ol style="list-style-type: none"> Players are tasked with getting to know their team mate's names and are awarded points for when players pass ball to a team mate and state the name of the ball receiver before the pass is completed. 3 successful naming completions leads to one point; At the start of the session each player to identify how he proposes to contribute to the team.
4. Effort 'Greater effort and physical fitness is promoted'	<ol style="list-style-type: none"> Teams are awarded double points for when a team scores and the outfield team (not including the goal keeper) crosses the half way line upon the score being completed. Thus greater effort gets rewarded; An extra point is offered for a hook, block down or forcing an error.
5. Respect 'Everyone has due regard for each other's feelings and rights'	<ol style="list-style-type: none"> If a player is fouled the offending player offers to help the other up and check if they are all right. The situation ends with a handshake; Only team captain/leader - wears a designated arm band - is allowed to communicate with the match referee.
6. Enjoyment 'Players have fun'	<ol style="list-style-type: none"> Each game to conclude with the most scores in a minute, most scores out of 10 kicks/shots from 20/45m line; Each game starts with the most scores in a minute, most scores out of 10 kicks/shots from 20/45m line.

APPENDIX

3

Super Game Centre Coaching Process

GAA SGC Pilot Programme

Pilot Site Lead Coaching Process

GAA P2S Value Number 1:

<Insert a definition for the value>

Pre Game Coach Player Interaction

What does <insert GAA value> mean to you?

PSL proposes a games modification specific to the chosen GAA value

How will this rule change affect play?

How might the rule change affect how you interact?

Post Games Coach Player Interaction

How did this rule change affect play?

How did this rule change affect how you interacted?



References

1. Sheridan, D., Coffee, P., Lavallee, D. (2014). A systematic review of social support in youth sport. *International Review of Sport and Exercise Psychology*, 7, 198-228.
2. Holt, N. L. (Ed.). (2008). *Positive youth development through sport*. London: Routledge.
3. Pate, R. R., Trost, S. G., Levin, S., & Dowda, M. (2000). Sports participation and health-related behaviors among US youth. *Archives of Pediatrics & Adolescent Medicine*, 154(9), 904-911.
4. Snyder, A. R., Martinez, J. C., Bay, R. C., Parsons, J. T., Sauers, E. L., & McLeod, T. C. V. (2010). Health-related quality of life differs between adolescent athletes and adolescent non-athletes. *Journal of Sport Rehabilitation*, 19(3), 237-248.
5. Smith, A. L. (2007). Youth peer relationships in sport. In S. Jowett, & D. Lavallee (Eds.), *Social psychology in sport* (pp. 41-54). Champaign, IL: Human Kinetics.
6. Marsh, H. W., & Kleitman, S. (2003). School athletic participation: mostly gain with little pain. *Journal of Sport & Exercise Psychology*, 25, 205-228.
7. Oler, M. J., Mainous, A. G., 3rd, Martin, C. A., Richardson, E., Haney, A., Wilson, D., et al. (1994). Depression, suicidal ideation, and substance use among adolescents: are athletes at less risk? *Archives of Family Medicine*, 3(9), 781-785.
8. Sabo, D., Miller, K. E., Melnick, M. J., Farrell, M. P., & Barnes, G. M. (2005). High school athletic participation and adolescent suicide: a nationwide US study. *International Review for the Sociology of Sport*, 40(1), 5-23.
9. Riddoch CJ, Andersen LB, Wedderkopp N, et al. (2004) Physical activity levels and patterns of 9- and 15-yr- old European children. *Medicine and Science in Sports and Exercise*, 36, 86-92.
10. Woods, C.B., Tannehill D., Quinlan, A., Moyna, N., & Walsh, J. (2010). *The Children's Sport Participation and Physical Activity Study* (Research Report No. 1). School of Health and Human Performance, Dublin City University and The Irish Sports Council, Dublin, Ireland.
11. Berger IE, O'Reilly N., Parent M.M. (2008). Determinants of sport participation among Canadian adolescents. *Sport Management Review* 11: 277-307.
12. Delorme, N., Chalabaev, A., & Raspaud, M. (2011). Relative age is associated with sport dropout: evidence from youth categories of French basketball. *Scandinavian Journal of Medicine & Science in Sports*, 21(1), 120-128.
13. Butcher J., Lindner K.J., & Johns DP (2002) Withdrawal from competitive youth sport: A retrospective ten-year study. *Journal of Sport Behavior*, 25, 145-162.
14. Cote J., Horton S., & MacDonald D., (2009). The benefits of sampling sports during childhood. *The Physical and Health Education Journal*, 12.6-11.
15. Strachan L, Cote J and Deakin J (2009) "Specializers" versus "samplers" in youth sport: Comparing experiences and outcomes. *The Sport Psychologist*, 23, 77-92.
16. Quested, E., Ntoumanis, N., Viladrich, C., Haug, E., Ommundsen, Y., Van Hove, A., Mercier, J., Hall, H.K., Zourbanos, N., & Duda, J.L (2013). Intentions to drop-out of youth soccer: A test of the basic needs theory among European youth from five countries. *International Journal of Sport and Exercise Psychology*, 11(4), 1-13
17. Haug, E., Rasmussen, M., Samdal, O., Iannotti, R., Kelly, C., Borraccino, A., & Ahluwalia, N. (2009). Overweight in school-aged children and its relationship with demographic and lifestyle factors: Results from the WHO-collaborative health behaviour in school-aged children (HBSC) study. *International Journal of Public Health*, 54, 167-179.
18. Balish, S.M., McLaren, C., Rainham, D., & Blanchard, C. (2014). Correlates of youth sport attrition: A review and future directions. *Psychology of Sport and Exercise*, 15, 429-439.
19. Burton, D., (1984). The dropout dilemma in youth sports: Documenting the problem and identifying solutions. In R.M. Malina (Ed.), *Young athletes: Biological, psychological and educational perspectives* (pp.245-266). Champaign, IL: Human Kinetics.
20. Le Bars, H., Gernigon, C., & Ninot, G. (2009). Personal and contextual determinants of elite young athletes' persistence or dropping out over time. *Scandinavian Journal of Medicine and Science in Sports*, 19, 274-285.
21. Burns, C., Murphy, J., Vaughan, J., MacNamara, A., & MacDonnacha, C. (2012). Correlates of adolescent sport participation. Department of Sport Leisure and Early Childhood Studies, Cork institute of Technology and The Gaelic Athletic Association, Dublin, Ireland.
22. Lunn, P., Kelly, E., & Fitzpatrick, N. (2013). *Keeping them in the game: Taking up and dropping out of sport and exercise in Ireland* (Research Series No. 33). Dublin: The Irish Sports Council.
23. Cohen, S., Underwood L.G., & Gottlieb, B.H. (2000). Social support measurement and intervention. A guide for health and social scientists (pp. 195-217). New York, NY: Oxford Press.
24. Sarrazin, P., Vallerand, R., Guillet, E., Pelletier, L., & Cury, F. (2002). Motivation and dropout in female handballers: A 21-month prospective study. *European Journal of Social Psychology*, 32(3), 395-418.
25. Freeman, P., Coffee, P., & Rees, T. (2011). The PASS-Q: The perceived available support in sport questionnaire. *Journal of Sport & Exercise Psychology*, 33(1), 54-74.
26. Rees, T., Haslam, S.A., Coffee, P., Lavallee, D. (2015). A social identity approach to sports psychology: Principles, practice, and prospects. *Sports Medicine*, 45 (8), 1083-1096
27. Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Enquiry*, 11, 227-268.
28. deCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York, NY: Academic Press.
29. White, R.W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66, 297-333.
30. Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
31. Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford Press.



