

THE GAELIC GAMES YOUTH PARTICIPATION STUDY

Donnelly, P., Horgan, P., Lane, A., McKay, M., O'Brien, W., & McGourty, P. (2024). *THE GAELIC GAMES YOUTH PARTICIPATION STUDY*. GAA.

Link to publication record in Ulster University Research Portal

Publication Status:

Published (in print/issue): 31/01/2024

Document Version

Publisher's PDF, also known as Version of record

General rights

The copyright and moral rights to the output are retained by the output author(s), unless otherwise stated by the document licence.

Unless otherwise stated, users are permitted to download a copy of the output for personal study or non-commercial research and are permitted to freely distribute the URL of the output. They are not permitted to alter, reproduce, distribute or make any commercial use of the output without obtaining the permission of the author(s).

If the document is licenced under Creative Commons, the rights of users of the documents can be found at https://creativecommons.org/share-your-work/cclicenses/.

Take down policy

The Research Portal is Ulster University's institutional repository that provides access to Ulster's research outputs. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact pure-support@ulster.ac.uk

Download date: 03/06/2025

THE GAELIC GAMES YOUTH PARTICIPATION STUDY























The Gaelic Games Youth Participation Study

This study was undertaken under the auspices of the National Games Development Committee led by Chair, John Tobin and Director of Coaching and Games Development, Shane Flanagan. The research study was led by the GAA's Strategy, Insights, and Innovation Manager, Dr. Peter Horgan and supported by an expert advisory panel. The advisory panel was composed of representatives of the GAA, LGFA, and Camogie Associations, as well as leading researchers in youth sport, physical activity, and statistics from Universities and Technological Universities from across Ireland. This model has shaped recent research publications on behalf of the GAA, LGFA, and Camogie Associations, and the study would not have been completed without their effort and expertise. Their contribution to this study has been invaluable.

The study authors would also like to acknowledge the input of young players from CLG Naomh Pól, Belfast for their contribution to the development of the survey instrument. The authors would like to thank the volunteers and Games Development personnel across the GAA, LGFA, and Camogie Associations for their support in circulating the initial survey so widely. This contributed enormously to such a significant response rate. There are special thanks due to the young people who participated in the study. Without your contribution this ground-breaking study would never have happened. Finally, this report is dedicated to all the volunteers across all our codes who have worked so tirelessly for many years to ensure that a love of our games is passed from generation to generation. This effort epitomises the old Irish saying 'Ní neart go cur le chéile'.

For further information about this report please contact:

Dr Peter Horgan
Coaching and Games Development Department
Gaelic Athletic Association
Croke Park
Dublin. D03 P6K7
peter.horgan@gaa.ie
+353 1 8363222

© Gaelic Athletic Association 2024

Published January 2024

Place of Publication: Dublin, Ireland

This research was part funded by Sport Ireland and Healthy Ireland through the Sport Ireland Research Grant Scheme which aims to support research endeavours for the Irish sports sector. The scheme provides an opportunity for sporting bodies to undertake research on issues that are relevant to their own unique contexts and provides a platform for NGBs/LSPs/Sport Ireland Funded Bodies to build meaningful relationships with the third level sector whilst building their understanding and capability on how to do research.

Please cite this report as:

Horgan, P., Donnelly, P., Lane, A., McKay, M., McGourty, P., O'Brien, W., Lawler, M., Donoghue, K., Fogarty, N., Meyers, E., Heffernan, J., and Harmon, W. (2024). *The Gaelic Games Youth Participation Study*. Dublin: Gaelic Athletic Association.

Contents

Cont	ents	3
Fore	word	4
Your	ng People, Sport, and Physical Activity	5
Rese	arch Aims and Objectives	7
Meth	ods	8
	TION 1: Who are the youth participants elic games and why did/do they	
-	cipate?	
1.1	Gender and Age	10
1.2	County of residence of participants	12
1.3	Place of residence	13
1.4	Initiation into Gaelic games	13
1.5	Influences on initiation into Gaelic games	13
1.6	Motivations for participation in Gaelic games	15
	TION 2: What is the current level of vement in Gaelic games?	16
2.1	Playing codes	16
2.2	Participation profile	17
2.3	Participation frequency in Gaelic games	21
2.4	Perceived participation levels in games/matches	22
2.5	Muscle strengthening for Gaelic games	22
	Sporting role models	
are y	TION 3: What sport/physical activities outh participants involved in outside of	
Gaeli	ic games?	26
3.1	Current participation in non-Gaelic games sports	26
3.2	Previous participation in non-Gaelic games sports	29
3.3	Reasons for stopping participation	29
3.4	Overall physical activity	31

	ON 4: What other roles are youth ipants involved in with their Club?	32
-	Current roles in the Club	
	Future roles in the Club	
7.2	rature roles in the Clab	
SECTI	ON 5: What is the general, and	
	ing-specific experience of youth	
-	ipants in Gaelic games?	
	Gaelic games experience rating	.34
	Gaelic games Coach Autonomy	25
•	Supportive Behaviours	.35
SECTI	ON 6: What are the future intentions of	
	participants in Gaelic games?	
6.1	Future Gaelic games participation	
i	intentions	.37
	ON 7: What are the implications of this	40
	for research, policy, and practice?	
7.1	Introduction	.40
7.2	Monitoring participation and incorporation of views of players for	
	development programmes	40
7.3	The experience of playing Gaelic games	:
	past, present, and future	41
7.4	Develop a position on multi-sport	
	participation and physical activity behaviour among youth Gaelic Games	
	participants, potentially in partnership	
	with other sporting organisations	41
7.5	Beginning of the Gaelic games	
	journey	42
7.6	Youth participation in Gaelic games:	
	what does it look like?	.42
7.7	Multiple teams and sessions per week	13
7.8	Health benefits of physical and muscle	. 43
7.0	strengthening activities	.44
7.9	Sporting role models: who are they?	
7.10		
7.11	J	
7	Gaelic Games	46
	ON 8: Youth Participation Study	
Resea	rch Team	47
SECTI	ON 9: References	FO
JECII	VIV 3. REIEI EIICES	JU

Foreword

Mar chathaoirleach ar Choiste Forbartha na gCluichí Láir, is mór an onóir dom an tuarascáil seo a chur faoi bhráid chomhaltaí an CLG, Cumann Peil Gael na mBan, agus an Chumainn Camógaíochta.

Gaelic games have been at the forefront of the provision of sport and physical activity opportunities for children, young people, and adults across Ireland for almost 140 years. The GAA, LGFA, and Camogie Associations can be rightly proud that, through their volunteers and staff members, a programme of coaching and games opportunities are provided annually for hundreds of thousands of players across each Association.

The teenage player has been the subject of much discussion across each Association in recent years. However, the voice of the young player is often absent from such discussions. The study, perhaps for the first time, provides us with detailed information on our young players, how they participate in our games, where, when, and with whom. It has also allowed them to tell us how they experience participation in our games for the first time on such a wide scale basis. It is important that such messages are part of the policy making and decision making processes across each Association.

As Chair of the Central Games Development Committee, I would like to express my thanks to the advisory panel for their work in undertaking this research and producing this report. Their expertise in their fields, allied to their interest in and commitment to Gaelic games has contributed to this ground-breaking publication. This is the latest in a series of research reports that have been produced under the auspices of the Central Games Development Committee. I thank my fellow committee members for their support in this work.

I would also like to thank Sport Ireland and Healthy Ireland for their support in undertaking this study.

In presenting this report to our members and the wider sporting community, I recognise that the findings present challenges anew. However, through the same passion, dedication, and expertise displayed to date by our volunteers and staff members I am convinced that lessons learned from this study will be reflected in future programmes nationwide.

Ba mhaith liom 2024 taitneamhach sna cluichí Gaelacha a ghuí ar ár n-imreoirí óga go léir. Tá súil agam go mbainfidh tú an taitneamh, an cairdeas agus an méadaíocht céanna as ár gcluichí a h-imirt agus a bhí na mílte agat roimhe seo.

Is mise,

Seán Ó Toibín

Cathaoirleach, Coiste Lárnach Forbartha na gCluichí

Young People, Sport, and Physical Activity

There is a body of empirical evidence to support the importance of physical activity (PA), especially for the physical health, mental health, and wellbeing of adolescents. For example, regular participation in PA has a positive impact on a range of health markers, including improved cardiometabolic biomarkers, body composition, physical fitness, bone health, mental health (Donnelly *et al.*, 2023; Poitras *et al.*, 2016), and improved academic performance (Marques *et al.* 2016). Furthermore, PA behaviours adopted during adolescence are likely to be maintained into adulthood (Hayes *et al.* 2019). A physically active lifestyle helps to prevent disease in adulthood including cancer, type II diabetes, osteoporosis, and cardiovascular diseases (Endes *et al.*, 2016; Van de Laar *et al.*, 2011).

The wealth of evidence on the positive impact of increased PA participation on health lead to the development of national and international PA guidelines. In Ireland, the current national guidelines state that children and adolescents should engage in 60 minutes of moderate-to-vigorous physical activity (MVPA) daily (Healthy Ireland, 2016). In 2020, the World Health Organisation (WHO) released updated global guidelines, which now recommend that children and adolescents engage in at least 60 minutes per day of mostly aerobic MVPA across the week (WHO 2020). Furthermore, due to the recent findings supporting a dose-response relationship between PA intensity and health (Gralla *et al.*, 2019), the latest guidelines have also included a recommendation to additionally include vigorous-intensity aerobic activities, as well as activities that strengthen muscle and bone on at least three days per week (WHO 2020).



Despite PA guidelines being well established and implemented internationally, global estimates show that over 80% of adolescents are insufficiently active (Guthold *et al.*, 2020, Sallis *et al.*, 2016). In 2016, an analysis of 1.6 million adolescents worldwide found that 77.6% of boys and 84.7% of girls were failing to meet the recommended PA thresholds (Guthold *et al.*, 2020). Results from Irish research are comparable, with the most recent Children's Sports Participation and Physical Activity (CSPPA) Study concluding that 81% of boys and 89% of girls aged 10–18-years failed to meet the national PA guidelines (Woods *et al.*, 2023). Research consistently shows that throughout adolescence, attainment of PA guidelines decreases significantly (Corder *et al.*, 2015, Dumith *et al.* 2011, Harding *et al.* 2015). Across the adolescent years, PA levels decline by a mean of 7% per annum, equating to a total PA decline of 60–70% throughout this period (Dumith *et al.*, 2011). Moreover, the age-related decline in PA participation is steeper for girls than for boys, with Farooq *et al.* (2020) reporting annual declines in MVPA of 3.4% in males and 5.3% in females. This was also evident in the CSPPA study, as the percentage of boys meeting the PA guidelines declined from 28% in primary school age groups to 15% in post-primary school age groups. In girls, the PA levels were consistently lower and declined from 17% to 9% in the same age brackets (Woods *et al.*, 2023).

In response to the low levels of PA reported throughout adolescence, increased efforts have focused on identifying effective settings to increase engagement in MVPA (Fenton *et al.*, 2015). Participation in organised sport has been identified as one of the "eight investments that work" for increasing PA (The

International Society for Physical Activity and Health, 2020), and is particularly relevant to youth given the existing cultural norms and infrastructure that encourages sports participation amongst this cohort (Howie et al., 2020). Indeed, organised sport is the most popular form of leisure-time PA for youth, with at least one third of children and adolescents participating worldwide (Aubert et al., 2018). Research has demonstrated that adolescents who participate in organised sport are significantly more physically active (Hebert et al., 2015, Kokko et al., 2018, Marques et al., 2016), and more likely to meet the PA guidelines than their non-participating peers (Sprengeler et al. 2019). Participants in organised sport also accumulate more MVPA on sports days than on non-sports days (Mooses and Kull, 2019). Furthermore, sport participation during adolescence has been shown to be a protective factor against sedentary behaviour, risk for depression, and body esteem issues (Alberga et al., 2012). Encouragingly, PA and sports participation during adolescence are predictors of PA and sport participation in adulthood (Kjønniksen et al., 2009; Scheerder et al., 2006; and Telama et al., 2005).



Engagement and participation in sport also has a range of psycho-social benefits. Sport has the potential to support the personal and social development of young people (Holt *et al.*, 2017). Research has shown how participation in sport can lead to cognitive, emotional, moral, social, and identity development (Lara-Bercial and McKenna, 2022). These gains are due to the amalgamation of a number of generative mechanisms including capturing the attention of the young person, providing a nurturing and caring environment, building young people's self-confidence, and providing opportunities to experience situations, positive and negative, similar to those that appear in adult life i.e., conflict, disappointment, failure, success, struggle, competition, and diversity. (Alberga *et al.*, 2012; Holt *et al.*, 2017).

Gaelic games have the potential to deliver health benefits through the promotion of sport and PA, as well as broader volunteer-oriented social, economic, and health benefits through its Club system. Participation in Gaelic games has been demonstrated to contribute to the achievement of daily PA targets in children (e.g., O'Connor *et al.*, 2018), adolescents (e.g., Gavin *et al.*, 2020), and adults (e.g., Mangan *et al.*, 2020). Indeed, programmes such as the Healthy Club programme have been cited as one of the few examples of settings-based initiatives and systems thinking for health promotion in sport (Lane *et al.*, 2021).

The contribution of sport and PA to non-health related outcomes is also significant. Sport can play a role in tackling societal challenges around anti-social behaviour, as part of broader personal development programmes or in conjunction with community and youth services. Further, as identified in the 'Keeping Them in the Game: Taking Up and Dropping Out of Sport and Exercise in Ireland study', Hurling was one of only three games that are statistically significant in their causal link to Leaving Certificate results (ESRI, 2013).

Despite the known benefits of sports participation (Duda *et al.*, 2013), there has been a decline in the number of adolescents participating in sport (Murphy *et al.*, 2016). The onset of puberty (i.e., approximately 11 years for girls and 14 years for boys) has been particularly identified as a key time point where such a decline is observed (Alberga *et al.*, 2012). A survey of children aged 4-14 years reported sport participation rates peaking at ages 9-11 years (Australian Sports Commission, 2016), whilst other studies of sport participants have reported peak participation at ages 10-14 years (Wong *et al.*, 2016). Furthermore, national participation reports in England (Sport England, 2019) and Ireland (Woods *et al.*, 2023) suggested that adolescents are the least likely participant population to be active. Of note, participation rates have been reported to be particularly low for females (De Knop *et al.*, 1996; Eime *et al.*, 2016; and Wong *et al.*, 2016). Therefore, the need to understand participation in sport and look at strategies to keep more adolescents engaged in sport and PA is evident (Drake *et al.*, 2012).

Research Aims and Objectives

This study sought to investigate the reasons why young people participate in Gaelic games currently, what specific factors motivate their continued participation, and what factors might motivate them to continue playing into the future.

The objectives of this research are to describe:

- the characteristics of Gaelic games youth participants, aged 13-201, and their entry into Gaelic games;
- the level of engagement of youth participants in Gaelic games and other activities;
- · youth participant's experience of coaching in Gaelic games; and
- the future intentions of participants in relation to Gaelic games.

^{1.} 13-20 year olds will be considered as youth in this report.



Methods

This study took place over three consecutive phases. Quantitative methods were used, with data collected using an online questionnaire that was specifically designed for this study.

Phase One - Questionnaire Development

The first phase involved the development of the draft Youth Participation Survey, which was circulated to 80 youth participants in CLG Naomh Pól, Belfast. Subsequently, focus groups consisting of 45 teenagers who had completed the survey, were convened. Focus groups were conducted in September 2022. The focus group questions were developed to mirror the sections of the Youth Participation Survey. Participants were asked if survey questions were clear or if any questions had caused confusion. The insights gained from these focus groups assisted in the production of a revised survey instrument.

Phase Two - Data Collection

The survey was conducted in September/October 2022. Participants under the age of 18 were recruited to take part with the help of authority figures, including coaches, parents, and Games Development personnel. These figures were advised to advocate for the completion of the survey under their own supervision. The survey was circulated via:

- direct email to all Club secretaries in each Association for further circulation to Club coaching officers, team coaches and parents of players; and
- direct email to all Games Development personnel, and Coach Developers in each Association.

In addition, a promotional campaign was designed with members of the GAA communications department, utilising:

- · GAA, LGFA, and Camogie Association websites;
- print and digital media via press launch;
- · social media; and
- coaches, Coach Developers, and Games Development staff.

Phase Three - Data Analysis

Phase three consisted of the data analysis process. In total, 8,857 responses were received. Following data cleaning, which removed invalid or incomplete responses, a total of 5,049 valid responses remained (57% completion rate). Invalid responses were removed due to inconsistencies in their responses. All analyses were conducted in SPSS version 28. For the majority of analyses, cross-tabulations were produced, with accompanying statistics (Chi²) indicating the degree of association between groups/variables. The magnitude (or meaningfulness) of these associations was interpreted using the Cramer's *V* statistic. Here, 0 indicates no association between variables, and 1 indicates perfect association. In the present report, the following were used to interpret results for Cramer's *V*:

•	Degrees of freedom = 1	Small $V = 0.10$; Medium $V = 0.30$; Large $V = 0.50$
•	Degrees of freedom = 2	Small <i>V</i> = 0.07; Medium <i>V</i> = 0.21; Large <i>V</i> = 0.35
•	Degrees of freedom = 3	Small <i>V</i> = 0.06; Medium <i>V</i> = 0.17; Large <i>V</i> = 0.29
•	Degrees of freedom = 4	Small <i>V</i> = 0.05; Medium <i>V</i> = 0.15; Large <i>V</i> = 0.25
•	Degrees of freedom = 5	Small $V = 0.04$; Medium $V = 0.13$; Large $V = 0.22$

Elsewhere and where appropriate, independent samples t-tests were computed to examine mean differences, and in some cases, binary logistic regression models were computed to examine results, simultaneously adjusted for other variables.

The study advisory group reviewed the findings and collated each into the overall report.



SECTION 1

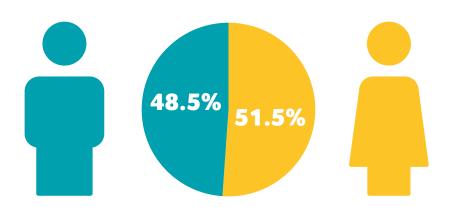
Who are the youth participants in Gaelic games and why did/do they participate?

This section presents data related to the demographic and participation characteristics of the study participants.

1.1 Gender and Age

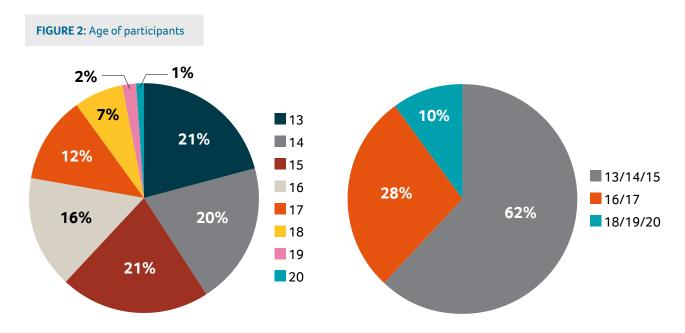
In total, 48.5% (n = 2449) of the participants were male and 51.5% (n = 2600) were female.

FIGURE 1: Gender profile of participants





The age profile of participants is presented in Figure 2 below. More than 75% of the sample were aged 13-16 years old. The average age of participants was 15.1 years, with no overall substantive difference between males and females. Given that a relatively small proportion of participants were aged 19 or 20, a decision was made to band ages for further analyses. In addition to this methodological consideration, the banding was considered appropriate and useful from a conceptual point of view. Ages 18, 19, and 20 were banded to represent older youth players. Ages 13 to 15 were banded to represent younger players, and ages 16 to 17 were banded to represent a developmental period leading into older youth play.



Age and Gender

Figure 3 shows that there was an uneven gender and age distribution in the sample.

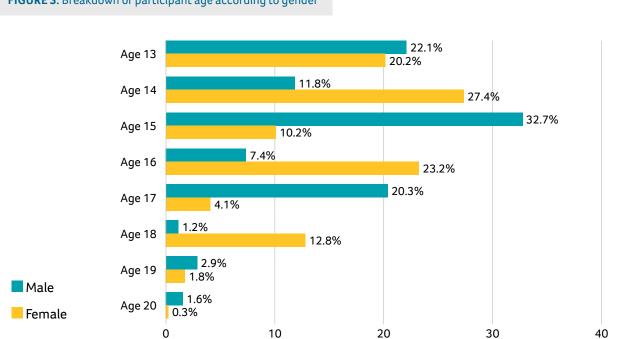
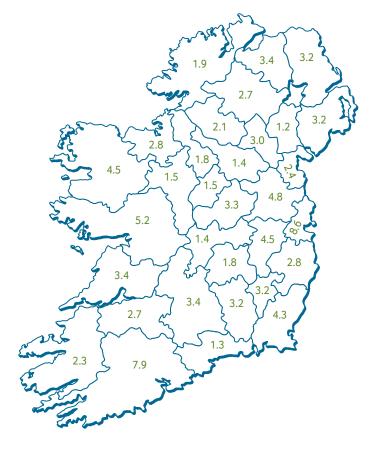


FIGURE 3: Breakdown of participant age according to gender

1.2 County of residence of participants

There were participants from all Counties in Ireland, relatively proportional to overall County population; for example, Dublin (8.6%), Cork (7.9%), Galway (5.2%), and Meath (4.8%) compared to Leitrim (1.8%) and Louth (2.4%), as outlined in Figure 4.

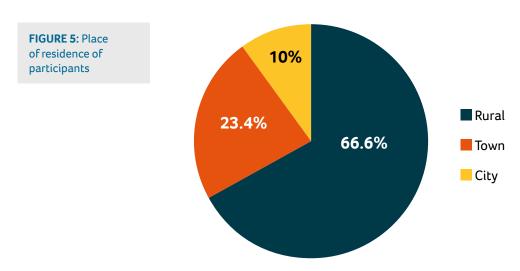
FIGURE 4: Percentage of Study Participants per County





1.3 Place of residence

To get a deeper sense of the geographical background of participants, each were asked whether they lived in one of four possible locations – in the countryside, a village, a town, or a city. As shown in Figure 5 below, the majority of participants (66.6%) indicated that they lived **rurally**, in the countryside (48%), or in a village (18.6%). Approximately one quarter (23.4%) reported living **in a town**, with 10% reporting living **in a city**.



1.4 Initiation into Gaelic games

The average age at which participants reported first playing Gaelic games was 6.2 years old. However, males reported beginning their journey almost a year earlier in comparison to their female counterparts, with males beginning at an average age of 5.8 years old and females at 6.6 years old (p < .05).



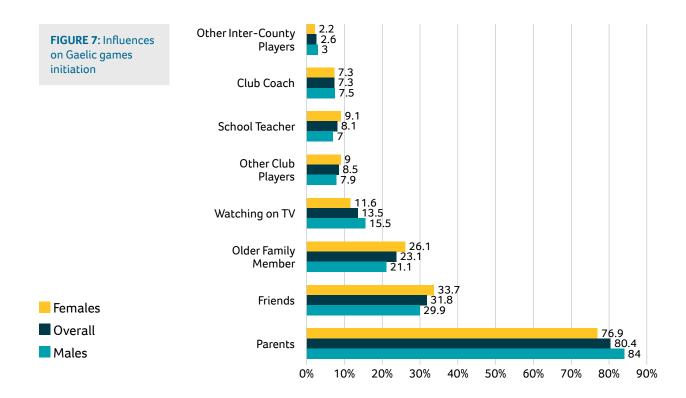


1.5 Influences on initiation into Gaelic games

Participants were asked about the influence that people had on their initiation into Gaelic games². Just over 80% of participants identified their **parents** as a major influence on beginning to play Gaelic games. A higher proportion of males reported this than females (84% compared to 76.9%). The next most popular reported influence was **friends**, with almost one third (31.8%) of participants selecting this option, with a slightly higher proportion of females than males doing so (33.7% v 29.9%). The third most commonly reported influence for Gaelic games initiation was **an older family member** (23.1%). Male participants were marginally more likely to be influenced to begin participating as a result of **watching Gaelic games on television**, with 15.5% of male participants reporting this as an influence compared to 11.6% of females. However, all of these differences were negligible in terms of statistical effect sizes³.

^{2.} Participants were asked to identify the three most important influencers on their intiation into Gaelic games hence, the percentages do not total 100.

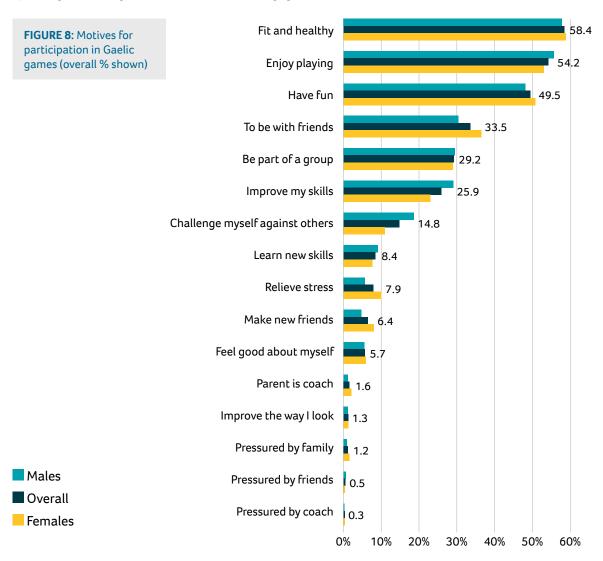
^{3.} Cramer's V effect sizes were small (.022 \leq V \leq .096).





1.6 Motivations for participation in Gaelic games

Participants were asked to indicate the top three reasons that they participated in Gaelic games. **To be fit and healthy** was the highest reported motive for playing Gaelic games among all participants (58.4% of the total sample), with **enjoyment of playing** Gaelic games (54.2%), and **having fun** (49.5%) also scoring highly. Social engagement with **friends** (33.5%) and being **part of a group** (29.2%) were also strong motives for playing Gaelic games, with **improving skills** the sixth highest rated reason for participation (25.9%). There was little difference between males and females, apart from **challenging myself**, where a larger proportion of males than females cited this as a motivation (18.6% v 11%; with a small effect size, Cramer's V = .11). Statistically speaking, all other gender differences were negligible.



Given the prevailing debate about participation and retention in sport, it was decided to look at what socio-demographic factors might have been significantly associated with those reasons. To do this, a number of binary logistic regression analyses were computed.

To have fun was a particularly important issue for younger and female participants.

For males, and older participants, **I enjoy/love playing the game** was reported by a significantly larger proportion of respondents.

To be fit and healthy was considered significantly important by older participants.

Of note, place of residence (rural/town/city) was not significantly related to any of these top three reasons for participation.



SECTION 2

What is the current level of involvement in Gaelic games?

This section presents data related to current and past participation in Gaelic games.

2.1 Playing codes

Participants reported involvement in all codes across Gaelic games, with a significant proportion reporting participating in multiple Gaelic games codes. Almost half of males (48.3%) reported themselves as **dual players**, 42.1% reporting as **footballers only**, and a further 9.6% reporting as **hurlers only**. A total of 42.8% of females reported themselves as **dual players**, 43.9% reporting as **footballers only**, and a further 13.3% reporting as **Camogie players only**. Overall, 3.2% reported playing Handball (60.7% of these male) and 3.1% reported playing **Rounders** (38.1% of these male).

Figure 9 shows the numbers of males reporting involvement in each code. In addition to the values displayed, a total of 53 male dual players also reported playing Handball, and a total of 32 male dual players also reported playing Rounders.



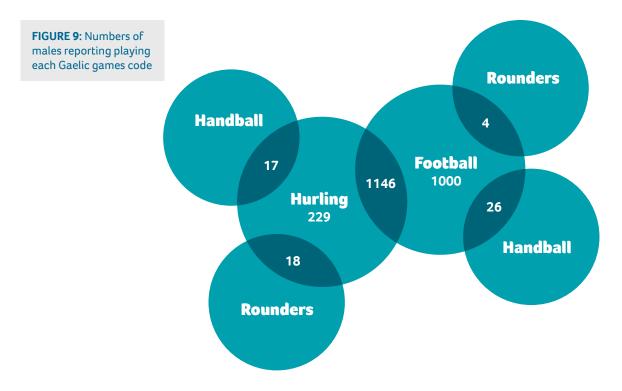
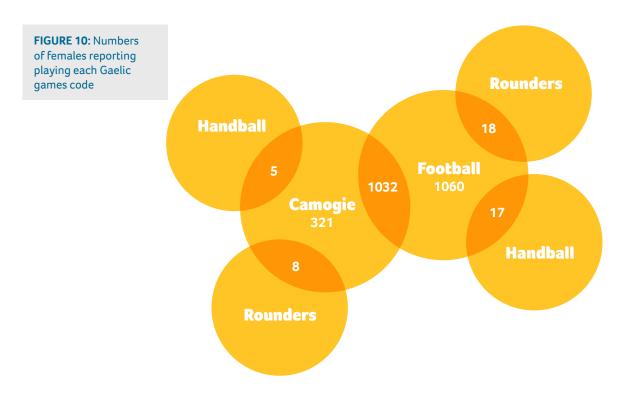


Figure 10 displays the numbers of females playing each Gaelic games code. In addition to the values displayed, and discussed above, a total of 34 female dual players also reported playing Handball, and a total of 62 female dual players reported playing Rounders.



2.2 Participation profile

As well as being able to participate in multiple codes across Gaelic games, participants are also permitted to play for multiple units of the GAA, LGFA, or Camogie Associations. The Club is the fundamental unit of each Association, with representative opportunities to participate across School, 3rd Level, and a variety of inter-County ages and levels.



Current Participation

As shown in Table 1, almost all participants reported currently playing for a **Club** (99.2%). A high proportion also reported participating in Gaelic games in **school** (78.6%), with a relatively small proportion reporting playing at **3**rd **level** (1.6%), likely reflective of the age profile of the sample. A greater proportion of males than females indicated playing underage inter-County Gaelic games.

TABLE 1: Current Participation in Gaelic games

	Overall % (n)	Males % (n)	Females % (n)
Club	99.2 (5008)	92.3 (2429)	99.2 (2579)
School	78.6 (3969)	79.3 (1942)	78.0 (2027)
Underage inter-County	25.5 (1292)	30.3 (742)	21.2 (550)
Minor inter-County	7.3 (371)	7.2 (176)	7.5 (195)
3rd Level	1.7 (86)	1.5 (37)	1.9 (49)
U20 inter-County	0.8 (38)	1.1 (26)	0.5 (12)
Senior inter-County	0.8 (44)	0.2 (4)	1.5 (40)

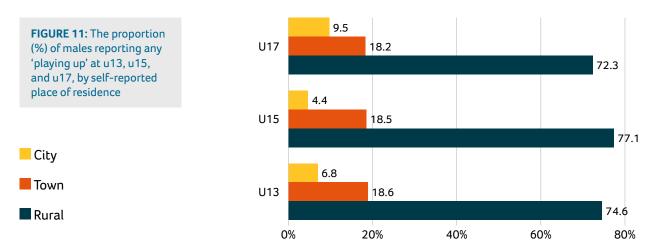
Playing Up

Players are permitted to play across multiple age groups within Gaelic games. This has been called 'Playing Up'. We wanted to see what proportion of players play at their own age group, and at least one additional (older) age group.

Playing Up - Males

Overall, 21.8% (n = 118) of u13 males reported 'playing up' to u15 (n = 93 in either Hurling or Football, and n = 25 in both codes). Somewhat larger numbers (n = 362; 45.1%) of u15 males reported 'playing up' to u17 (n = 259 in either Hurling or Football, and n = 103 in both codes). Finally, assessing the number of u17 boys who played up proved to be more complex, as there is no uniformity amongst counties in the provison of age grade in Gaelic games above u17. Therefore, we accounted for those boys who said that they participate at u17 plus u19, u20, or u21. In total, 27.6% (n = 137) of u17 males reported 'playing up' to u19, u20, or u21 in either code.

Figure 11 below displays the proportion of males that reported to 'playing up' at u13, u15, and u17, by self-reported place of residence. Results show a clear relationship between reporting 'playing up' and living in a more rural setting, across all age groups.

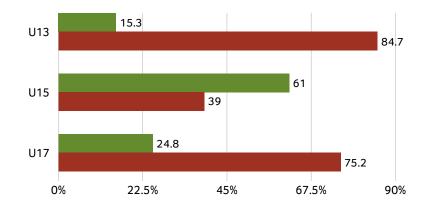


We further examined the proportion of males reporting playing inter-County Gaelic games, and those reporting 'playing up'. Of the 118 u13 males reporting 'playing up', 18 (15.3%) also reported involvement in an inter-County team. Of the 362 u15 participants reporting 'playing up', 221 (61.0%) also reported involvement in an inter-County team. Finally, of the 137 u17 males reporting 'playing up', 34 (24.8%) reported involvement in an inter-County team (see Figure 12). Results suggest an 'n' shaped curve, with the majority of u13 and u17 boys not reporting playing at inter-County level, but with the majority of u15 boys reporting 'playing up' also reporting inter-County involvement.









Playing Up - Females

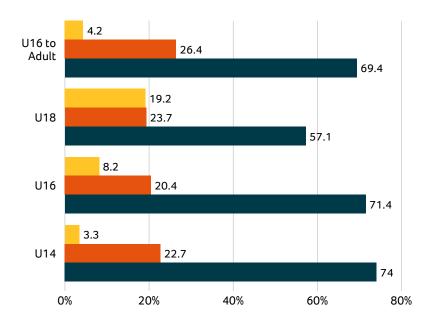
Overall, 42.7% of u14 females (n = 304) reported 'playing up' to u16 (n = 248 in either Camogie or Football, and n = 56 for both codes). A larger proportion (n = 318; 52.9%) of u16 females reported 'playing up' to u18 (n = 234 in either Camogie or Football, and n = 84 in both codes). Finally, because females playing u16 are permitted to 'play up' to adult games, the proportion of current u16s who also reported playing adult games were analysed. In total, 23.9% (144) u16 females reported also playing adult games.

Figure 13 below displays the proportion of females reporting any playing up at u14, u16, u18, and u16 reporting playing adult games, by self-reported place of residence. As was the case with males, results suggest a positive relationship between reporting 'playing up' and reporting living in a rural setting, at all female age groups.



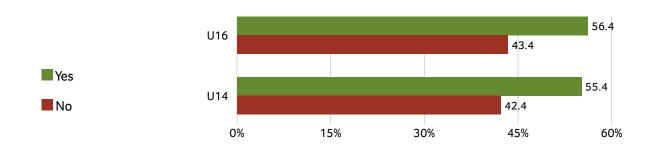
FIGURE 13: The proportion (%) of females reporting any 'playing up' at u14, u16, and u18, by self-reported place of residence





In the same way as for male respondents, we further examined the proportion of females reporting playing inter-County Gaelic games, and those reporting 'playing up'. Of the 304 u14 females reporting 'playing up', 42.4% (n = 129) also reported involvement in an inter-County team. Of the 318 u16 females reporting 'playing up', 39.2% (n = 138) also reported involvement in an inter-County team. As was the case with males, results suggest a positive relationship between reporting 'playing up' and reporting living in a rural setting, at all female age groups.

FIGURE 14: Percentage of female participants in each age group reporting 'playing up' and involvement in an inter-County squad.



2.3 Participation frequency in Gaelic games

Participants were asked about how frequently they were involved with each of their teams, plus involvement in Gaelic games 'in their own time' i.e., outside of arranged games or training sessions. A majority of participants reported training 2-3 times per week with their Club (58.4%), with 25.8% reporting training 4-5 times per week, and 10.9% indicating that they train every day with their Club. Of note, 68% of males, and 77% of females who reported participating with their Club every day were dual players.

More than four in ten (42.9%) participants reported training up to three times per week with their school. In addition, more than one quarter of participants reported playing Gaelic games every day in their own time⁴. The data in Table 2 presents the playing frequencies for the overall sample.

TABLE 2: Frequency of F	articipation in Gaelic games

	Almost Everyday % (n)	4-5 Times per week % (n)	2-3 Times per week % (n)	Once a week or less % (n)
Club	10.9 (549)	25.8 (1300)	58.5 (2940)	4.5 (228)
County	0.4 (13)	1.2 (35)	21.5 (650)	30.8 (931)
School	4.1 (186)	1.6 (70)	37.2 (1676)	48.8 (2200)
3 rd Level	0.6 (6)	0.2 (2)	4.8 (46)	4.8 (46)
In Your Own Time	26.9 (1208)	11.5 (518)	29.1 (1309)	25.4 (1139)

There was a relationship between gender and participation, particularly in the areas of **school** participation, and participation of boys and girls **in their own time** (see Table 3). Responses indicated that males reported more frequent participation in both cases, although the size of this effect in statistical terms was small⁵.

^{4.} Playing 'in your own time' refers to informal activity undertaken by players individually or in small groups outside of organised training.

^{5.} Cramer's V values for 'school', and 'in own time' were .10 and .14 respectively.

TABLE 3: Gender Comparison of Frequency of Participation in Gaelic games

		Almost Everyday (%)	4-5 Times per week (%)	2-3 Times per week (%)	Once a week or less (%)	Never (%)
Club	Males	11.5	25	59.7	3.4	0.4
Club	Females	10.4	26.6	57.2	5.5	0.3
Country	Males	0.6	1.1	20.1	36.9	41.4
County	Females	0.2	1.2	23	24.2	51.3
Cabaal	Males	6.2	2	42.2	41.5	8
School	Females	2.1	1.1	32.3	55.8	8.6
Callana	Males	1.1	0	4.2	3.6	91.1
College	Females	0.2	0.4	5.5	6.1	87.8
In Your	Males	35.9	12.3	28.5	19.1	4.2
Own Time	Females	18.6	10.9	29.7	31.1	9.7

2.4 Perceived participation levels in games/matches

When asked about the frequency with which they get to participate in games/matches, 84.1% of participants indicated that they get to play **most of the time in games/matches**, with 9.9% reporting participating **some of the time**. In addition, 2.3% indicated that they **never** get to play, with 3.7% reporting that they **don't get much time to play**. There was little gender variation in these responses.

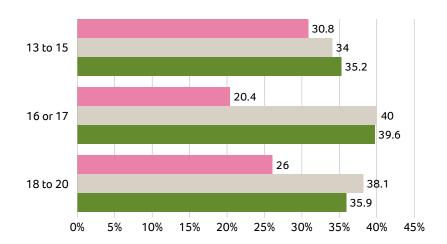
2.5 Muscle strengthening for Gaelic games

Participants were asked about the number of days that they had participated in muscle strengthening activities for Gaelic games during the last seven days. Overall, the average participation in muscle strengthening activity was 3.1 days per week, 3.5 days for males and 2.7 days for females (p < .05, d = .424). In terms of the proportions engaging in muscle strengthening by age band, there was a significant difference statistically (Chi square = 56.69, $_{df}4$, p < .001), however the magnitude of the difference was small (Cramer's V = .08).

Figure 15 displays the proportions by age band reporting engagement in muscle strengthening activity (0 days, one or two days; and three-plus days). Youth PA guidelines recommend that children and adolescents incorporate at least three muscle and bone strengthening activities per week into their daily PA. Overall, approximately one third of participants reported muscle strengthening activities at least three times per week with a small-sized difference across age bands. The proportion of those reporting no days reduced from ages 13-15 to 16 or 17.



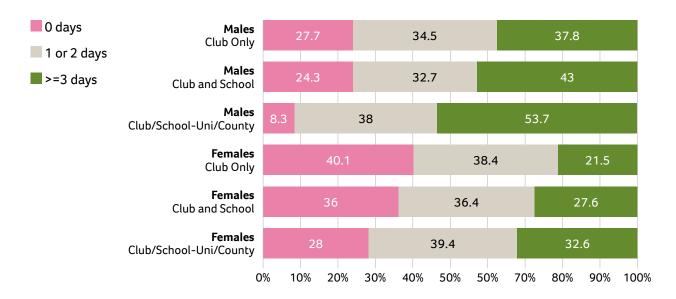
>=3 days



We further explored the relationship between the extent of Gaelic games involvement (Club only etc.) and the weekly frequency of engagement in muscle strengthening activity, hypothesising that greater involvement would likely be associated with more frequent activity. Figure 16 displays that for both males and females, this hypothesis was supported, particularly for males. As can be seen, 27.7% of Club only participating males reported 0 days of muscle strengthening activities, compared to just 8.3% of males who played for Club, School/University, and inter-County level. Results for females were not as acute.

However, for both males and females, the proportions reporting no activity decreased with extent of involvement, and the proportions reporting participating in muscle strengthening activity ≥ 3 times per week increased with extent of Gaelic games involvement.



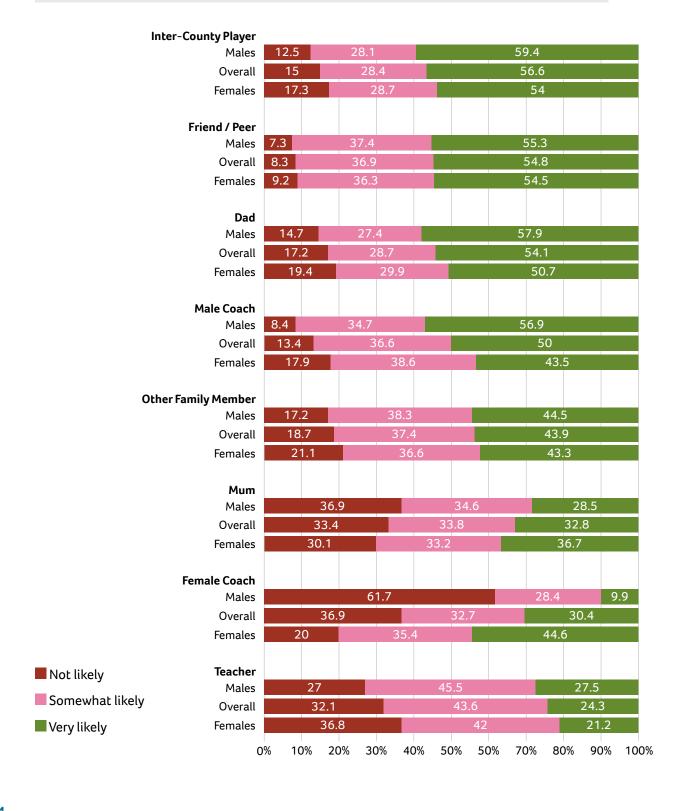


2.6 Sporting role models

Participants were next asked to rate how likely they would be to view various figures as sporting role models, with three possible response options: 'Not Likely', 'Somewhat Likely', and 'Very Likely'. Results are displayed in Figure 17. The most commonly cited 'very likely' role model was an **inter-County Player** (56.6%). **Friends** and **Dads** were popular role models, followed by **Male Coaches**. **Female Coaches** and **Teachers** were the lowest rated role models for the group overall.

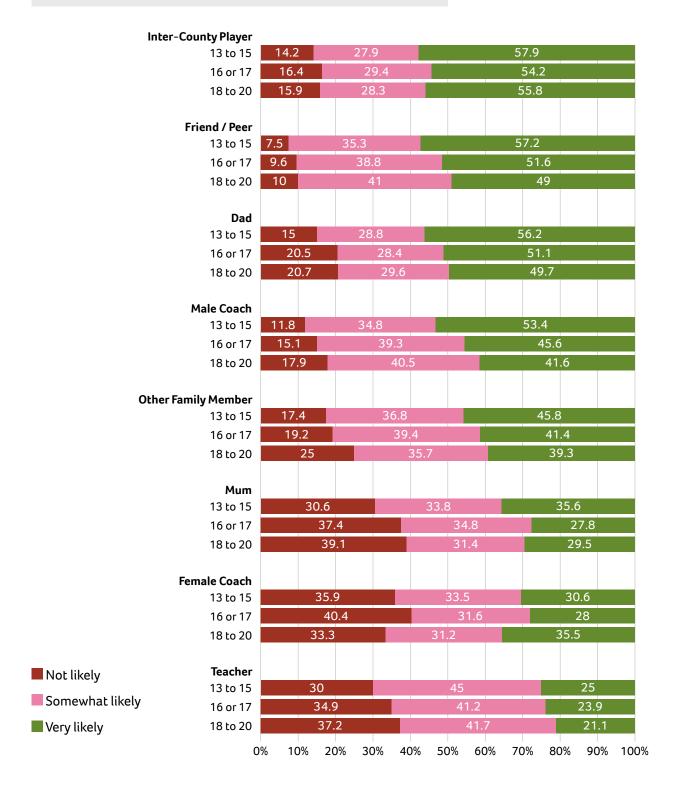
Male participants more favourably rated their **Dad** (57.9% v 50.7%), **Teachers** (27.5% v 21.2%), **inter-County Players** (59.4% v 54%), and **Male Coaches** (56.9% v 43.5%) as role models for their sports participation than females. Females were more likely to rate their **Mum** (36.7% v 28.5%) and **Female Coaches** (44.6% v 9.9%) as role models. There were little differences in ratings of **Friends** (55.3% v 54.5%) and **Other Family Members** (44.5% v 43.3%) between males and females.

FIGURE 17: Likelihood of identification as sporting role models (all participants, males only, and females only)



A similar pattern of results (in terms of the ordering of role model influence) was observed when analysed by age bands. Although there appears to be some differences for age among role models, none of these differences were statistically meaningful.

FIGURE 18: Likelihood of identification as sporting role models (by age bands)





SECTION 3

What sport/physical activities are youth participants involved in outside of Gaelic games?

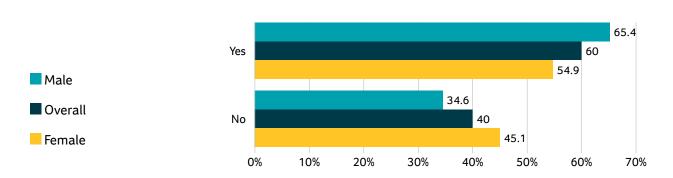
As well as participation in multiple Gaelic games codes, participants were also asked about their participation in non-Gaelic games sports and other types of physical activity.

3.1 Current participation in non-Gaelic games sports

Overall, 60% of participants reported that they currently participate in a sport other than Gaelic games, with a greater proportion of males (65.4%) than females (54.9%) reporting doing so (small statistical effect).



FIGURE 19: Current participation in non-Gaelic games sports

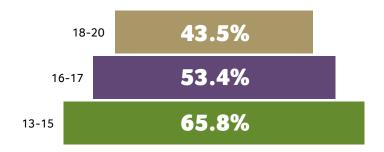


There was no substantive difference in these findings by place of residence (59.5% and 61.1% of those living in rural/urban settings respectively reported current involvement in another sport).

Please note, that what follows (Figures 20 and 21) represents responses that are restricted to this sub-sample of the study who reported involvement in any other non-Gaelic games activity (n = 2912).

As displayed in Figure 20, the proportion of participants reporting playing other sports on a weekly basis decreased with age. Among those aged 13 to 15 years old, 65.8% reported at least weekly involvement in another sport. This decreased to 43.5% among 18 to 20 year olds⁶.

FIGURE 20: Proportion of participants reporting current participation in non-Gaelic games by age band



Of those reporting current involvement in any other sport (see Figure 21), the most popular was **Soccer** (84.6%). **Basketball** (55.2%) and **Athletics** (54.5%) were the next most popular sports, followed by **Cycling** (41.2%) and **Rugby** (40.6%).

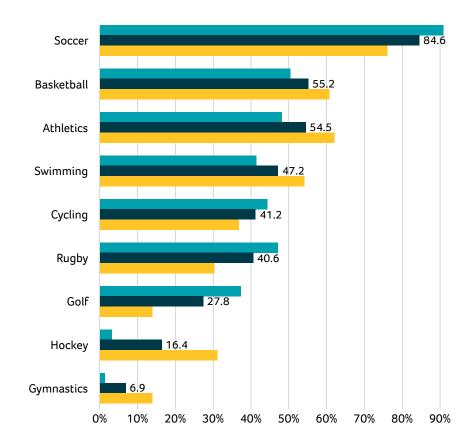
There was a difference between male and female participants regarding the sports participated in. Males were more likely to participate in **Cycling**, **Golf**, **Rugby**, and **Soccer** than females, whereas females were more likely to participate in **Athletics**, **Basketball**, **Gymnastics**, **Hockey**, and **Swimming** than males. The statistical effect sizes for these differences were small (.11 < Cramer's V < .17), although for **Hockey** (V = .27) and **Gymnastics** (V = .25) a substantively greater proportion of females than males reported participation, with an effect size approaching medium.

^{6.} There is a statistically significant effect for this difference: Chi² = 123.50, $_{df}2$, p < .001, Cramer's V = .16.

FIGURE 21: Current Participation in Non-Gaelic games.⁷

■ Males
■ Overall

Females





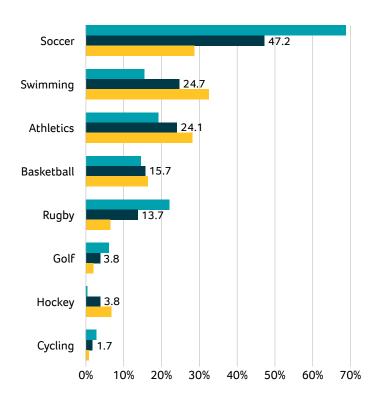
^{7.} Represents the proportion of those who reported playing ANY other sport, rather than the proportion of the whole sample. Results are ordered high to low according to displayed overall proportion.

3.2 Previous participation in non-Gaelic games sports

Over half (55%) of participants who reported no current involvement in non-Gaelic games reported previous involvement in other sports, 59% of males and 52% of females. There was no substantive difference in these findings by place of residence. The results that follow (Figure 22 and Table 4) detail the responses from those participants who reported previously playing sports other than Gaelic games.

Participants were most likely to identify **Soccer** as a sport that they previously played, with 47.2% of total participants reporting having done so. This was much more common in males than females (69% v 29%). **Swimming** (24.7%) and **Athletics** (24.1%) were also frequently reported previous sports, although in these cases both are more common among females than males. In contrast, males were also more likely to have previously played **Rugby** than females.







For those participants who previously participated in non-Gaelic games sports, but no longer do, the average age for when they stopped their participation in other sports was 12.7 years. The average age for male participants was slightly higher than females, with males stopping at an average age of 13.1 years and females at an average age of 12.3 years.

3.3 Reasons for stopping participation

The most common response for both males (72%) and females (60%) for stopping playing other sports was I preferred playing Gaelic games (65%). Time-related concerns were prominent reasons for stopping playing other sports (not enough time/training times clashed), followed by losing interest, which was equally common for males and females (33.2%). The only notable gender difference was that 11.6% of females indicated they preferred team sports compared to 5.1% of males.



 TABLE 4: Reasons for stopping participation in non-Gaelic games sports

	Overall % (n)	Male % (n)	Female % (n)
I preferred playing Gaelic games	65.4 (700)	71.6 (352)	60.1 (348)
Not enough time	52.5 (562)	53.4 (262)	51.8 (300)
Training times clashed	43.6 (466)	45.2 (222)	42.1 (244)
I lost interest	33.2 (355)	33.2 (163)	33.2 (192)
I was not having fun	24.6 (263)	23.8 (117)	25.2 (146)
Friends stopped playing	10.9 (117)	9.6 (47)	12.2 (70)
Poor location	8.9 (94)	8.6 (43)	8.8 (51)
I did not like the coach	9.2 (98)	9 (44)	9.3 (54)
Focus on studies	7.6 (81)	6.7 (33)	8.3 (48)
I preferred team sports	8.6 (92)	5.1 (25)	11.6 (67)
I got injured	6.6 (71)	5.9 (29)	7.3 (42)
It was too competitive	4.3 (46)	2.6 (13)	5.7 (33)
My parents couldn't afford the cost	2.3 (25)	1 (5)	3.5 (20)
I felt pressured to leave	2.1 (22)	2.6 (13)	1.6 (9)

3.4 Overall physical activity

World Health Organisation PA guidelines suggest that youth should engage in moderate-to-vigorous intensity PA of mostly aerobics for at least 60 minutes per day throughout the week. Additionally, youth should incorporate vigorous-intensity aerobic activities, while also engaging in muscle and bone strengthening activity at least 3 days a week. With this in mind, participants were asked to indicate on how many days in the past week they engaged in moderate to vigorous PA for at least 60 minutes, inclusive of organised sport (see Table 5). The average number of days of participation in other activities for at least 60 minutes was 5.7 days per week. Data indicate that 23.6% of males and 17.7% of females met the recommended threshold for PA.

TABLE 5: Past week number of days of participation in at least 60 minutes of physical activity per day

Number of Days	Overall % (n)	Male % (n)	Female % (n)
0	1.2 (38)	1.3 (21)	1 (17)
1	3.1 (101)	2.2 (35)	3.9 (66)
2	7.7 (254)	7.1 (112)	8.4 (142)
3	14 (461)	14.4 (228)	13.7 (233)
4	17.2 (570)	16.8 (269)	17.8 (301)
5	21.2 (696)	18.8 (300)	23.4 (396)
6	14.9 (489)	15.8 (251)	14.1 (238)
7	20.7 (679)	23.6 (377)	17.7 (302)

Over two thirds (69%) of participants indicated that they engage in PA outside of their participation in organised sport with a small-sized statistical difference for gender (Cramer's V = .10).

Those participants who indicated that they participated in other physical activity, were asked to be specific about that activity. Results (see Table 6) are restricted to the sub-sample who indicated that they did participate in other activities.

TABLE 6: Participation in other physical activities at least twice per week

	Overall % (n)	Male % (n)	Female % (n)	Cramer's V
Running	52 (1396)	57.1 (752)	47.0 (644)	.119
Walking	77.3 (2155)	72.5 (908)	81.2 (1247)	.175
Cycling	22.4 (514)	32.7 (375)	12.1 (139)	.280
Dancing	10 (204)	0.2 (15)	16.5 (189)	.349
Weightlifting	31.4 (724)	45.8 (544)	16.1 (180)	.377

The Cramer's V values (effect sizes) indicate that for cycling, dancing, and weightlifting, the gender differences were noteworthy.



SECTION 4

What other roles are youth participants involved in with their Club?

As well as other sporting and physical activites, participants were also asked about other roles that they might hold, currently or in the future, within their GAA, LGFA, and/or Camogie Clubs.

4.1 Current roles in the Club

Not surprisingly, given the age profile of participants, a minority reported holding other roles within their Club (24.5%), though a higher proportion of females (28%) than males (21%) reported doing so.

Of those who reported having another role, females were were more likely to be involved in coaching and refereeing than males (see Table 7).

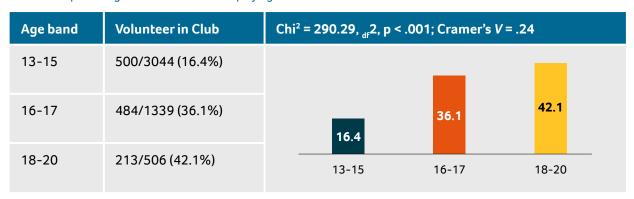


TABLE 7: Current non-playing roles in the Club8

	Overall % (n)	Male % (n)	Female % (n)
Coach	9.0% (455)	6.7% (164)	11.2% (291)
Referee	6.6% (331)	3.7% (90)	9.3% (241)
Volunteer	14.7% (740)	12.9% (318)	16.2% (422)

When analysed by age, older participants reported being more likely to volunteer for other roles within the Club (42.1% aged $18-20 \, v$ 16.4% aged 13-15). Of note, there was a small-sized (in statistical terms) difference in these findings by place of residence (22.6% of those reporting living in a rural setting, 26.8% of those living in a town, and 31.9% of those reporting living in a city indicated having other roles within the Club).

TABLE 8: Impact of age band on current non-playing Roles in the Club



4.2 Future roles in the Club

Regarding having a role in their Club in the future, 56% of participants indicated that they would like to take on non-playing roles, 55.6% of males and 56.2% of females.

The most commonly selected role was **Coaching** (43.7%), followed by engagement in the **Healthy Club Programme** (20.3%), and for females more than males, **Refereeing** (see Table 9).

TABLE 9: Future non-playing roles in the Club

	Overall % (n)	Male % (n)	Female % (n)
Coach	43.7% (2207)	44.3% (1086)	43.1% (1121)
Referee	12.5% (629)	8.7% (214)	16.0% (415)
Club Leadership	16.5% (835)	16.4% (401)	16.7% (434)
Healthy Club	20.3% (1025)	20.8% (509)	19.8% (516)

^{8.} These values relate to those who endorsed having a current role in the Club (24.5% of total sample).



SECTION 5

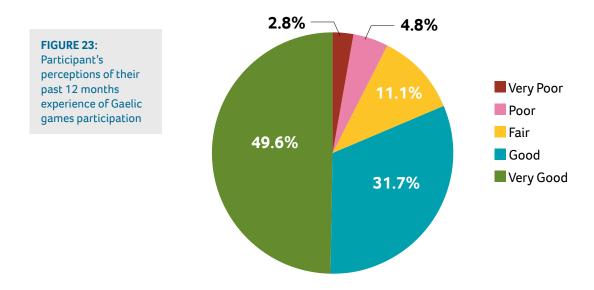
What is the general, and coaching-specific experience of youth participants in Gaelic games?

Participants were also asked to rate their experiences of participation and the coaching environment.

5.1 Gaelic games experience rating

Participants were asked to rate their past 12-month Gaelic games experience on a scale from 1 to 5, with 1 = very poor to 5 = very good. Overall, 81.3% of respondents rated their experience as **very good or good** compared to just 7.6% rating it as **poor or very poor** with little difference between males and females.





5.2 Gaelic games Coach Autonomy Supportive Behaviours

Autonomy supportive behaviours in coaching refers to the coaches' ability to take players perspectives into account, acknowledging other's feelings, and providing information and opportunities for choice while minimising the use of pressures, demands, or consequences. To assess the coaching environment, participants were presented with five statements regarding their coach, and their autonomy supportive behaviours.

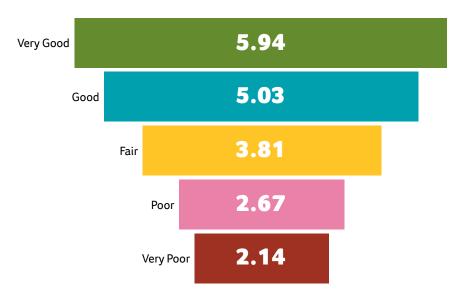
Participants were asked to rank how true they view the statement to be on a 1 to 7 scale, with 1 = 'strongly disagree' and 7 = 'strongly agree'. Scores across all items were averaged to give an overall mean coaching environment score, with higher scores reflecting higher ratings. Across all five items, the average score was 5.15 (SD = 1.71), (5.23 males v 5.07 females, p = .002), indicating a strong score in favour of coaches displaying autonomy supportive behaviours. Of note, the Cronbach's alpha value for all five items was α = .94, suggesting very good internal consistency of these items.

TABLE 10: Average coaching environment score by all participants, male respondents only, and participants respondents only

	Overall	Males	Females	Cohen's d
I feel that my coach has provided me with choices and options	5.27	5.37	5.17	d=0.10
I feel understood by my coach	5.24	5.36	5.15	d=0.11
My coach conveys confidence in my ability to make changes	5.34	5.44	5.26	d=.096
My coach encourages me to ask questions	5.14	5.20	5.11	d=.049
My coach tries to understand how I see things before suggesting a new way to do things	4.73	4.81	4.66	d=.073

Participants who rated their Gaelic games experience as **very good** had significantly higher ratings for their coaching experience, than those players who rated their Gaelic games experience as **very poor** (see Figure 24). The statistical effect size for this comparison was substantial.

FIGURE 24: Comparison of reported past 12-month experience in Gaelic games (Very Poor to Very Good) with Coaching Experience score (2.14 - 5.94)







SECTION 6

What are the future intentions of youth participants in Gaelic games?

Having considered current and previous engagement in Gaelic games as well as other sports and physical activities, participants were asked about their future intentions towards participating in Gaelic games.

6.1 Future Gaelic games participation intentions

Overwhelmingly, participants indicated that they intend to continue participating in Gaelic games (96%, n = 4,457), with no substantive difference between males (96.8%, n = 2,210) and females (95.9%, n = 2,247).



When asked why they intended to continue participating, I enjoy being competitive and my friends are playing were the most common reasons cited (see Table 11). This was in the overall sample, as well as individually for males and females.

The next most common reason for girls was **getting on well with teammates** (26.4%). For males, the next most common reason was **being good at Gaelic games** (28.2%), followed by **I would like to play inter-County** (27.8%). Health reasons were more prominent for females than males, while an ambition to improve and having the opportunity to play in Croke Park were equally relevant for males and females.

TABLE 11: Reasons for continued participation in Gaelic games. The top three reasons are shaded.

	Overall % (n)	Males % (n)	Females % (n)
I enjoy being competitive	37.4 (1887)	40.2 (984)	34.7 (903)
My friends are playing	31.6 (1594)	32.2 (788)	31.0 (806)
I am good at Gaelic games	26.2 (1323)	28.2 (691)	24.3 (632)
I would like to play inter-County	24.8 (1254)	27.8 (682)	22.0 (572)
I get on well with my teammates	23.8 (1201)	21.0 (514)	26.4 (687)
I want to be successful with my Club	22.5 (1135)	25.4 (622)	19.7 (513)
I want to stay healthy	19.1 (962)	16.6 (407)	21.3 (555)
I am motivated to improve	17.0 (859)	18.3 (449)	15.8 (410)
I want to play in Croke Park	12.9 (649)	13.6 (333)	12.2 (316)
I get lots of opportunity to play games	12.0 (607)	12.0 (295)	12.0 (312)
The standard of coaching is good	6.8 (343)	7.1 (174)	6.5 (169)
It helps me relieve stress	6.3 (319)	3.9 (96)	8.6 (223)
My parents want me to stay playing	6.0 (304)	5.0 (123)	7.0 (181)
My Club is successful	5.6 (284)	5.2 (127)	6.0 (157)
I get on well with my coach	5.5 (279)	5.6 (138)	5.4 (141)
The facilities are good	2.9 (148)	3.4 (83)	2.5 (65)
The programming/schedule of games is good	1.2 (59)	1.6 (38)	0.8 (21)

When examined by the different age cohorts, it was notable that there was general commonality in response. However, there was a noteworthy increase in the proportion of participants aged 18-20 reporting that they 'want to be successful with my Club' and 'want to stay healthy'.

While the overall numbers are low, the proportion of respondents identifying that participation in Gaelic games 'helps me relieve stress' is an important finding in determining their future involvement in Gaelic games.

TABLE 12: Reasons for continued participation in Gaelic games by age band. The top three reasons are shaded.

	Overall % (n)	13 to 15 % (n)	16 or 17 % (n)	18 to 20 % (n)
I enjoy being competitive	37.4 (1887)	37.2 (1168)	39.0 (541)	33.8 (178)
My friends are playing	31.6 (1594)	34.5 (1082)	28.1 (390)	23.1 (122)
I am good at Gaelic games	26.2 (1323)	26.8 (841)	26.1 (362)	22.8 (120)
I would like to play inter-County	24.8 (1254)	28.1 (881)	21.7 (301)	13.7 (72)
I get on well with my teammates	23.8 (1201)	23.8 (747)	24.2 (336)	22.4 (118)
I want to be successful with my Club	22.5 (1135)	21.5 (675)	23.3 (323)	26.0 (137)
I want to stay healthy	19.1 (962)	16.9 (529)	20.9 (289)	27.3 (144)
I am motivated to improve	17.0 (859)	16.2 (508)	18.9 (262)	16.9 (89)
I want to play in Croke Park	12.9 (649)	14.6 (458)	10.3 (143)	9.1 (48)
I get lots of opportunity to play games	12.0 (607)	12.8 (401)	11.3 (157)	9.3 (49)
The standard of coaching is good	6.8 (343)	6.7 (211)	6.8 (94)	7.2 (38)
It helps me relieve stress	6.3 (319)	3.6 (114)	9.3 (129)	14.4 (76)
My parents want me to stay playing	6.0 (304)	6.0 (189)	6.1 (84)	5.9 (31)
My Club is successful	5.6 (284)	5.5 (172)	5.4 (75)	7.0 (37)
I get on well with my coach	5.5 (279)	6.3 (198)	4.5 (62)	3.6 (19)
The facilities are good	2.9 (148)	3.1 (98)	2.7 (37)	2.5 (13)
The programming/schedule of games is good	1.2 (59)	1.4 (45)	0.9 (12)	0.4 (2)

Finally, we also decided to analyse whether the intention to continue participating in Gaelic games was in any way related to the coaching environment experience identified in Section 5. Results indicated that, while the vast majority of participants reported an intention to continue playing Gaelic games, there was a notable, and statistically significant difference between those suggesting continued playing intention (Mean = 5.25 [SD = 1.63]) compared to those not (Mean = 2.70 [SD = 1.75]), on Coaching Experience score (t_{4626} = 20.02, p < .001), i.e., those participants who reported that they intended to continue participating reported their coaching experience higher than those who reported that they are not going to continue participating in Gaelic games.



What are the implications of this study for research, policy, and practice?

7.1 Introduction

This section summarises findings from the study and considers the implications of those findings in terms of research, and applied impacts for the GAA, Camogie Association, and LGFA.

RESEARCH FOR GAELIC GAMES

7.2 Monitoring participation and incorporation of views of players for development programmes.

The GAA, LGFA, and Camogie Associations should continue to monitor participation across Gaelic games to further understand the views of young people, and ensure that such views are incorporated into player, coach, and volunteer development programmes.



RESEARCH RECOMMENDATION: Develop a longitudinal surveillance project to further understand participation and drop out across adolescence using qualitative and quantitative methods to ultimately enhance and maintain participation for all (males and females) in Gaelic games across the lifespan.

7.3 The experience of playing Gaelic games: past, present, and future

The findings concerning the relationship between the coach/coaching environment and past 12-month player satisfaction were noteworthy. Higher scores on coaching autonomy supportive behaviours (such as taking their players perspectives into account, acknowledging other's feelings, and providing information and opportunities for choice while minimising the use of pressures, demands, or consequences) were related to higher scores on past 12-month experience of Gaelic games, with large statistical effect sizes. The Coaching and Coach Education in Gaelic games baseline report (Horgan, *et al.*, 2021) provides an overview of coaching and coaches across Gaelic games. However, while the findings of these studies serve as a snapshot of the impact of coach behaviour on player enjoyment and participation, we recommend that further research is conducted in this area, to better inform coaching and coach development programmes.

RESEARCH RECOMMENDATION: Conduct further research on the coaching environment created by coaches and experienced by players to better understand which elements contribute to a positive experience in Gaelic Games.

7.4 Develop a position on multi-sport participation and physical activity behaviour among youth Gaelic games participants, potentially in partnership with other sporting organisations

Alongside significant involvement in Gaelic games, many participants reported that they were also heavily involved in participating in non-Gaelic games sports and other physical activities. Overall, 60% of participants reported that they currently participate in a sport other than Gaelic games. Of those who currently did not participate in other sports, over half (55%) reported that they had previously participated in such sports. It is clear from this research, and other research in the adolescent area (e.g., Woods et al., 2022) that there is a significant need to coordinate sport, physical activity, and physical education provision. Statutory bodies, such as Sport Ireland and Sport



Northern Ireland, educational institutions, health agencies, as well as governing bodies of sport have a role to play in ensuring that young people are supported in their sport and physical activity journey.

RESEARCH RECOMMENDATION: Develop a research project to quantify and understand the nature of multi-sport participation and physical activity behaviour among youth Gaelic Games participants, potentially in partnership with other sporting organisations.

APPLIED IMPACTS FOR GAELIC GAMES

7.5 Beginning of the Gaelic games journey

The finding that young people reported that they began playing Gaelic games on average at age 6 illustrates the importance of both Club nursery programmes and early primary school involvement. Gaelic games in the primary school setting has been the subject of a separate study, with several emerging recommendations (Bowles, et al., 2023). However, despite the apparent growing interest in Club nurseries, there is currently no policy framework in place for this area. The Gaelic games Player Development Pathway highlights the importance of an early start to participating in our games. Therefore, in an era where more and more Clubs are providing nursery programmes for the pre-Go Games age cohorts, the absence of such a policy has the potential to negatively impact on the development of young players, both male and female.

POLICY RECOMMENDATION: Consult on, develop, launch, and implement a Club nursery policy.

7.6 Youth participation in Gaelic games: what does it look like?

The reasons presented for playing and continuing to play were positive from the point of view of the three Gaelic games Associations. That so many young players play for health, enjoyment, and social reasons, challenges coaches, volunteers, and officials to ensure that these issues are central to overall Club involvement and engagement, and that they are key components of each training session.

The findings also illustrate that young participants dedicate a considerable amount of time to participating in Gaelic games. Players often participate for multiple codes and teams across multiple units. On the plus side, this ensures that players can have a rich and varied experience of participation in terms of types of games (and game contexts) and exposure to a variety of coaches and coaching methodologies. However, potential difficulties may arise. Organisationally trying to provide for multiple codes, units, and age groups can be extremely difficult. Games programmes at all levels have expanded providing leagues and championships at local, regional, county, and cross-county levels. Trying to provide such a broad programme of activities while ensuring that players have opportunities for rest and recovery is challenging. Ensuring that there is an overarching body to monitor this programme seems important in terms of player welfare and sustainability.

POLICY RECOMMENDATION: Establish best practice guidelines around developing and delivering a coordinated fixtures programme to meet the needs of youth participants across the Club, school, and county setting.



7.7 Multiple teams and sessions per week

The Gaelic games Player Pathway and Sports Science 2030 Vision (Lane *et al.*, 2023) identifies a series of Athletic Development Principles and provides a framework for the application of sports science across Gaelic games of which coaches, players, officials, and parents should be mindful:

- Be aware of the players' total workload, across all sessions. This could include what the player is
 doing with the Club/school/county and any other sports/activities and organisations they may be
 involved with.
- Provide guidance and support to players who are over trained and under trained.
- Be aware of spikes in the player's workloads. This can increase their risk of injury.
- Taper the player's workload in the lead in to important games as this may help optimise performance.
- Avoid:
 - Completing two high intensity activities in the one day;
 - Playing two full games within 60 hours; and
 - Completing high intensity activities on two consecutive days.
- Encourage windows and opportunities for unstructured free play activities during the players week.
- Encourage a minimum of one day off from structured activity per week.
- Help players to understand these workload principles and encourage them to communicate with the coach.
- Encourage involvement in a variety of activities/sports. As the player gets older, the number of
 activities will decrease. Coaches should work together to manage activity across different sports/
 teams using these workload principles.

PRACTICE RECOMMENDATION: Disseminate the Gaelic games Player, Coach Education Pathway and Sports Science Framework to support Clubs, counties, and schools as they engage with players and coaches across the lifespan.



7.8 Health benefits of physical and muscle strengthening activities

Muscle strengthening activities were a further significant element of the total physical activity of participants within the 'sport' domain. Overall, the average participation in muscle strengthening activity was 3.1 days per week, with approximately one third of participants reporting engagement in muscle strengthening activities at least three times per week. Interestingly, the proportion of those reporting no days of muscle strengthening per week reduced from ages 13-15 to 16-17. For both males and females, the proportions reporting no muscle strengthening activity also decreased with increasing involvement in Gaelic games. At the same time, the proportions reporting that they participated in muscle strengthening activity ≥ 3 times per week increased with extent of Gaelic games involvement. This is intuitive as each coach and/or playing group would have an individual strengthening aspiration or requirement. However, as with scheduling of games, it seems important that there would be a player-focussed and holistic view taken of these activities, both from the point of view of player welfare, but also in terms of optimising performance (and minimising fatigue and burnout).

PRACTICE RECOMMENDATION: Develop educational content to ensure all youth participants are engaging in safe and appropriate physical activity and muscle strengthening activity through Gaelic games to deliver health benefits.

7.9 Sporting role models: who are they?

Intercounty players were the most frequently identified sporting role models by participants. Other key role models related to friends, dads, and male coaches. However, male respondents were unlikely to endorse female authority figures as sporting role models. We believe this is likely because of a lack of exposure to female figures in male sports. It is possible that with a greater representation of female role models in these areas, these perceptions of male respondents could change. Findings and recommendations from the Coaching and Coach Education in Gaelic Games: A Female Coach Perspective study (Donnelly *et al.*, 2023) and programmes such as the Female Coach Mentorship programme currently underway provide additional avenues for female coaches and may result in a greater representation of female role models for all young participants in Gaelic games.

PRACTICE RECOMMENDATION: Build greater diversity into coaching in youth Gaelic games to include enhanced representation of females, and intercounty players.

7.10 Single code/Dual code

While the participants in this study reported playing multiple Gaelic games codes, there is a slight concern in the number of players reporting that they play Hurling or Camogie only. For both male and female participants, more than 40% reported that they played Gaelic football only; another 40%+ were dual Hurlers and Gaelic footballers, with only 9.6% (male) and 13.3% (female) reporting as Hurlers/Camogie players only. This might be a function of the make-up of this particular cohort of respondents, or it may reflect historical and/or accessibility issues (e.g., membership of rural or remote Gaelic football-only Clubs). The advisory group do not claim that this cohort provide a representative sample of all young Gaelic games players, however, the overall response rate was high and, statistically, such a high response rate could be thought of as indicative of the overall population. Additional research is required to establish further details on the Hurling/Camogie playing population. Use of the Foireann membership system can provide for an analysis of female participation, however, in GAA terms this can be more difficult as members are not required to indicate whether they are Hurlers, footballers, or dual players.

Beyond this analysis, there is a need to ensure that Hurling/Camogie is sustained in existing areas and promoted in those areas where expansion of the game is possible. The GAA Strategic Plan - Aóntas 2026 - identifies actions towards the development of Hurling, including:

- Hurling will grow exponentially, arising from an increased investment in the Division 2 and 3 Hurling counties.
- Invest additional resources to safeguard and grow the game of Hurling.
- Explore ways to maximise the value of Hurling and Camogie's Intangible Cultural Heritage designation by UNESCO.

PRACTICE RECOMMENDATION: Prioritise actions proposed in Aóntas 2026 to promote Hurling and Camogie among youth participants.

7.11 Gender and youth participation in Gaelic Games

Participants were evenly split between males and females, with the ages of participants biased in favour of younger players. Of note, there were few substantive gender differences in response profiles. However, there were notable exceptions in responses to role models, where, perhaps expectedly due to likely exposure, a substantively greater proportion of males than females reported male coaches as role models, with the reverse true for females and female coaches. In addition, female participants reported that they began to participate in Gaelic games later, engaged in independent practice, and engaged in less muscle strengthening activities than their male peers. In addition, fewer female participants reported participating at inter-County level. These findings may indicate that female participants were provided with fewer opportunities to participate in such activities. Therefore, a nuanced approach to player development for male and female participants is required.

PRACTICE RECOMMENDATION: Continuously apply a gender lens to coaching and games development to ensure that male and female youth participants have equal opportunities to begin, develop, and maintain their participation and performance in Gaelic games.





SECTION 8

Youth Participation Study Research Team

Dr. Peter Horgan

Dr. Peter Horgan is the Strategy, Insights, and Innovation Manager for the GAA, with responsibility to lead, develop, and implement a systematic approach to policy development and research within the Association. Previously, he was the Education Officer, with responsibility for the development and implementation of the GAA coach and coach developer education programmes. Previously, he has coached at Club, university, and inter-County academy level across Hurling, Camogie, Gaelic football, and Ladies Gaelic football.

Dr. Paul Donnelly

Dr Paul Donnelly is Lecturer in Sports Development and Coaching at the University of Ulster's School of Sport in Belfast. He is also currently the Chair of the Camogie Association National Development Plan Implementation Committee and Vice-Chair of Play NI, an agency with responsibility for the development and promotion of children and young people's play. From the St Paul's Club in Belfast, Paul is a former Antrim Senior Hurler, and is currently manager of the Down Senior Camogie

Padraig McGourty

Padraig McGourty is a Lecturer in Statistics and Information Technology in the Department of Health and Nutritional Sciences, at the Atlantic Technological University, Sligo. Padraig is currently Chairperson of the Connacht GAA Games Development Committee and a member of GAA's National Games Development Committee. Padraig is a qualified GAA coach developer and has a keen research interest in coach education, coach development and coach mentoring.

Kevin Donoghue

Kevin Donoghue is a senior student at Syracuse University in New York, USA, currently studying Sports Management in the David B. Falk College of Sport and Human Dynamics and Public Communications in the S.I. Newhouse School of Public Communications. Kevin joined the GAA Coaching and Games Development department in September 2022 and assisted manager Peter Horgan in ongoing research projects over the course of the Fall semester.

Dr. Aoife Lane

Dr Aoife Lane is Head of Department of Sport and Health Sciences in the Technological University of the Shannon (TUS), Athlone. Aoife is a founder of the Women's Gaelic Players Association and current Chair of the Gaelic Games Sports Science Working Group. Aoife's research focuses on sport, health and exercise in women and girls, working with partners internal and external to TUS. Aoife is Lead of the SHE Research Group in TUS Athlone, which aims to bridge the gender data gap in sport, health, and exercise science research.

Dr. Wesley O'Brien

Dr. Wesley O'Brien, is a Senior Lecturer in Physical Education and Coaching Science, working in the School of Education, at University College Cork (UCC). He is currently supervising postgraduate research in the fields of physical education, wellbeing, physical activity, physical literacy, and sport participation. Wesley is an advocate for increasing physical literacy through projects such as Y-PATH, Sport for Life, Project Spraoi, Gaelic for Girls, and Project FLAME. In 2023, Wesley is coaching the Cork Senior Camogie and the UCC Fitzgibbon Cup teams.

Dr. Michael McKay

Dr Michael McKay is based in Ulster University acting in the role of 'Knowledge Broker' for the Northern Ireland Public Health Research Network. Michael has previously worked in several different Universities including Liverpool John Moores, the University of Liverpool, and the Royal College of Surgeons in Ireland. Among other accomplishments, Michael developed and oversaw the evaluation of a classroom-based alcohol education intervention for secondary school children, in a sample of over 12,000 schoolchildren in Northern Ireland and Scotland. Michael has over 100 peer-reviewed publications in health and developmental psychology, and in 2023 was part of the Derry Senior Camogie backroom team.

Elizabeth Myers

Elizabeth Myers is a graduate student at the State University of New York (SUNY) at Oswego in New York, USA, currently studying for her master's degree in strategic communications. Previously, Elizabeth graduated with a BA in Human Development also from SUNY Oswego. Elizabeth joined the GAA Coaching and Games Development department in June 2023 and assisted manager Peter Horgan in ongoing research projects for the 2023 Fall semester. She has a keen interest in youth participation as she played Gaelic Football with St. Brendan's GAA in New York until she reached u14's then played for Rockland GAA in New York until u18's, she also joined Raheny GAA while living in Dublin playing on the Junior A ladies team. As well as playing soccer growing up for numerous clubs, Elizabeth was a collegiate soccer player for SUNY Oswego.

Dr. Margaret Lawler Dr Margaret Lawler is an Assistant Professor of Psychology in the School of Medicine, Trinity College Dublin, and a Chartered Health Psychologist of the Psychological Society of Ireland. Margaret also serves as an editorial board member for the International Journal of Behavioral Nutrition and Physical Activity. Her research focuses on adolescents' health, wellbeing, and behaviour change with an emphasis on physical activity participation. She is particularly interested in the application of novel interventions (e.g., mindfulness, motivational interviewing, social prescribing) to promote health behaviour change and psychological well-being among youth. Margaret was recently awarded an inaugural TCD Medicine Seed Award (2022) and Irish Research Council New Foundations Award (2022) for her research exploring the suitability and acceptability of social prescribing for adolescents and young adults with chronic diseases. **Niamh Fogarty** Niamh Fogarty is a postgraduate research student in the Department of Sport and Health Sciences, in TUS Athlone. Previously, Niamh graduated with a BSc (Hons) in Athletic Rehabilitation Therapy. As an enthusiastic sportsperson with a passion for exercise and health, her current research focuses on the female athlete and the menstrual cycle. Outside of academia, she has had the opportunity to work as the lead athletic therapist with several Clubs and Inter-County teams, including Ballinamere GAA, Westmeath U16 LGFA, and Westmeath Minor LGFA. **James Heffernan** James Heffernan is the current Youth Development Coordinator with the Camogie Association with remits for projects such as Development Squad pathway, John West Féile and the Nancy Murray Cup Competition. James has over nearly 20 years' experience working across all codes of the Gaelic Games family along with being a coach developer and coach developer assessor. From and education perspective, James has a degree in Health Related Fitness from University of Limerick. William Harmon William Harmon is the Development Officer with specific remit for coach education in the LGFA. William has specific responsibility for the development of the LGFA coach and coach developer programmes. William has recently completed research into communities of practice in Gaelic games as part of his MSc at the Munster Technological University (MTU). As a coach, William has coached at all age grades and levels at Club and Inter County level. William has also served as the Coaching Officer for his Club, Firies, over the last 3 years.

SECTION 9 References

Alberga, A.S., Sigal, R.J., Goldfield, G., Prud'Homme, D. and Kenny, G.P., 2012. Overweight and obese teenagers: why is adolescence a critical period? *Pediatric Obesity*, 7(4), pp.261-273.

Aubert, S., Barnes, J.D., Aguilar-Farias, N., Cardon, G., Chang, C.K., Nyström, C.D., Demetriou, Y., Edwards, L., Emeljanovas, A., Gába, A. and Huang, W.Y., 2018. Report card grades on the physical activity of children and youth comparing 30 very high human development index countries. *Journal of Physical Activity and Health*, 15(s2), pp.S298-S314.

Australian Sports Commission, 2016. AusPlay: Participation Data for the Sport Sector. Belconnen ACT.

Bowles, R., Brennan, C., Culhane, P., Donnelly, P., Haughey, T., Horgan, P., McGourty, P., Murtagh, E. 2023. Gaelic Games in the Primary School - A Report on primary school coaching. Dublin: Gaelic Athletic Association.

Corder, K., Sharp, S.J., Atkin, A.J., Griffin, S.J., Jones, A.P., Ekelund, U. and van Sluijs, E.M., 2015. Change in objectively measured physical activity during the transition to adolescence. *British Journal of Sports Medicine*, 49(11), pp.730-736.

De Knop, P. ed., 1996. Worldwide trends in youth sport (pp. 276-281). Champaign, IL: Human Kinetics.

Donnelly, P., Healy, C., Paradis, K., Horgan, P. and McKay, M.T., 2023. The inter-relatedness and demographic predictors of physical activity, self-rated health, and mental well-being: A three-wave study in secondary school children. Journal of Adolescence, 95(1), pp.157-169.

Donnelly, P., Haughey, T.J., Graffan, A., McGourty, P., McGrane, B., Lane, A., Moore, A., Stapleton, N., Williams, N., Harmon, W. and Horgan, P. 2024. Coaching and Coach Education in Gaelic Games: A Female Coach Perspective. Dublin: GAA.

Drake, K.M., Beach, M.L., Longacre, M.R., Mackenzie, T., Titus, L.J., Rundle, A.G. and Dalton, M.A., 2012. Influence of sports, physical education, and active commuting to school on adolescent weight status. *Pediatrics*, *130*(2), pp. e296-e304.

Duda, J.L., Quested, E., Haug, E., Samdal, O., Wold, B., Balaguer, I., Castillo, I., Sarrazin, P., Papaioannou, A., Ronglan, L.T. and Hall, H., 2013. Promoting Adolescent health through an intervention aimed at improving the quality of their participation in Physical Activity (PAPA): Background to the project and main trial protocol. *International Journal of Sport and Exercise Psychology*, 11(4), pp.319-327.

Dumith, S.C., Gigante, D.P., Domingues, M.R. and Kohl III, H.W., 2011. Physical activity change during adolescence: a systematic review and a pooled analysis. *International Journal of Epidemiology*, 40(3), pp.685-698.

Eime, R.M., Harvey, J.T., Sawyer, N.A., Craike, M.J., Symons, C.M. and Payne, W.R., 2016. Changes in sport and physical activity participation for adolescent females: a longitudinal study. *BMC Public Health*, 16, pp.1-7.

Endes, S., Schaffner, E., Caviezel, S., Dratva, J., Autenrieth, C.S., Wanner, M., Martin, B., Stolz, D., Pons, M., Turk, A. and Bettschart, R., 2016. Longterm physical activity is associated with reduced arterial stiffness in older adults: longitudinal results of the SAPALDIA cohort study. *Age and Ageing*, 45(1), pp.110-115.

ESRI, 2013. Keeping Them in the Game: Taking Up and Dropping Out of Sport and Exercise in Ireland, ESRI, Dublin.

Farooq, A., Martin, A., Janssen, X., Wilson, M.G., Gibson, A.M., Hughes, A. and Reilly, J.J., 2020. Longitudinal changes in moderate-to-vigorous-intensity physical activity in children and adolescents: A systematic review and meta-analysis. *Obesity Reviews*, *21*(1), p.e12953.

Fenton, S.A., Duda, J.L. and Barrett, T., 2015. The contribution of youth sport football to weekend physical activity for males aged 9 to 16 years: variability related to age and playing position. *Pediatric Exercise Science*, 27(2), pp.208-218.

Gavin, K. W., Lane, A. and Dowd, K. P. 2020. The contribution of Gaelic football participation to youth physical activity levels. *Journal of sports science & medicine*, 19(4), pp. 652-661.

Gralla, M. H., McDonald, S. M., Breneman, C., Beets, M. W. and Moore, J. B. 2019. Associations of objectively measured vigorous physical activity with body composition, cardiorespiratory fitness, and cardiometabolic health in youth: A review. *American Journal of Lifestyle Medicine*, 13(1), pp. 61-97

Guthold, R., Stevens, G.A., Riley, L.M. and Bull, F.C., 2020. Global trends in insufficient physical activity among adolescents: a pooled analysis of 298 population-based surveys with 1·6 million participants. *The Lancet Child & Adolescent Health*, 4(1), pp.23-35.

Harding, S.K., Page, A.S., Falconer, C. and Cooper, A.R., 2015. Longitudinal changes in sedentary time and physical activity during adolescence. *International Journal of Behavioral Nutrition and Physical Activity*, 12, pp.1-7.

Hayes, G., Dowd, K.P., MacDonncha, C. and Donnelly, A.E., 2019. Tracking of physical activity and sedentary behavior from adolescence to young adulthood: a systematic literature review. *Journal of Adolescent Health*, 65(4), pp.446-454.

Healthy Ireland. 2016. Get Ireland Active! National Physical Activity Plan for Ireland. Vol. 6. Dublin, Ireland.

Hebert, J. J., Møller, N. C., Andersen, L. B. and Wedderkopp, N. 2015. Organized sport participation is associated with higher levels of overall health-related physical activity in children (CHAMPS Study-DK). *PLoS One*, 10(8), pp. e0134621.

Holt, D.H., Frohlich, K.L., Tjørnhøj-Thomsen, T. and Clavier, C., 2017. Intersectoriality in Danish municipalities: corrupting the social determinants of health? *Health Promotion International*, 32(5), pp.881-890.

Horgan, P., Bowles, R., Considine, J., Donnelly, P., Harmon, W., Harrison, H., Kelly, S., MacNamara, A., McCullick, B., McGourty, P., Williams, N. 2021. *Coaching and Coach Education in Gaelic Games: A Baseline Report* Dublin, GAA.

Howie, E. K., Guagliano, J. M., Milton, K., Vella, S. A., Gomersall, S. R., Kolbe-Alexander, T. L., Richards, J., and Pate, R. R. 2020 Ten research priorities related to youth sport, physical activity, and health. *Journal of Physical Activity and Health*, 17(9), pp. 920-929

Kjønniksen, L., Anderssen, N. and Wold, B., 2009. Organized youth sport as a predictor of physical activity in adulthood. *Scandinavian Journal of Medicine & Science in Sports*, 19(5), pp.646-654.

Kokko, S., Martin, L., Geidne, S., Van Hoye, A., Lane, A., Meganck, J., Scheerder, J., Seghers, J., Villberg, J. and Kudlacek, M. 2018. Does sports Club participation contribute to physical activity among children and adolescents? A comparison across six European countries. *Scandinavian Journal of Public Health*, 47(8), pp. 851-858.

Lane, A., Murphy, N., Regan, C. and Callaghan, D., 2021. Health Promoting Sports Club in Practice: A Controlled Evaluation of the GAA Healthy Club Project. *International Journal of Environmental Research and Public Health*, 18(9), p.4786.

Lane, A., Ryan, D., Moyna, N., Madigan, S., Kirby, K., O'Reilly, E., Kearney, P., Tuohey, E. and Kennedy, M. 2023. The Gaelic Games Player Pathway and Sports Science. Ireland: GAA, LGFA and Camogie Association.

Lara-Bercial, S. and McKenna, J., 2022. Looking Back and Looking Around: How Athletes, Parents and Coaches See Psychosocial Development in Adolescent Performance Sports. *Sports*, *10*(4), p.47.

Mangan, S., Collins, K., Burns, C. and O'Neill, C., 2020. The positional technical and running performance of sub-elite Gaelic football. *Science and Medicine in Football*, 4(3), pp.182-191.

Marques, A., Ekelund, U. and Sardinha, L. B. 2016. Associations between organized sports participation and objectively measured physical activity, sedentary time, and weight status in youth. *Journal of Science and Medicine in Sport*, 19(2), pp. 154-157.

Mooses, K. and Kull, M. 2019. The participation in organised sport doubles the odds of meeting physical activity recommendations in 7-12-year-old children. *European Journal of Sport Science*, pp. 1-7

Murphy, M.H., Rowe, D.A., and Woods, C.B., 2016. Sports participation in youth as a predictor of physical activity: A 5-year longitudinal study. *Journal of Physical Activity and Health*, 13(7), pp.704-711.

O'Connor, S., Whyte, E., Gibbons, B., Feeney, O., Luc, S., and Ní Chéilleachair, N., 2018. Fundamental movement skill proficiency in juvenile Gaelic games. *Sport Sciences for Health*, *14*(1), pp.161-172.

Poitras, V.J., Gray, C.E., Borghese, M.M., Carson, V., Chaput, J.P., Janssen, I., Katzmarzyk, P.T., Pate, R.R., Connor Gorber, S., Kho, M.E. and Sampson, M., 2016. Systematic review of the relationships between objectively measured physical activity and health indicators in school-aged children and youth. *Applied Physiology, Nutrition, and Metabolism*, 41(6), pp.S197-S239.

Sallis, J.F., Cerin, E., Conway, T.L., Adams, M.A., Frank, L.D., Pratt, M., Salvo, D., Schipperijn, J., Smith, G., Cain, K.L. and Davey, R., 2016. Physical activity in relation to urban environments in 14 cities worldwide: a cross-sectional study. *The lancet*, 387(10034), pp.2207-2217.

Scheerder, J., Thomis, M., Vanreusel, B., Lefevre, J., Renson, R., Vanden Eynde, B. and Beunen, G.P., 2006. Sports participation among females from adolescence to adulthood: A longitudinal study. *International review for the sociology of sport*, 41(3-4), pp.413-430.

Sport England, 2019. Active Lives Adult Survey: November 2019/20 Report. London: Sport England

Sprengeler, O., Buck, C., Hebestreit, A., Wirsik, N. and Ahrens, W. (2019) Sports contribute to total moderate to vigorous physical activity in school children. *Medicine & Science in Sports & Exercise*, 51(8), pp. 1653-1661.

Telama, R., Yang, X., Viikari, J., Välimäki, I., Wanne, O. and Raitakari, O., 2005. Physical activity from childhood to adulthood: a 21-year tracking study. *American journal of preventive medicine*, 28(3), pp.267-273.

The International Society for Physical Activity and Health. 2020. Eight investments that work for physical activity.

Van De Laar, R.J., Ferreira, I., Mechelen, W.V., Prins, M.H., Twisk, J.W. and Stehouwer, C.D., 2011. Habitual physical activity and peripheral arterial compliance in young adults: the Amsterdam growth and health longitudinal study. *American journal of hypertension*, 24(2), pp.200-208.

WHO, 2020. WHO guidelines on physical activity and sedentary behaviour. Geneva: World Health Organization, pp.1-582.

Wong, J.E., Parikh, P., Poh, B.K., Deurenberg, P. and SEANUTS Malaysia Study Group, 2016. Physical activity of Malaysian primary school children: comparison by sociodemographic variables and activity domains. *Asia Pacific Journal of Public Health*, 28(5_suppl), pp.35S-46S.

Woods CB, Ng KW, Britton U, McClelland J, O'Keeffe B, Sheikhi A, McFlynn P, Murphy MH, Goss H, Behan S, Philpott C, Lester D, Adamakis M, Costa J, Coppinger T, Connolly S, Belton S. and O'Brien W, (2023). The Children's Sport Participation and Physical Activity Study 2022 (CSPPA 2022). Physical Activity for Health Research Centre, Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland, Sport Ireland and Healthy Ireland, Dublin, Ireland and Sport Northern Ireland, Belfast, Northern Ireland.