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7 **How does mentoring measure up?**

8 **Mentoring as a learning tool for neophyte Performance Analysts**

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## Abstract

The purpose of this study was to explore the experiences of neophyte Performance Analysts working in a high performance third level Gaelic Games setting, involved in a mentoring programme with experienced analysts. The primary purpose was to identify the effectiveness of mentoring in developing neophyte analysts working with high performance third level Gaelic Games teams, while the secondary purpose was to explore programme design. A qualitative research design was adopted. Mentees ( $n = 6$ ), mentors ( $n = 4$ ) and lead coaches ( $n = 6$ ) engaged in focus groups, which were analysed using Reflexive Thematic Analysis. The results indicate that mentoring can be an effective development tool for analysts, in Task Instruction function. Furthermore, the results provide further information on a) the importance of dyad matching and training, b) the mentoring process, including engagement types, relationships developing and c) the importance of coach interactions in the development of analysts. The findings have implications for the successful implementation of mentoring as a strategy for the development of neophyte analysts and includes recommendation for a multiple mentor approach for more effective development.

Keywords: Gaelic Games, Tertiary Environment, Programme Coordinator, Coach-Analyst Relationship, Mentoring Functions, Performance Analysis

## Introduction

Mentoring has been defined as a process where a more experienced and knowledgeable person (mentor) acts as a role model, providing guidance and support to a novice (mentee or protégé), assisting their development (Weaver & Chelladurai, 1999). To date, within sport, mentoring research has been conducted across administration (Weaver & Chelladurai, 1999), coaching (Leeder & Sawiuk, 2021; Sawiuk et al., 2017) and strength and conditioning (Gillham et al., 2015). Furthermore, mentoring has been investigated in tertiary sporting environments with student athletes (Comeaux, 2010). However, there has been no exploration of mentoring of Performance Analysts (referred to as Analysts hereafter).

The relationship between a mentor and a mentee can be described as a social exchange between two individuals (Hallmann et al., 2021). Consequently, central to social exchange theory is the concept of reciprocity, a state in the relationship in which both parties are benefiting while expending the same costs (Foa & Foa, 1974). While a reciprocal state is not always likely to occur in an exchange, it is uncommon that one side is burdened with all the cost of the relationship with no benefits (Hallmann et al., 2021). Mentees can receive numerous benefits from mentoring relationships, whilst mentors can benefit from professional and intrinsic rewards through personal investment in an individual and learning to refine their instructional techniques (Gillham et al., 2015).

Mentoring relationships are viewed as either formal or informal in nature. Formal mentoring is when a third party facilitates pairing based on certain characteristics or set protocol (Ragins et al., 2000). To facilitate this, specific methods for dyad matching have been employed, including practitioner assigned, choice based, and assessment based (Hoffmann, 2019). Importantly, age and gender should not be an issue but occasionally they can due to power dynamics (Smith et al., 2016). Such importance placed on dyad matching, points to the possibility of exploring the benefits of team or institution alumni mentoring as recommended

in the literature (Comeaux, 2010). In comparison, Ragins et al. (2000) described informal mentoring as relationships that develop organically, through a desire to help or seek help. Hence, informal mentoring relationships are characterised by high levels of trust and chemistry (Hoffmann, 2019; Hoffmann & Loughhead, 2016). As such, informal mentoring can flourish because the relationship grows within a non-intimidating and familiar environment (Sandardos & Chambers, 2019), where the deconstructed hierarchy allows for a healthy friendship to develop (i.e., the friendship function; Sandardos & Chambers, 2019). Considering the recognised benefits of informal mentoring, due consideration for the facilitated matching within a planned mentoring programme is a must for administrators in tertiary environments, capturing strengths of the informal relationships (Hoffmann & Loughhead, 2016).

### **Developing Analysts**

Performance Analysis (PA) is a sports science discipline, which involves systematic analysis of sporting performance with the objective of providing valuable input to direct the coaching process and improve performance (O'Donoghue, 2015). Consequently, effective PA should provide coaches with information that adds to what they can see for themselves (Bampouras et al., 2012).

If mentoring is to be effective with analysts, it is important to consider the skillsets required to be an effective analyst. Martin and colleagues (2021) defined an analysts role as integrating and translating objective, reliable and relevant data to co-create knowledge, allowing for the creation of learning opportunities for relevant stakeholders to enhance decision making and judgements. Furthermore, they summarised the roles and responsibilities of the analyst to include: a) defining roles and establishing relationships, b) conducting needs analysis and service planning, c) system design, d) data collection and reliability checking, e) data management, f) analysis, g) reporting to key stakeholders, h) facilitation of feedback, and i) service review and evaluation. Consequently, the purpose of this study is to assess the impact

of the programme and track the experiences of analyst (mentees) and mentors across a mentoring intervention in a tertiary Gaelic Games setting.

Reflecting McKenna et al. (2018), albeit in a different sport, this study focuses on the development of neophyte analysts. Cognisant of this, the programme aims to build the following skills and capacities in the student analysts:

1. Contextual awareness. Analysts need to develop skills such as empathy and micro-political literacy (Martin et al., 2021). Gaining an understanding of the learning capacity or understanding levels of the players or coaches they are engaging with, effectively what is their “PA age”. In coaching, it was identified that mentoring can play a crucial role in helping developing coaches to navigate complex environments, tolerate complexity and become practitioners (Sawiuk et al., 2017). Furthermore, they identified positive mentoring relationship as crucial in navigating political landscapes in sport.
2. Building relationships. Analysts should be supported in trying to build strong relationships with coaches and players. The power dynamic and the status of the coach can affect the functionality of the relationship (McKenna et al., 2018), yet a strong coach-analyst relationship has been identified as a key factor for successful analysts (Wright et al., 2014). Hoffmann and Loughhead (2019) identified developing coach relations as one of the key functions of mentoring, achieved through an understanding of context and social norms.
3. PA and sport expertise. Sports specific knowledge and analysts having a coaching or playing background in sport were identified as desirable (Wright et al., 2014). However, it is not a pre-requisite if the analyst approaches their role with a desire to learn the sports’ intricacies. Sawiuk and colleagues (2017) highlighted that coach mentors from other sports were beneficial as they could assist with more non sport specific support, allowing for effective processes.

128        4. Technical expertise. An understanding of how to operate video analysis software is

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5. crucial for analysts. Mentoring has been identified to help with task specific improvement with mentees (Hoffmann & Loughhead, 2016).

6. Professional behaviours. Time management, communication skills, presentation skills, reflective practice and ethical practice are all behaviours an analyst must develop (Martin et al., 2021), along with showing good judgement, interpreting data and responding to contextual situations (Wright et al., 2014). Mentoring with university students has shown to help with time management skills and goal setting (Comeaux, 2010).

### **Considerations for PA Development: An Irish context**

In an Irish context, Martin and colleagues (2018) identified that 70% of coaches use PA regularly to inform the content of training and 91% highlighted its importance in affecting change. At higher performance levels, many teams and individuals have specific PA support but at development levels, a coach-analyst conducts considerable PA. The role of PA in the coaching process was identified as critical, as 86% of coaches valued it as ‘important to essential’ and 94% of coaches desired more PA. Typically, cost, time invested, technical expertise and national governing bodies misunderstanding of PA, were highlighted as barriers to PA. In a Gaelic Games context, research showed usage levels below other Irish sports, with PA used by 51% of Gaelic games coaches, who used both notational analysis and match video (Martin et al., 2017). In the intervening period, PA has gathered further momentum in Gaelic Games and has become a crucial component of team preparation (GAA, 2022). This research aims to explore the impact of mentoring as an educational tool for neophyte analysts in a Gaelic Games tertiary environment.

### **Methods**

Considering the context of investigation, a pragmatic approach was employed as an attempt to provide practical solutions to contemporary problems experienced by people in social contexts

(Giacobbi et al., 2005). Pragmatism focuses on what works in practice, guided by empirical evidence, rather than rigid adherence to certain ontological or epistemological assumptions (Jenkins, 2017). Pragmatism offers a flexible and outcome-oriented approach to understanding, in this sense, diverging from positivist and constructivist positions, rejecting the qualitative and quantitative divide, positioning either or both as valuable to unpacking real-world problems (Creswell & Clark, 2017). The programme coordinator (PC) was a co-constructor of knowledge with the participants (Giacobbi et al., 2005); a process facilitated through immersion within the environment. The primary researchers experience and qualifications in both PA and coaching contribute to the credibility and applicability of the findings. As the first author, the PC was an ‘insider’ to the environment under investigation, the second author acted as an ‘outsider’ to the tertiary Gaelic Games environment with extensive experience in another sport and as a researcher in sport. This ‘insider’ and ‘outsider’ perspective was seen as a resource in the collection and analysis of data, as without this insight there is potential for weakened theoretical sensitivity leading to reduced quality of findings (May & Perry, 2022). Consequently, a qualitative research design was employed, with multiple focus groups the primary method, as it allows for a greater understanding of the PA process, an area where quantitative design is more regularly utilised to measure actual sporting performance. The subjective nature of the qualitative data was used to explore the nuances of the interactions of and between participants.

## **Participants**

A purposeful sampling approach was employed for the identification and selection of information-rich cases related to the phenomenon of interest due to their knowledge and experience (Palinkas et al., 2015). Embedded in a purposeful sampling approach is the ability to compare experiences, to identify similarities and differences in the phenomenon of interest (Palinkas et al., 2015). Participants in this study consisted of 13 student analysts (mentees), six

mentors and six coaches. Mentors were identified in the four field codes of Gaelic Games (Hurling, Camogie, Ladies Football and Men's Football). Mentors were contacted by the PC, where the programme concept was outlined in detail, with opportunity for questions provided. The student analysts and the coaches were all involved in teams across the four Gaelic Games codes in the same third level institution for a full season, lasting six months. Coaches led performance teams and had substantial experience of coaching Gaelic Games.

In line with evidence suggesting the benefits of mentors coming from different sports (Sawiuk et al., 2018), the mentor and mentee in each relationship were not necessarily from the same sport. Some mentors mentored more than one mentee. The mentees had limited experience, with five having no prior experience in PA. Further biographical information on mentors and coaches can be found in Table 1 and Table 2 respectively. Participants are given identifiers in the results to protect their identity (Mentees as Analysts 1, Mentors as Mentor 1 and Coaches as Coach 1).

*Insert Table 1 and Table 2 here.*

## **Procedure**

Mentees were identified through e-mail, seeking expressions of interest to work with high-performance teams as student analysts. The PC deliberately matched dyads, considering the individuals involved and referencing mentoring literature, where programmes have failed due to poorly matched dyads (Hoffmann, 2019; Sandardos & Chambers, 2019). When the mentor was confirmed, the PC contacted the mentee identifying their mentor. Training for the mentees consisted of a face-to-face workshop, which explored the skills required in PA, and information on the mentor-mentee relationship, along with how dyads can function effectively. Mentors received training in the form of an online workshop, outlining the programme and skills required, including research and context informed information, details of the dyad matching process, initial meeting suggestions, benefits of mentoring and the challenges of mentoring.

Mentors were also giving specific information about their mentees and the teams they were assigned to. Mentors were subsequently contacted on an individual basis to allow for questions and to ensure complete understanding. The PC then connected the mentors with the mentees. As per the details in the mentee workshop and mentor workshop, the exact nature of the initial meeting was left up to the dyad to decide, as a result engagement across dyads were a mixture of both face-to-face and online interactions, this freedom around engagement type was used with the aim of allowing for the strengths of informal mentoring to accrue (Sandardos & Chambers, 2019). Dyads engaged regularly throughout the course of the six-month season, with some dyads meeting weekly, while others met less frequently, depending on how the relationships developed. The PC periodically contacted all participants throughout the programme to assist with any issues.

## **Instrumentation**

Qualitatively, focus groups were used, this method allows for the gathering of high-quality information in a timely manner, facilitating interaction among the group about the phenomenon, sharing both similarities and differences (Stewart & Shamdasani, 2014). Three separate focus groups were held with mentors, mentees and managers/coaches, all being conducted post programme. Participants in all focus groups were asked open ended questions, with the researcher probing throughout to gain further depth in responses. Questions directed at both mentors and mentees included; a) tell me about your initial engagement with your mentor/mentee?, b) has your relationship developed, and if so how and why?, c) in which areas has the mentoring support been helpful?, d) outline a practical impact of the mentoring support?, and specifically for mentors e) why were you willing to become a mentor?. While coaches were asked about the impact in terms of practice analysts were making. The inclusion of a focus group with the managers/coaches was to gain insight into the development of the mentees as an analyst within their own environment. The focus groups took place online

through zoom, with a total of 16 participants from the three cohorts: mentors (four), mentees (six) and managers/coaches (six). Three focus group interview guides were created with reference to the literature and research context. The focus groups lasted between 33-63 minutes. The audio of the focus groups were transcribed verbatim before analysis.

### **Data Analysis**

As the PC was situated in the research, reflexive thematic analysis was employed to analyse the qualitative data (Braun et al., 2019). The PC actively engaged in interpreting data through the lens of their own social position, their theoretical assumptions, and ideological commitments, as well as their scholarly knowledge (Braun et al., 2019). However, the PC used reflexivity to reduce personal bias and reflect openly on the data collected. A six-phase analysis process was used. Firstly, familiarisation with the data took place. This engagement was trying to draw connections between data and existing literature to allow for direction of future coding (Braun et al., 2019). Secondly, generation of codes within NVivo. The coding phase in reflexive thematic analysis is about focused attention, to rigorously make sense of data (Braun et al., 2019). Then, in depth searching for themes within the codes took place to assist in the construction of an insightful narrative around the data. Then there was considerable back and forth reviewing, defining, and naming themes before the production of the final report.

### **Findings**

Reflexive thematic analysis was employed to analyse data (Braun et al., 2019) and six themes were identified with a total of eighteen subthemes. (Insert Table Three around here).

### ***Programme Design***

There were areas explored around what optimum programme design entails. The subtheme of *initial engagements* identified the importance of face-to-face interaction at the programme outset, 'Mine was just e-mails at the start. But if I was to do it again, I'd definitely meet face to face and create that connection from the start' (Mentor 2) and for that interaction to include

coaches, ‘I could have met them with the manager and see what their views and their philosophy was and what they wanted to get out of the PA’ (Mentor 2).

The importance of interactions with various stakeholders was further emphasised in the subtheme of the *role of the PC*. The PC was seen as an integral mechanism when assisting poorly functioning dyads and ensuring engagement, ‘if forced together [by PC] to a meeting or a call, I would have felt more obligation on me to actually keep reaching out and keep pushing if that makes sense’ (Mentor 3).

The subtheme of *prior PA experience* highlighted how any experience is beneficial in the analysts development, ‘Having been around the year before he knew the players, he was familiar with the management team and it really helped’ (Coach 1), contrasted with ‘He came to us with no Gaelic games experience and very little understanding of the game. So, it was like you’d to teach him everything from scratch’ (Coach 2).

Within *future directions of the programme*, one mentor highlighted that PA is not an environment for learning on the job as you need systems in place in place to work optimally, ‘It is so fast paced when you are involved in a team that sometimes it gets very frustrating if people are not catching up as quick as you’d hope’ (Mentor 3). The opportunity for new analysts to work alongside a more experienced peer was identified,

I’d feel an apprenticeship or someone underneath him would be good next year. So there wouldn’t be a big hole left in two years time, as he has a lot of knowledge. A person to pass the knowledge on year to year, so if there was a PA continuity plan.  
(Coach 1)

### ***Mentoring Process***

The subtheme of *mentors’ skills* identified the process of mentoring as non linear and a learned skill, ‘you use skills that you see other people doing’ (Mentor 1) and ‘leaning on my profession, in terms of lecturing, in that sort of ilk’ (Mentor 3). Honesty was identified as crucial by

mentees, they welcomed honesty from mentors in reviewing their work as they were operating in high performance environments. 'We were bringing stuff to him, and he'd review it, he knew he could be honest. And we didn't take offence' (Analyst 4). The mentors also quietly challenged the opinions of the mentees 'he makes you think in fairness, which is good' (Analyst 3) and 'I think bouncing ideas off each other is how people learn' (Analyst 1).

The subtheme of *mentor availability* brought up contrasting responses. Mentors wanted to be supportive to mentees, but availability was problematic, 'not covering myself in glory, I was probably just too busy and happy enough to just let it drift' (Mentor 3), while mentees also recognised this 'it's not to say that they can't be good mentors, it's just that they could be unbelievably busy in everything else, that this will take a low priority' (Analyst 2). In contrast, access to mentors was evident in the highly functioning dyads, 'he was on campus, and we could meet him week on week' (Analyst 3).

The subtheme of *engagement type* identified how engagements were both formal and informal in nature, describing engagement as follows, 'for some of it there was a goal but then more informal at the matches it was a chat' (Analyst 4). While the relationship was driven from both sides, 'if we wanted to meet, he'd always make time or before we presented anything we'd always make sure we get [content] to him before we presented, so it was two way' (Analyst 3).

### ***Benefits of Mentoring***

The subtheme of *benefits to mentees* showcased sharing of technical information (task instruction) in dyads was evident, 'he showed us templates he had, which we brought into ours' (Analyst 4). Mentees also outlined support afforded in utilising technology, 'I'd used Nacsport and Sportscore but never really Hudl to do analysis, so we spent time going through dashboards and then what kind of ways we could bring them in' (Analyst 4). The importance of coach relations was emphasised in the focus groups, 'Definitely for me from the previous year he built relations between us and the management' (Analyst 3).

The subtheme of *willingness to mentor* identified an altruistic nature present in mentors. Some mentors mentioned previously receiving informal mentoring which aided their own careers and were thus willing to help others, ‘the [PA] community is so helpful in terms of helping each other or sharing ideas. We were in their footsteps, so if you could give back in anyway’ (Mentor 2).

While the subtheme of *benefits for mentors*, illustrated how they could learn from mentees, as they were closer in age to athletes they’d engage with in their own professional practice, ‘The very fact that the mentee is 20/21, just how to engage with people of that age’ (Mentor 3). Mentors also highlighted new ways of thinking and access to new technology as ways they learned from mentees.

### ***Interactions with Management Teams***

In a subtheme of *embeddedness*, there was surprise at how some PA’s were fully integrated into management teams was identified. Analysts were afforded support from specific coaches, which led to them being valued and aiding decision making. ‘I found it very beneficial this year that [coach] was the link. It gave [Analyst] an idea of what we were thinking as managers too.’ (Coach 5). This was also highlighted by mentors,

They were appreciated and [manager] was very influential in that. They had that link. If they were doing the work and not getting appreciated or not getting value for it. I don’t know if the same enthusiasm would be there to produce document, reports or do analysis. (Mentor 1)

Within a subtheme of *player engagements*, it became evident that analysts were a useful bridge between management and players,

I do feel a lot of the players nearly enjoyed engaging more with him than the management team because there wasn’t that barrier. We are probably closer to being

their dads than their brothers. [Analyst] was a friend and they probably could engage with him a bit better. Something we possibly didn't utilise enough. (Coach 1)

While the analysts also gained confidence and energy from engaging directly with players too,

I found myself more motivated to get through a mountain of work on opposition or a game we just played, and I felt like the players are very accepting of any kind of feedback, whether it be positive or something to work on. (Analyst 5)

Mentees identifying how important the coach-analyst relationship was explored in the subtheme of *autonomy*. This was highlighted by trust levels, 'I think to be honest they trusted me' (Analyst 2) and 'you're kind of given the license to, not fail, but make mistakes and test things out' (Analyst 1). Furthermore, a mentor was equally surprised by the approach of a coach operating in a high performance environment affording autonomy to analysts, 'I think [Manager] became more open to PA this year and letting the lads do it' (Mentor 1). There was further autonomy afforded in delivering presentations 'we were given ownership to provide them presentations' (Analyst 4).

#### ***Analyst Input***

The functions carried out by analysts were outlined within the subtheme of *Analyst duties*. Analysts conducted roles including, in game notational stats, post-game analysis and opposition analysis, among other duties. They craved further responsibility to complete the analysis cycle 'the only other thing to consider is the [videoing], we were relying on match footage to be uploaded by someone else, rather than do it all yourself' (Analyst 5).

Some analysts were given the responsibility to communicate directly with player, which was explored in the subtheme of *half time roles*, 'in crunch situations, like the semi-final of [competition], we're down by 5 points and you're the one to come onto the pitch and give the messages' (Analyst 1), while other communicated with management as gatekeepers of the

information ‘they knew what they wanted to say at half time, and those targets had been agreed in an analysis meeting, so we knew and they knew what they were trying to get from it’ (Analyst 4).

In the subtheme of *decision making*, coaches highlighted instances where the analysts input directly affected decision making,

There was a defensive puckout strategy, that we were tracking. And we changed our tactical set up, as we got feedback during the year and we started getting huge success. It was instant feedback. When we met the players at half time we were able to say, they’ve only won 30% of their puck outs and we could put it down to our tactical tweak or set up. (Coach 1)

A good example is [opposition], they communicated we were winning puck outs on one side and not winning the other, we kept hitting them to one side. And when we got the message in, we started winning all our puck outs. (Coach 5)

Coaches emphasised how important the information was for session planning ‘we’d build out sessions based on the numbers of the previous game’ (Coach 6). However, some coaches felt that the PA’s didn’t know how valuable their input was, ‘I don’t think they realised until very late in the year that the information they were giving was impacting our decisions’ (Coach 6).

### ***Developing as an analyst***

Within the subtheme of *feedback*, coaches provided an excellent indicator on the improvement and evolving role of analyst, indicating that they added value and highlighted improvements in their professional practice. For example, in-game support was lauded ‘The way they communicated to me on the side line was excellent... They made it very simple. They had a cheat sheet, where I could quickly scan the numbers and know exactly what was going on’ (Coach 5). While post-game support was also highlighted positively, ‘having them in the team

meetings and having them present, strengthened their confidence and presentation skills, they needed to stand in front of a room of county players and get a message across' (Coach 3), which was echoed by the analysts, 'I think the big thing personally was confidence, in presenting' (Analyst 1) and 'when presenting you don't want to sound like you don't know what you're talking about' (Analyst 5).

This progress was not evident for all analysts, which was evidenced within the subtheme of *areas for improvement*, as students who were in their first year of PA support were not as accomplished in terms of clarity 'if you were giving lads certain specific numbers, you'd be wondering are they actually right?' (Coach 2), thus highlighting the varying success of this mentoring programme.

### Discussion

Findings suggest positive development of the analysts, positing mentoring as a useful educational tool. In comparison to coaches acting as 'gatekeepers' of information between analysts and players (Bampouras et al., 2012), there was considerable opportunity afforded to the analysts to deliver to players, despite the high stakes nature of their environment. This opportunity afforded is a result of trust earned and relationships grown by the analysts, the benefits of fostering positive relationships (Nelson et al., 2023). This development of trust led to improvements in practice for many of the functions of PA (Hughes and Franks, 2007); a) providing immediate feedback, evidenced by the provision of information to coaches at half time, b) evaluating specific aspects of performance, illustrated with their provision of video supports, c) evaluating specific aspects of performance, shown by measurement of key performance indicators and d) assisting coaches with selection mechanisms, evidenced by providing individual information and opposition analysis.

Furthermore, dyadic mentoring was successful as a development resource. However, the analysts also indicated that interactions with coaches, players, peer analysts and external

mentors influenced their development, suggesting triadic or multiple mentoring approaches may be more successful in this context. This accessing of support from various sources aligns with the development of neophyte sports scientists operating in high performance environments (Gillham et al., 2015). Furthermore, findings highlight areas for improvement and areas for sustained focus to ensure formal mentoring programmes can support the development of analysts. The nuances within the findings indicate that if applied thoughtfully, they can guide evidenced-informed practice across contexts (Taylor et al., 2023). Therefore, simply replicating mentoring programmes in different environments may not be advisable, as the conditional knowledge acquired within this setting may not apply in other settings (Collins et al., 2022). Consequently, PCs should apply their own Professional Judgement and Decision Making to ensure their intentions for impact are met (Martindale & Collins, 2012). For example, there are several key stakeholders who all contribute towards the need for a flexible design. It is suggested that analysts need to gain experience in the field and acquire it quickly, inserting analysts with no experience in a results driven environment is not optimal. The importance of contextual awareness, technical capability and sport expertise were identified as crucial for analysts (Martin et al., 2021; Nelson et al., 2023). The in-situ mentoring support that was provided to the analysts in this programme helped develop the intangible skills required to be an effective PA, which are difficult to acquire through traditional educational methods (O'Brien & Taylor, 2025b; Nelson et al., 2023), alongside acquiring task specific professional skills.

From a formal mentoring perspective, the PC has a crucial role in mentor selection, ensuring their accessibility and availability are crucial for individual mentees (O'Brien & Taylor, 2025a). Subsequently, initial matching should be considered carefully against the context of the intervention (Collins et al., 2022). Purposeful matching and training have been evidenced previously (Comeaux, 2010; Hoffmann, 2019; O'Brien & Taylor, 2025a), however

initial training alone is inadequate and continuous support for mentors from the PC is required (O'Brien & Taylor, 2025b). Often in formalised mentoring programmes the PC recruits mentors based on a subjective approach selecting individual who they feel embody a desired set of dispositions and attitudes (Leeder et al., 2019). Training can be difficult to apply properly as so many of the relationships are unique, but this is where the PC can provide role clarity.

Making multi-disciplinary sports management teams aware of their part in the growth of the analyst is crucial to their functioning, whilst generating a mutually beneficial social exchange. While most coaches in this research are aware of the importance of PA in the coaching process and its impact on performance, there are some who are still to fully embrace PA. Consequently, stakeholder misunderstanding on the role of PA in the coaching process has been identified as a considerable stressor for both analysts and coaches (Martin et al, 2023). Therefore, continued efforts to address this collaborative understanding around the co-creation of knowledge is crucial, as we progress from traditional dyad through to triadic and beyond to multiple mentor relationships. The role of the PC is also one that is frequently mentioned in making sure all stakeholders are aware of PA impact, which aligns with literature, as the role of the PC scaffolding sports science supports was seen as critical (Gillham et al., 2015). The PC has a challenging task providing development opportunities for analysts operating within a result driven environment, achieving this coherence requires clear understanding of the programme across all stakeholders (Taylor & Collins, 2021).

The authors of this paper are suggesting a multiple mentor network, to best facilitate the development of neophyte analysts, which has been suggested previously in coach education literature (Leeder & Sawiuk, 2021; Olsson et al., 2017). The multiple mentor network in this context included the following stakeholders: formal mentor(s), peer student analysts, team coach or manager, external mentors and the PC. Consequently, a multiple mentor network approach can reduce the probability of dysfunctional mentoring (Leeder & Sawiuk, 2021),

advancing beyond one-dimensional traditional dyadic relationships and potential micro political issues (Sawiuk et al., 2017). This breadth of support can help in the development of analysts with the varied challenges they encounter (Martin et al., 2023), and support learning pathways tailored towards the individual (Knowles et al., 2001; Nelson et al., 2023). Previously, the utilisation of a multiple mentor approach was advocated within sports coaching practice (Sawiuk et al., 2017). Such an approach appears beneficial to analysts as; (a) different mentors can provide different assistance based on needs, from helping with relationships to technical knowledge (Mezias & Scandura, 2005), (b) analysts are part of multi-disciplinary sports science teams, thus interacting with others requires considerable skill sets (Bampouras et al., 2012), (c) the peer network of developing analysts can also be a significant resource for each other as they explore similar yet different challenges within their teams and (d) the level of interaction of analysts with coaches means they can be significant performance supports (McKenna et al., 2018).

Crucially, the coach-analyst relationship appeared to be central for successful PA provision (Martin et al, 2021; McKenna et al., 2018; Nelson et al., 2023; Wright et al., 2014). The coaches assisted integrating analysts into the team environment, affording them trust and responsibility. As evidenced in the findings, coach relations was an area where mentors provided guidance to mentees. Some mentees discussed how advice on approaching problems and communication advice, helped them develop strong relationships with coaches. This type of social development supports analysts as they navigate the challenges of providing value in performance environments (Nelson et al., 2023). Consequently, to ensure analysts are utilised and valued, organisations should ensure that coaches are aware of their role in the development of analysts. There appears to be significant social exchange taking place between coaches and analysts. Many of the coaches invested considerable time engaging with the analyst, as they felt they were an integral part of the coaching process (Groom et al., 2011). Such an approach

has significant benefit for coaches as a competent analyst can add value, particularly in terms of opposition analysis. This finding draws parallels with Andersen and colleagues, (2021) who found utilising a collaborative approach to PA and utilising knowledgeable others enhances overall learning and group dynamic. For example, analysts in this research, typically spent more time analysing opponents than coaches, thus, the analyst could be deemed the most knowledgeable individual and therefore scaffold the learning to aid the players' (Andersen et al., 2021). A more integrated link between coaches, mentors, and analysts at the outset of the programme may further facilitate cohesion and coherence in this area, with stakeholders using shared mental models amidst their competing agendas (Collins et al., 2022).

Finally, suggestions arose in the findings on how to tailor the programme to provide additional learning opportunities for neophyte analysts. Mentoring managed to help in the development of the social skills required by analysts, which are often overlooked in PA education but are crucial for success (Nelson et al., 2023). Both mentees and coaches proposed the idea of current mentees becoming mentors in the future. In line with previous research, findings suggest that those who received positive mentoring experiences are more likely to be good mentors themselves in the future (Arnold et al., 2021). Peer mentoring has been evidenced to be effective in coaching as there is a narrower epistemological gap between mentor and mentees (O'Brien & Taylor, 2025a; Olsson et al., 2017), this peer mentoring approach could be deemed worthy of consideration to enhance effectiveness, as the mentee-mentor gap was considerable for this programme.

## **Limitations**

The collection point at the conclusion of the programme, while rich in terms of data sourced from three different populations, has limitations regarding the comparability to a pre programme collection point to gather information on development over time of mentors and mentees.

## Conclusion

This study aimed to explore the process and relationships of a formal mentoring programme for neophyte analysts. Specifically, this research sought to generate guidelines for the development of analysts within a Gaelic Games setting. Six main themes were generated which provided additional insights into the realities of a formal mentoring programme for analysts.

First, mentoring can be used to develop analysts, similar to coaches, analysts educational development is individualised and requires ad hoc learning pathways tailored towards the individual's needs (Knowles et al., 2001; Nelson et al., 2023; O'Brien & Taylor, 2025b). Second, programme design is crucial, with an awareness of the nuances within the programme required to ensure success, due to the complex and dynamic setting that analysts operate in (cf. Olsson et al 2017). Third, the coach-analyst relationship appears central for successful PA provision, as coaches have the opportunity to integrate analysts into their management team structure to enhance coaching delivery. A direct coach-analyst link was instrumental in the provision of quality PA. A more integrated link between all contributors can further facilitate considerable cohesion and coherence (Collins et al., 2022). Finally, we suggest that a multiple mentor network might be best suited for developing PA's. A multiple mentor network has been suggested in previous literature (Leeder & Sawiuk, 2021; Ollson et al., 2017) as they can be used to provide individualised support to mentees, providing more of what they need and less of what they don't need, engaging with mentors in a needs driven approach (Mezias & Scandura, 2005). In summary, the study identifies several factors which are important for the implementation of a formal mentoring programme with developing analysts, which may be useful for various organisations across various sports, in both PA and other sport science domains.

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|                    | Years Experience     | Accreditation Level (GAA PA) | Related Academic Qualification |
|--------------------|----------------------|------------------------------|--------------------------------|
| Mentors<br>(n = 6) | 5 – 10 years (n = 6) | Level 4 (n = 1)              | PhD (n = 1)                    |
|                    |                      | Level 3 (n = 4)              | MSc (n = 5)                    |
|                    |                      | No Qual (n = 1)              |                                |

Table 1: Mentors Biographies

|         | Coaching @ Performance Level | Experience in PA role | Inter County Coaching Experience |
|---------|------------------------------|-----------------------|----------------------------------|
| Coaches | 5 – 10 Years (n = 4)         | Yes (n = 2)           | Yes (n = 4)                      |
| (n = 6) | 10+ Years (n = 2)            | No (n = 4)            | No (n = 2)                       |

Table 2: Coaches Biographies

| Theme                             | Sub Theme             | Raw Data                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Programme Design                  | Initial Engagement    | The workshop initially and knowing them around campus, so mine was a lot of face to face, knowing them that way, so was easier on my behalf there meeting them. It didn't really feel that awkward. (Mentor 1)                                                                                                                                                                                                                              |
|                                   | Programme Coordinator | If you forced me and [mentee] together to a meeting or a call or something I would have felt obligated or more obligation on me to actually keep reaching out and keep pushing if that makes sense? (Mentor 3)                                                                                                                                                                                                                              |
|                                   | Prior Experience      | when you look at the other groups who had a year under their belt, they performed much better this year, if you draw a comparison between the two year. (Mentor 1)                                                                                                                                                                                                                                                                          |
|                                   | Future Directions     | Peer to peer support will be really important. I'm sure we'd all be willing to come back and support but even like next year just bringing people with us essentially because obviously we'd have the most experience out of all of them (Analyst 5)                                                                                                                                                                                        |
| Mentoring Process                 | Mentor Skills         | If they say something that's a bit negative or something that can be improved on you don't take it to heart because its just like just like a chat. (Analyst 3)                                                                                                                                                                                                                                                                             |
|                                   | Mentor Availability   | I probably should probably reached out myself more so than relying on someone else it's just when you're in the middle of college and trying to get work done (Analyst 2)<br>So it is not a case, that I wouldn't have wanted to help but at the time you asked me and the timeframe was particularly busy. (Mentor 3)                                                                                                                      |
|                                   | Engagement Type       | He was watching matches and our interactions and then feeding back on that. Then when we met it was formal and we were analysing [games] together again so it was like bringing the two together (Analyst 4)                                                                                                                                                                                                                                |
| Benefits of Mentoring             | Benefits to Mentees   | Example of the dashboard that we were going to send, he gave us some other things that we could add to it and those specific things like sources score and stuff he showed us how he had done that and previous template (Analyst 4)                                                                                                                                                                                                        |
|                                   | Willingness to Mentor | I was thinking of when I was in their shoes in [college] and I had a mentor in [name]. (Mentor 1)                                                                                                                                                                                                                                                                                                                                           |
|                                   | Benefits to Mentors   | I think just to see them develop was good. And I suppose with [mentee], seeing her hopefully developing this string to her bow. (Mentor 1)                                                                                                                                                                                                                                                                                                  |
| Interactions with management Team | Embeddedness          | I suppose them being so young and only learning their trade a small bit aswell that it gave a clear direction of what we're actually looking for. I think knowing exactly what we are at is hugely important for them to be able to deliver what we are after. (Coach 6)<br>I used one of our management team, [name], to link in with them a good bit, to be able to filter out stuff before it was put in front of the players. (Coach 5) |
|                                   | Player Engagement     | As a management team at the end of the year when we did a review, I think we underutilised him, we didn't use him enough, in terms of in front of the team. (Coach 1)                                                                                                                                                                                                                                                                       |
|                                   | Autonomy              | There was so much trust from minute one which is just something you wouldn't really expect and simply I didn't expect comparing it to home club, where it took a while for them to buy into the process (Analyst 1)<br>Think yourself rather than having everything prescribed, this is what we want, this is how we do it, do X, Y and Z and send it to us. You're able to go actually analyse games yourself (Analyst 2)                  |
| Analyst Input                     | PA Duties             | So they were doing presentations themselves. It wasn't just here is the information and do what you want with it. It was more involving them. (Mentor 2)                                                                                                                                                                                                                                                                                    |
|                                   | Half Time Role        | In-game analysis was kind of like we gave it to them at half time cause they'd have specific things or you obviously don't want to overload them with information at half time. Two or three things maybe we'd go and there was once or twice where we spoke at half time (Analyst 2)                                                                                                                                                       |
|                                   | Decision Making       | The players were so well armed, they knew what we wanted off them and they knew how they could break down teams. (Coach 4)<br>It was great for that kind of intrinsic feedback for yourself just to say you've actually had an impact on how that game was played. (Analyst 5)                                                                                                                                                              |
| Developing as an analyst          | Feedback              | So she felt that she was having a direct input into what was happening and she could see it. (Coach 1)<br>The players came and said, that one of the positives they found was the video analysis was kept short and snappy and that it was <u>relevant</u> . (Coach 3)                                                                                                                                                                      |
|                                   | Areas for Improvement | Just constant interaction across all stakeholders and troubleshooting (Coach 2)                                                                                                                                                                                                                                                                                                                                                             |

743 Table Three: Themes, subthemes and participant quotes