The Forgotten Position in Coaching? Investigating Challenges when Developing Goalkeepers in Soccer Academies

This study explores the challenges and nuances of talent development (TD) for goalkeepers (GKs) within Irish soccer academies, a position often overlooked in existing TD literature. Adopting a co-production methodology, the research engaged Academy Managers (AMs) and Goalkeeping Coaches (GKCs) from the League of Ireland to uncover lived experiences and contextual insights (n = 16). Through semi-structured interviews and reflexive thematic analysis, three core themes were actively generated: 1) gaps in individual GK development, 2) the process of collaboration, and 3) exploring the barriers to effective GK development. Findings highlight the unique psychological and social demands placed on GKs, the need for cohesive integrated coaching practices, and the importance of institutional support for GK specific development nationally. The study advocates for a nested approach to future research on the macro (national planning), meso (academy culture), and micro (coaching practices) levels to inform more inclusive and impactful TD strategies. Ultimately, this work contributes to the growing body of Research of Sport (ROS), laying the groundwork for future Research for Sport (RFS) initiatives aimed at enhancing GK development in Ireland.

Keywords**:** Talent Development, Goalkeeping, Academy Soccer, Coaching, Problematisation

Key Points:

This research looks at challenges in TD that affect the development of GKs in the League of Ireland Academy system.

The research has highlighted three key areas that require further research to inform academy staff of effective GK Development, namely gaps in individual GK development, the process of collaboration, and exploring the barriers to effective GK development

Suggestions are made to improve GK TD through a nested approach to future research.

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Talent Development (TD) research has focused on understanding key developmental factors that influence an athlete's journey toward their highest competitive level. For example, research has considered the impact of challenges on development (Collins & MacNamara., 2012; Collins et al., 2016), the influence of key stakeholders in the TD process (Pankhurst et al., 2013; Sweeney et al., 2022), and the importance of psychological skills on TD (Edwards et al., 2023; Gledhill et al., 2017). Such exploration reflects the nature of TD whereby the paths to success are complex, non-linear, and individualized (Collins & MacNamara, 2012). This complexity drives the need for exploratory research to increase the levels of knowledge and understanding in TD (e.g., Mills, 2023; Gilbert & Trudel, 2001). In a soccer context, TD research that has focused on athlete and coach experiences has paid little attention to the potential nuances of TD across playing positions (West, 2018). For example, the goalkeeper (GK) has been identified as a critical playing position, yet there is limited research to support their development specifically. Current GK research focuses mainly on competition data (White et al., 2020) and physical data (West, 2018) at senior levels with a lack of research exploring the development of GKs in a TD setting (Otte et al., 2020, 2022). To identify impactful avenues of exploration regarding GK TD co-production with knowledgeable others has been advocated. Co-production supports the construction of research via 'integrated knowledge transition', with those who work in the 'muddy swamps' of practice with the potential to improve research quality, relevance, and translation to practice (Collin & Kamin, 2012; Smith et al., 2023). Consequently, this study explores the challenges that impact GK TD through interviews with Academy Managers (AMs) and Goalkeeping Coaches (GKCs) across League of Ireland soccer academies.

Talent Development

TD in sport can be described as a long-term process that supports individuals with the potential to become elite performers, providing them with the necessary environment to nurture and maximize their abilities (Taylor et al., 2022; Till & Baker, 2020). Navigating such a process effectively can be challenging due to the complex interplay of biological, psychological, social, and environmental factors within and across individual athletes (John et al., 2019). Consequently studies have advocated for the use of suitable Talent Development Environments (TDE's) to help structure and scaffold the journey for athletes. These environments encapsulate a wide array of influences along the TD journey, including "all aspects of the coaching situation" that may affect an athlete's development (Martindale et al.,

2005, p. 354). These environments contain inter-connected and dynamic parts (e.g., relationships and individual personalities) which affect the TDE and the athlete (Phillips et al., 2013). Indeed, how the dynamic interconnectedness is viewed and appreciated is a source of discussion in research (Hartigh & Geert, 2018). Therefore practitioners have attempted to enhance our understanding of TDE's by using questionnaires with players (Martindale et al., 2010), evaluating coherence across stakeholders in a TDE (Curran et al., 2021), and exploring how environmental factors can influence the experiences of athletes in a TDE (Taylor & Collins, 2023). Environmental factors coupled with the impact of cultural and organisational structures within TDE's have a significant impact on the potential development of athletes (Henriksen & Stambulova, 2023. Yet in practice there can be an over-reliance on "flawed" TD models (Baily & Collins, 2015) with recent research emphasizing the "limitations of best practice models" and highlighting the need for contextual clarity for each scenario (Gavin et al., 2024). One such context within soccer is the TD of GKs.

Talent Development and Goalkeeping

While literature is abundant on TD and soccer in academies (Ashdown et al., 2024; Aalberg & Saether, 2016; Gansgo et al., 2021; Mills et al., 2014; Sweeney et al., 2022; Towlson et al., 2019) there is a dearth of research concerning GK development. Otte et al. (2020, p.2) refer to "the largely under-researched context of the football goalkeeper". This is due to studies omitting data relating to the GK and their specific game actions (Slaidins & Fernate, 2021), the sample size of GKs being too small to justify inclusion in the analysis (Kannekens et al., 2011), and the contrasting profiles between GKs and outfield players (Gil et al., 2014). Research that has considered GKs mainly focuses on physical requirements or preparation (Nikolaidas et al., 2015), perceptive training techniques for senior GKs (Li et al., 2021), training types (Otte et al., 2020), and positional demands of senior GKs (Otte et al., 2022). Some studies have explored GKs specifically, looking at match demands (Moreno-Perez et al., 2020) and weekly load (Abbott et al., 2023). Yet, these focus exclusively on senior GKs. Recent research has shown there may be value in identifying GK-specific attributes for predicting GK talent (Honer et al., 2025) with some recognising psychological skills as some of the most important attributes when identifying talented youth GKs (Lethole et al., 2024). Overall there is a knowledge gap relating to the TD of GKs. Filling this gap would support coaches, both outfield and support staff, to become more informed about goalkeeping, leading to more informed decisions based on the specificity of the GK position (Collins et al., 2022). Co-production has emerged as a valuable approach to provide impactful research across sport and physical activity (Smith et al., 2023).

Co-Production

The emergence of co-production as a valuable research method is due to its perceived strengths in identifying novel and varied truths and investigating them for deeper meaning in research contexts (Buckley et al., 2022). However, co-production can be difficult to define due to its flexible nature (Bandola-Guil et al., 2023). Some researchers suggest co-production is situated at the "crossroads between several academic disciplines" (Ostrom, 1996, p. 1079). In contrast, others advocate for a narrower focus, defining it as "the involvement of individual citizens and groups in public service delivery" (Verscheure et al., 2012), which focuses on the implementation stage of a programme, mirroring a review process (Vargas et al., 2022). Importantly, this collaborative and participatory procedure engages individuals who have the necessary lived experience integral for greater understanding of a particular context in the research process (Smith et al., 2023). As such, this democratic process (i.e., research produced by the people, for the people) is an important approach due to its potential for impact within a specific context for many stakeholders (Pettican et al., 2022). Co-production also has the potential to improve academic quality and research excellence with co-producers enhancing the process through provision of more insightful questions and context-specific approaches (Smith et al., 2023). With regard to the current research, this improvement is reflected in the integration of co-production and problematisation by the streamlining of questions and member-checking processes, along with the generation of themes and subthemes which identified the core issues in the problematisation process. Some individuals become involved in the process as they have the motivation to produce usable information and a better understanding of the nuances and complexities involved in their field (Van Eijk & Stein, 2014). Additionally, this approach can lead to unanticipated answers and themes not foreseen by the researcher, generating novel knowledge (Felippe et al., 2017).

Specifically, "integrated knowledge translation" as a type of co-production is advantageous. This is a shared process in which researchers work with "knowledge users" in multiple parts of the research process such as the structuring of appropriate questions, population identification, and data analysis (Smith et al., 2023). This approach has the potential to shape the questions used and implement the results found thus making the research more impactful (Smith et al., 2023). Knowledge users also hold perceptions regarding which information is useful along with deciding whether the research findings could be implemented successfully in practice (Graham et al., 2019). This approach aims to bridge the "academic – practitioner" divide, giving a better representation of the nuances and challenges faced in the sport (Leggat et al., 2021). In some cases, co-production has been

described as “transdisciplinary” research due to its extended knowledge production process and ability to produce “knowledge in the context of application”, where other modes of investigation are not sufficient due to the complexity and uncertainty of the social interactions involved (Bandola Guil et al., 2023). However, co-production is not without its faults. Logistical issues potentially impact accurate data collection in relation to time (too many co-producers involved) and researchers become disincentivised due to recognising other forms of research which may be better suited as they are perceived to be more valued in the academic system (Smith et al., 2023). Aligning with this, some policymakers and researchers do not see value in the lived experience of others and believe it is not important enough to influence policy and practice (Smith et al., 2023). Despite its potential faults, co-production is an effective method that can produce “usable knowledge” for stakeholders in context (Bandola-Guil et al., 2023). However, the practicalities of involving various stakeholders in all aspects in a co-productive methodology often result in necessary compromise with examples across the literature of partial co-productive approaches being adopted (e.g., Lokot & Wake, 2021). It has even been proposed that this this methodology is best considered as a “non-linear co-production spectrum” to account for the complexities of its adoption in real world settings (Curtin & McMullin, 2025). Indeed, research has declared that co-production can occur in part or all of the research and participatory process (Masterson et al. 2024).

This current research aims to address the paucity of empirical work in this TD context by employing a partial co-production methodology that positions coaches as integral partners in the research process, thereby enhancing the overall validity and practical utility of the findings. In turn, underpinning Research for Sport (RFS), with the purpose of generating understanding around the challenges faced when coaching GKs in TD.

Research of Sport

ROS, distinct from RFS and Research Through Sport (RTS), is a concept that reflects a stage where researchers investigate and develop sport through the examination of actions and performers within the domain, thus developing a “different flavour” of knowledge (Collins & Kamin, 2012, p.693). The central idea is that through careful and varied research of a particular area over time, all three stages will exist in parallel with “peer-reviewed” knowledge generated, thus creating a large base of knowledge to use for impactful change in the future (Collins & Kamin, 2012). “Pragmatic Researchers” sometimes adopt the ROS approach due to their research being exploratory in nature (Burns et al., 2024). This stage may also be deemed necessary when researchers and practitioners are looking to develop

sport-specific theories in a seemingly under-researched area, and that "such exploration is a good way to clarify many saliant points" (Collins & Kamin, 2012, p.692). This outcome is often best achieved using a co-production approach as the primary research strategy due to its positive use of indigenous knowledge and its ability to increase the diversity of forms of knowledge (Bandola-Gill et al., 2023). As an example, Webb et al. (2020) explored player perceptions of the soccer TD process in England. The study resulted in three key themes being unearthed (player development through education, TI criteria, and first team development criteria). This ROS produced valuable insights which would allow practitioners to further investigate this area with the potential to make impactful changes in the future. This is distinct from RFS, which focuses more on performance enhancement directly through a theory, rather than on theory development itself (Collins & Kamin, 2012).

Due to the exploratory nature of ROS, impact on a domain may not be evident initially. Indeed, this stage may act more as a "gap-spotting" exercise, with the impactful or innovative knowledge to come at a later stage (Alvesson & Sandberg, 2011). This is a perspective of problematisation, whereby assumptions (in this case the development of GKs) are challenged with the view to developing research questions (Alvesson & Sandberg, 2011). Hence, we may not view the information gained from ROS as impactful, or indeed "innovative" (Anthony & Tripsas, 2016) as knowledge gained from an under-researched area (i.e., GK TD) may be different but will likely not be impactful. Through the lens of ROS this present study will look to achieve the initial goal of unearthing potential theories and questions for future RFS through co-production.

Methodology

This study adopted a pragmatic research philosophy taking into consideration the social and historical context within which the research is embedded (Burns & Collins 2023). Pragmatism suggests that knowledge is constructed when researchers and participants combine to analyse 'practical problems' in specific contexts (Burns et al., 2024), supporting the production of practically meaningful findings and implications (Giacobbi et al., 2005; Jenkins, 2017). To achieve this a partial co-productive approach was adopted to ensure that the research was conducted with, rather than just on, key stakeholders. In this type of approach, co-production may operate at different points in the research lifecycle, with some research suggesting the mechanisms of co-production can be enacted partially or fully, i.e. intention, assets, dialogue, documentation, interpretation and understanding (Masterson et al., 2024). With regard to the current study, this reflects the real-world nature of research

projects, where investigators seek to engage time-poor, under-resourced GKCs and AMs who often have competing priorities, thus hampering the implementation of full co-production.

This approach provided opportunities to foster mutual learning, build trust, and enhance the relevance and impact of the study (Bandola-Gill et al., 2023), a central tenet of pragmatism (Holtrop & Glasgow, 2020). Power dynamics were considered during the entire process but were mitigated by reflexivity, natural framing of questions and transparency (Braun & Clarke, 2024) – the voluntary nature of participation in the interview was evident from the start along with a consistent reminder of how all answers would remain confidential. To support the co-productive approach, the active co-construction of knowledge was facilitated by the first author's role in Irish academy soccer as an active GKC and the second author's experience as an active TD coach in a contrasting field. Our combined knowledge of the wider context was considered a resource and not a bias in the collection and analysis of data (May, 2011)., and this is reflected in how the researcher is seen as a “storyteller” whose interpretations are shaped by their personal positioning, lived experiences and expectations. The practice of reflexivity formally incorporates the researchers involvement, it is an essential component of RTA (Braun & Clarke 2024). This also permitted us to critically reflect on our assumptions, thereby helping shape the process and thus help contextualise the knowledge that has been produced (Braun & Clarke, 2024). Mutual trust and shared experience, given the backgrounds of both authors, fostered an environment in which rich, meaningful data could be obtained (May, 2011). This permitted the translation of knowledge from the key stakeholders (coaches) and put them at the centre of the study. As a reflection of this, qualitative data collection via semi-structured interviews provided a deep exploration of practitioners' lived experience of working with GKs in TD (May, 2011). In this manner participants became active partners in the research process by helping shape questions used in the research and making the questions relevant to their experience. Co-production processes included the pilot interview alongside participants assisting with interpreting their own data, validating findings via member reflections, and showing trust and transparency by honestly recounting experiences from their coaching past. With regard to the member checking process, interviewees were provided with a transcript of their interview and asked to control for quality and accuracy. All were comfortable with the accuracy of their input and there were no additional comments generated outside of the interviews themselves.

Participants

A purposeful sampling approach was used to recruit participants who can give an in-depth perspective in response to the research questions (Creswell, 2020). Eight GKCs (minimum of

two years experience in the National League Men's Academy system and a minimum of a National Goalkeeping C Coaching Licence) and eight AMs (with a minimum of two years experience in their role and a minimum UEFA A / UEFA Elite Youth A Coaching Licence) were interviewed. Due to the operating nature of AM's (I.e., on the ground with staff and players) versus Directors of Football (i.e., often detached from practice), their lived experience of this aspect of practice was deemed more valuable. Due to the homogenous nature of the sample (i.e., all coaches; Jones et al., 2012), and the aim to generate depth of understanding and not generalisation (Jones et al., 2012), sampling of sixteen participants took place in line with suggestions by Sandelowski (1995) regarding appropriate sample size for homogenous groups. To increase the relevance of data to the study's context, and aligning with our pragmatic approach, a homogeneous sample of Irish practitioners was deemed important to enhancing the contextual fit of the data.

Ethical approval was obtained through the University's institutional ethics committee, and participants were contacted via email, informing them of the purpose of the study and inviting them to participate. Informed consent was obtained prior to data collection.

Biographical data of participants	**GKCs (n=8)**	**AMs (n=8)**
Age	38 (21 – 55)	45 (34 – 56)
Years of experience in the academy	Average 3 - 5	Average 1 - 3
Provence:		
• Leinster	5	4
• Munster	2	3
• Connaught	1	1
UEFA Elite Youth A licence		Yes – All 8
FAI National C Goalkeeping licence	Yes - All 8	
Fulltime	1	3
Part time	7	5

Table 1: biographical data of participants

Data Generation

Data was gathered using semi-structured interviews which lasted 42 – 56 minutes (average duration 47 mins). This is an appropriate method to use when looking to unearth novel themes as it produces rich data from the lived experiences and perspectives of the main stakeholders (Braun & Clarke 2021). Aligning with this, the use of semi-structured interviews is an appropriate method when investigating under-researched areas due to providing the researcher with flexibility to probe new lines of enquiry (Pistrang & Barker 2021). Interviews were conducted electronically via Zoom (Zoom Video Communications—Version 5.15.2, San Jose, CA, USA) and transcribed verbatim. An interview guide using open-ended questions underpinned by previous TD research and the researcher's knowledge of the specific and broader TD context was used to investigate the perspectives of GKCs and AMs working in the National League Academy System. e.g. "In your opinion, what are the biggest barriers to goalkeeper development in the National League Academy System today?". A pilot interview was utilised in advance of the data collection in order to aid the organisation of selecting potential new candidates and improving the interview guide (Majid et al. 2017).

Data Analysis

Interviews were transcribed verbatim and returned to the participants for checking to establish credibility and trustworthiness (Busetto et al., 2020; Kegler et al., 2019). Coach numbers were assigned in place of real names and identifying information discarded to protect anonymity. Data was stored, structured, and organized using qualitative analysis software (QSR NVivo). Reflexive Thematic analysis was used which was advantageous to the researcher regarding reflection and engagement with the material (Hall et al. 2024). This flexible approach allowed the researcher to become immersed in the data collection process which made identifying relationships and themes less complicated due to their prior knowledge of the subject matter. Braun & Clarke's (2006) 6-step analysis process was utilised here. The initial stage of data analysis began with familiarization which involved multiple readings of the transcripts to develop a much better understanding of the data. Subsequently the data set was coded initially to group the data in a meaningful manner. Qualitative analysis software (mentioned above) was used to gather, organize, and examine raw data into thematic hierarchies and to join the data into groups of meaning. The themes were then reviewed with the research question in mind and those that helped to understand the research question were developed. Following this, themes were inductively devised and named before being written up using data extracts to develop a coherent narrative (Hall et al., 2024)., producing of a report (Braun & Clarke, 2021; Braun et al., 2018).

Trustworthiness of the data was obtained using specific methods (Smith et al. 2014). All interviews were carried out by the first author, who increased trust and rapport with interviewees via appreciation of their history, current situation, and the nature of their roles and TD experiences, in the context of their own active role in the industry. Member checks were utilised after the interviews to ensure respondents' responses were accurate and there was a “fairness of quotes” considered for inclusion (Collins et al. 2016).

Analysis

Data analysis revealed three themes (Figure 1): Gaps in Individual GK Development, The Process of Collaboration, and Exploring the Barriers to Effective GK Development. Raw data quotations are used to support and add clarity to discussion.

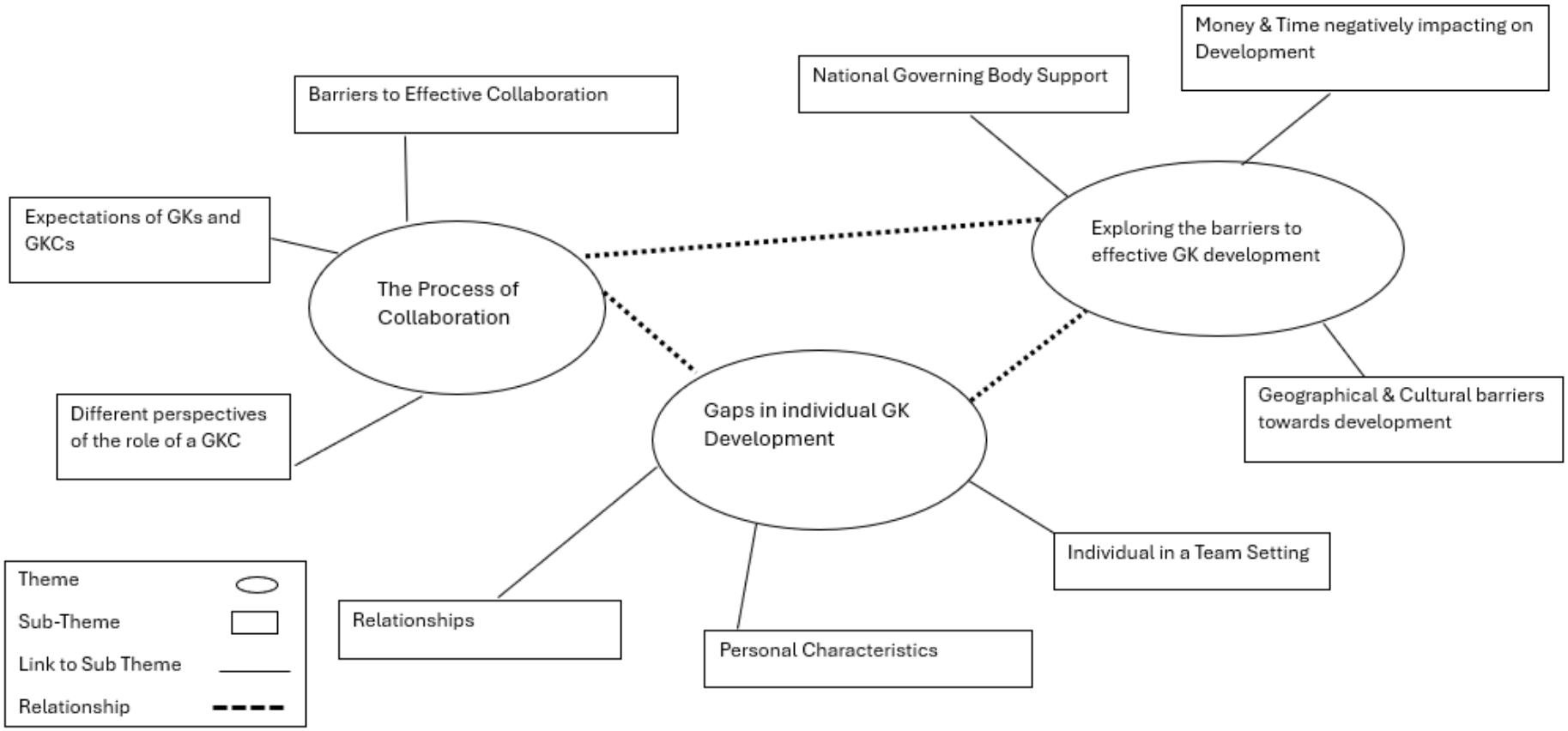

Figure 1. Code Map of Results

Figure 1 is a visual representation of the themes and sub-themes illustrating the interconnectedness of the results.

Gaps in Individual GK Development

This theme consisted of the following three subthemes; 1) Individual in a team setting; which referred to how the GK should be viewed as a different type of athlete in comparison to outfield players; 2) Personal characteristics; which referred to the perceived personal characteristics required by the GK which differ to outfield players; and 3) Relationships; which referred to important relationships which can shape a GKs TDE.

Firstly, participants viewed GKs as an *individual in a team setting* and thus have skill requirements distinct to other players (i.e. psychological), such is the difference of the "isolated position", (AM4). AM3 suggested the role of the GK reflected individual athletes such as "Federer and Tiger Woods… the mentality is a massive part of it and how they prepared themselves… I see them sometimes as a solo sport. They have to be a bit different to play in goal". GKC7 also believed this led to the "spotlight being on keepers a lot more than any outfield player". This is reflected in GKs being scrutinised "a lot more than outfield players" (AM6), while AM4 agreed by saying "I think it's highlighted more when they make a mistake… an outfield player probably makes ten mistakes in the game". Furthermore, participants believed younger GKs can be exposed as they are not familiar with the distinct pressures of the position, while stating "a goalkeeper is probably the most stressful position on the pitch" (GKC8).

Consequently, participants highlighted the importance of GKs developing resilience, especially in comparison to other positions as AM1 highlighted, "when they've made a few mistakes, it's really affected them… you need to have a special mentality to be a goalkeeper". AM6 agreed by stating: "99% of the time if he makes a mistake it's going to result in a goal… goalkeepers need to develop that resilience". Similarly, AM3 said: "If they've made a mistake… they gotta be able to bounce back there and then*"*. This highlights the need for GK's to build resilience; However, participants believed this skillset can be difficult to develop internally and is mostly based on experiences from games with AM6 stating "I don't think there's someone there for them to help with them… get their head around things… we're letting them down". AM1 agreed: "We don't do enough as a football club", and they are "light years behind what they're doing over there [*UK Academies*] now". Ultimately, this need for GK resilience led participants to feel that "it's massively different between a goalkeeper's development and an outfield player's development" (AM5).

Secondly, participants believed certain *personal characteristics* are essential for GKs and necessary to support effective transitioning to first team football, albeit difficult to instil. Participants highlighted challenges of understanding what type of person a GK is; "you just

don't know what they're thinking… And it's going to be tough" [*dealing with mistakes*] (AM6). Some suggested a potential development gap in relation to shaping the personality of GKs in the Academy system whereby they "think we just expect them to gain that [*mental skills*] through experience of playing football, but I think there should be more provided there" (GKC1), as "they can get very disappointed in themselves" (AM5). Furthermore, participants believed that the individual traits of a GK can affect interactions with coaches and players around training and competition. For example, "communication is a must for a GK… How do you coach communication?…. it's a skill slowly coming out of the game as they don't demand enough from each other anymore" (AM4). This can be a similar perspective regarding psycho-social growth, as traits like bravery and leadership are deemed necessary for GK's yet perceived to be difficult to develop: "I don't think you can teach anybody to be brave … a goalkeeper has to be brave" (GKC5). GKC1 also felt that "you want them to be a leader… I don't think when they first arrive into an academy they have to be one … you'd like them to be one at the end".

Participants highlighted *Relationships* surrounding a GK, and how they can affect their development. Notably, parental messages to GKs often contradicted coaches, "you're telling them one thing and then people tell them another thing, it'll only hinder their progress. And that can be exact same for parents" (GKC6). This left some participants unsure how to manage this relationship. For example, GKC2 suggested their intention was "to keep away from parents as much as I can because some of them think their children are gold. It's a hard one". Furthermore, AM1 highlighted their concerns around parental feedback, identifying that a GK might "make a mistake and then they have to get into the car and go through the whole mistake again with the parent". This can also affect the GK's relationship with the GKC. This relationship is important for GK development as it is a central sounding board going into senior soccer as GKC4 states "if you're a 17, you're a goalkeeper... You need to tell him, look, you need to bulk up. This is your next level is 20s then senior… You don't want to sugar coat situations".

The unique position and responsibilities of a GK require a specific set of physical, technical, mental, and social attributes that set them apart from their outfield counterparts (West, 2018). This is reflected in the current research, due to developmental gaps that propose challenges and prompt future discussion. Further discussion in this area may yield beneficial insights into what exactly is required by GKs in comparison to their outfield equivalents at academy level (Wixey & Kingston, 2023). Giving coaches these insights could help develop GKs further, with participants in this study suggesting resilience as a key component for

development. Indeed, previous research has explored the factors that contribute to experiencing setbacks and building resilience in competing senior athletes (Fletcher & Sarkar, 2012; Galli & Vealey, 2008). Furthermore, coping with pressure and developing resilience have also been outlined as important in developing "super-champs" across sports (Collins & MacNamara, 2016) and elite rugby players (Ashford & Taylor, 2022). Additionally, participants in this study discussed psycho-social skills (i.e., leadership, bravery, and communication) required by GKs to succeed during their journey through the academy system. This can be seen in research such as Mills et al. (2014), who advocate for practitioners to pay close attention to the "psycho-social environments" they create for academy players, as this can hinder long-term development. However, Crawley (2021) highlighted the limited emphasis put on embedding the psycho-social skills into everyday life in academies, albeit vitally important to do so. Furthermore, Mills et al. (2014) advocate for the development of "positive working relationships" with parents, a theme that was suggested in the current research. Identifying how the parents of GKs actually "parent" (Roberts, 2012, p. 24) may go a long way to providing answers to how the relationships between parents, children, and coaches can be preserved. This idea was also found in the current research, therefore further investigation may determine the extent to which the parent has a "controlling influence" on the young GK in a sporting context (Taylor & Collins, 2015). These controlling or overly evaluative parenting behaviours alluded to in this research are likely to undermine confidence and enjoyment.

The Process of Collaboration

This theme consisted of the following three subthemes; 1) Expectations of GKs and GKCs, which details the perceived disconnect between the academy and the GKs and GKCs; 2) Different perspectives of the role of the GKC, which discusses the perceived lack of role clarity for the GKC from both sides; and 3) Barriers to effective collaboration, which looks at the perceived issues preventing positive collaboration.

Firstly, the *expectations of GKs and GKCs* was evident. With participants highlighting a disconnect between the broader academy and GKCs specifically. GKC1 suggested coaches had high expectations of GKs when integrating into team practices, "I think goalkeepers across the board are just expected to be of a higher level… there's more expectation on you to perform". Some GKCs suggested GKs were needed to be involved to support the broader practice outcomes and not their own development, "as long as they have two keepers … that's really all they care about" (GKC7). This led to concerns about the GKs development, "I try and encourage goalkeepers to be involved in the session for development purposes, but I

don't get much buy-in sometimes, they [*coaches*] just don't want the keepers" (AM6). AM4 highlighted the expectations on GKCs might be down to a lack of understanding; "I don't think we … are educated enough around goalkeeping coaching and the nitty-gritty of it and the high level of it". Finally, GKC2 highlighted the rarity of collaboration; "it's great to actually have a coach that understands the goalkeeping role and the coaching in it, but that doesn't happen that often".

Both AMs and GKCs highlighted *different perspectives of the role of a GKC* with the potential to limit collaboration. AMs were critical of the culture surrounding GKCs, with AM4 suggesting; "I don't think we have high level goalkeeping culture there". Whilst AM5 referred to their perceptions of the qualities of GKCs; "I've seen some coaches with top qualifications … [*but*] I wouldn't let them look after a tiddlywinks team". Furthermore, at an individual level AM6 commented; "he wouldn't be the most skilled goalkeeping coach in the world … he wouldn't be upskilled in the modern-day goalkeeper". Yet, there were also suggestions that there was a need to appreciate the nature of the GKC role; "I'm very aware it's completely specialist … we don't take it seriously enough" (AM3). Comparatively, GKCs identified a range of judgements they perceived the broader academy had of their role. Several suggested that their role was deemed less important in the academy, creating potential for tension between staff. As examples, GKC2 shared, "there's not a massive understanding [*of*] the role of the goalkeeping coach … Yeah, you're only a goalkeeper coach. What do you know?" GKC4 reinforced this, "we're still kind of classed as, going over to the corner and smashing a few balls at them. Goalkeeping is not as simple as that". In addition, GKC8 provided a broader perspective; "this attitude in football in Ireland … right you take the keepers for half an hour and that's basically your job done". There was also consideration of the expectations other coaches placed on the GK; "from an outfield coach point of view, we need to be absolutely perfect in every regard… expected to come for every cross, save every ball, play a pass brilliantly" (GKC6).

Finally, participants identified a range of *barriers to effective collaboration.* AMs highlighted common issues around segregation. With AM4 identifying that "there's no coordination with the goalkeeper coaches as everybody does their own thing", and that "we need to come away from … go over into a corner and they just do their little thing". Possible reasons for this lack of collaboration were highlighted by AM8; "communication in general … I would like to improve" and AM3; "there's a real need almost for coaches to meet together and build a relationship … coaches say they don't get on". With AM3 further suggesting that "where people fall down … they kind of pigeonhole people. You look after

that bit". GKCs also highlighted similar barriers to collaboration with GKC 5 indicating that the relationship between coaches across age groups is key; "when I go in with the 14s, the relationship could be great. When I go in with the 15s, there might be a little bit of a personality clash". GKC1 noted there wasn't enough communication; "there just needs to be more face-to-face communication with coaches, oftentimes it's just a text message, a two-minute conversation". Finally, GKC1 called for more collaboration on projects to develop GKs through "unit work to kind of get them there… that's collaboration with coaches".

The apparent lack of co-operation noted in this research between the broader academy and GKCs has the potential to derail the development of academy GKs, with Martaens and Vealey (2024) outlining the importance of integration between coaches for the development of soccer players. Taylor and Collins (2022) define integration as the extent to which systems and stakeholders work in tandem to support an athletes development, leading to a coherent experience for the athlete. With coherence defined as the extent to which different elements of an athletes experience horizontally (e.g., within an age group) and vertically (e.g., between age groups) are mutually reinforcing (Taylor & Collins, 2022). The current research proposes potential restrictions to coherence and integration with data suggesting that there are challenges regarding perceptions and expectations of GKCs, commonly seen as a *view of* GKCs from the broader academy. So, while outfield coaches possess a wealth of knowledge and experience, there is potential for their assumptions and priorities to interfere with the specific needs of GK development (Ford et al., 2010; Silva et al., 2018). This may be down to a lack of specialized knowledge required to support the very distinct role of GKs (Otte et al., 2020; Windoro et al., 2020). This may also be a result of the ongoing perceived performance vs. development discussion (Barry et al., 2025), and from the volume of answers from GKC's in the present study, whereby outfield coaches prioritise winning games of long-term development of players. Indeed, balancing the development of an athlete while maintaining positive levels of performance is a difficult but potentially rewarding process in TD, with opposing views for both sides of the argument evident (Camire, 2015). Contrary to this, GKCs may find themselves advocating for drills and strategies that are not necessarily in alignment with the overall academy approach, further leading to conflicts and a lack of cohesion for the athlete (Nash & Mallett, 2019). Overall, this can lead to impaired 'integrated working practice', negatively impacting on the TD experience for GKs (Taylor & Collins, 2021). Research has shown that, although a complex social and discursive process, collaboration generally results in positive outcomes for co-constructing curriculums (Keenan, 2020). From the current study, it remains to be seen whether academies are currently set up in

436 the best manner with the most effective collaborative processes to achieve productive co-
437 constructed curriculums. Interestingly, effective collaborative processes require consideration
438 of, and research into three different paradigms to gain a deeper understanding of the
439 complexity (cf. Barley & Weickum, 2017). Barley and Weickum (2017) theorise these as (1)
440 black-box studies that capture collaborative teamwork by examining how inputs, variables,
441 and contextual factors influence collaboration (e.g., academy structures and systems). (2)
442 Collaborative interaction studies that explicitly focus on interactions between collaborators
443 (e.g., calls, meetings, messages between AMs, GKCs, and coaches). And (3) Work-orientated
444 research that examines the patterns of work and influence of collaboration on how team
445 members work separately (e.g., GKCs isolated practice or a coach on game-day). Therefore,
446 it would be of interest to explore each approach individually to understand the paradigmatic
447 influences on effective collaboration, as well as the interactions between, and influences on,
448 each paradigm.

449 **Exploring the barriers to effective GK development**

450 This theme consisted of the following three subthemes; 1) Money and time impacting
451 negatively on development, which highlights the issues caused by the part-time, under-
452 funded nature of the academy system; 2) Geographical and cultural barriers toward
453 development, which investigated the perceived influence of location and current Irish
454 sporting landscape has on GK development; and 3) National Governing Body support, which
455 details the areas where clubs perceive requires more support from the NGB.

456 One idea all participants were unanimous in agreement on was *Money and time*
457 *impacting negatively on development,* and how limiting it is for clubs: “I think definitely the
458 biggest barrier… is the access you have to them. There needs to be that industry” (GKC6).
459 Only being able to offer GKCs voluntary positions and expecting individuals to commit to
460 multiple portions of their week was sometimes unrealistic; “It's nobody's job to be there…
461 Like, everyone's there as volunteers” (GKC1). The lack of an industry for coaches is
462 worrying, “if you have an industry and say coaches getting paid … then there's accountability
463 behind what you're doing” (GKC6). Poor levels of funding leaves academies in a precarious
464 situation when recruiting staff; “clubs in Ireland aren't, flush with cash … a small amount of
465 investment in your goalkeeper side would see big rewards,” (GKC5). There was total
466 agreement between participants that the expectations placed on volunteer GKCs are largely
467 unrealistic. This has been the case in previous analysis of TD systems in terms of poor
468 resourcing, and how it can impact the athlete’s overall development (Til & Baker, 2020).

Logistically, low numbers of qualified GKCs coupled with restricted training times can hamper GK development, as "it comes down to fundamentally not having enough goalkeeper coaches in the country, who have the knowledge… And we need more help" (AM3). It is commonly felt that Academy coaches "definitely don't give them *[players]* enough time" (GKC2). Academies in Ireland are significantly restricted with regards to contact time as most players are in fulltime education away from their clubs. Less contact time here results in less development compared to other countries, which is a concern: "Number one [*barrier*] is just the football player development is time constraints and contact time … every player needs more if you're playing an elite level sport" (GKC1), and "We are always going to say it's contact time … that's a massive barrier" (AM6). This can hamper TDEs by reducing time on the pitch, therefore limiting players' progress, which can be construed as "failures of coaching practice", (Collins & Taylor, 2021). This is in direct conflict to the requirements needed to create a successful TDE, i.e. long-term aims and methods, wide-ranging coherent messages and support (Martindale et al., 2007).

Geographical & Cultural barriers towards development was reported as a key subtheme by participants, which promoted the idea of an urban/rural divide in relation to soccer influences. Centralisation of soccer influences (governance, successful academies, qualified coaches, international selections etc.) was identified by some participants as a significant barrier to GK development with some of the rural participants suggesting an advantage for those clubs based in and around Dublin: "this is going to be very controversial. But I think the opportunities are only up in Dublin" (GKC4). Some believe these regional differences have an impact on GK Development as "we need to do more stuff outside in rural areas and I don't think we're doing enough of that" (AM1).

Data here shows contrasting considerations when looking at playing multi-sports. In Ireland, GKs have a perceived advantage to develop their skillset by "playing in other sports… Gaelic football is a great example of something that can transfer into being a goalkeeper" (GKC1). Some GKCs feel this overlap provides opportunities for young players to increase their contact time and further skillset development, which is in-keeping with current views on positive connotations associated with athletes playing multiple sports at a young age (Gullich et al., 2020). Whereas some coaches are of the opinion that playing other sports can take away from GK development: "he's going backwards… is he playing another sport?... How does that coincide with your goalkeeping training?" (GKC4). Furthermore, some GKCs believe that for such a small country there are too many options to play other

sports which can dilute the development of young GKs: “There's so much opportunity, GAA is a big one, rugby is another big one” (GKC8).

Finally, participants discussed the challenges around *National Governing Body Support*. AM6 stated “not to slate anyone... there needs to be more done from a national body”. Expanding on this, some AMs felt there is a need for more engagement from the association such as “that night we had at [*club*] a few weeks ago with the goalkeepers was excellent… we want more of that… I feel the [*NGB*] need to do more in that, we need to educate more on it… educate coaches who are young or inexperienced” (AM3). Whereas other participants want more GKCs to be produced to work in academies as “there's a massive shortage of keeper coaches around the country” (AM2). Finally, participants allude to the goalkeeping position not being made attractive enough to prospective players by the NGB, and more needs to be done to entice players of a younger age to try it, with AM6 stating “I don't think we do enough to inspire… goalkeepers to be a goalkeeper”. GKC8 thinks that this “is a football problem. I mean, do kids really grew up wanting to be a goalkeeper”.

Soccer Academies in Ireland consistently operate under constrained budgets, particularly when compared to their counterparts in larger footballing nations. According to Bailey et al. (2010), sustained investment in infrastructure, coaching, and support services is crucial for long-term athlete development. However, this investment is currently lacking across most academies in the country and is impacting the development of aspiring GKs. The lack of funding highlighted here could negatively affect any potential ongoing development opportunities that may arise, therefore reducing the effectiveness of the TDE (Martindale et al., 2007). Similarly, many of the participants in this study are not full-time GKCs. Which could lead to generic training that fails to address the unique technical and tactical demands of the position (Ford et al., 2012). In many cases, financial issues can also lead to a lack of access to high-quality training environments, which in turn can restrict the ability to simulate game-like scenarios essential for GK learning (Renshaw et al., 2010). Furthermore, the financial situations alluded to here can affect reduced training time (due to renting of facilities), and thus impact GK development. Due to time constraints, GKs may receive only a fraction of the total training time, with sessions focused predominantly on outfield players and their needs. This reflects the performance versus development argument, whereby Head Coaches may decide to focus on strategies to win games during the limited training time available, rather than long-term development for individual players (Vaayens et al., 2009; Barry et al. 2025). In addition, all players in this Academy System are juggling multiple

commitments, including school, part-time jobs, and, sports and interests outside of soccer. Indeed, interacting with multiple sports is a constant academic discussion with some advocating for playing numerous sports at young age to reduce injury risk and aid performance later in life (Khan et al., 2024; Rugg et al., 2017), whereas some highlight this may be detrimental, and that early specialisation in sport can be a positive idea (Baker et al. 2020: Ericsson et al., 1993). These cultural differences reflect the nuanced aspects of the geographical data, whereby more rural GKCs feel more central academies benefit from their location around Dublin. This would align with the idea of "birthplace affect", whereby the area where a child grows up can lead to advantages in sport performance, either by access to certain sports provisions (i.e., specialist coaching, sporting facilities, high-level competition; Hancock et al., 2020). Consequently, this can lead to a higher chance of "expertise development in sport" due to proximity to better academies and structures (Rossing et al., 2017).

Implications for Future Research

This study sought to unpack challenges practitioners face developing GKs in an Irish academy soccer setting through a co-production methodology. In doing so, it sought to generate knowledge and position coaches as partial co-producers rather than passive subjects. This approach aligns with the principles outlined by Fals-Borda and Rahman (1991), where knowledge is constructed through dialogical engagement and mutual learning.

The implications for future research are therefore not prescriptive in the traditional sense. Instead, they reflect how practice problems are framed and addressed, emphasising relational, contextual, and participatory dimensions of TD (John & Thiel, 2022). As highlighted in recent co-production literature (cf. Boswell et al., 2021), successful implementation of co-produced insights requires institutional support, flexibility in practice design, and a commitment to valuing diverse forms of expertise. In the context of TD and GKs, this suggests a shift toward more collaborative, situated, and reflexive practices. Rather than seeking definitive answers, the study aimed to open up new lines of questioning that challenge linear, decontextualised, and often exclusionary areas, such as TD and GKs (Otte et 2020, p.2).

Based on our findings results indicate further enquiry associated with GK development is required across three organisational (i.e., nested) levels of player development (i.e., Macro, Messo and Micro; See Figure 2.). For clarity we refer to macro-level factors as national-level organisational and cultural influences, meso-level factors as academy influences, and micro-level factors as specific coaching influences.

Figure 2. Nested considerations for future research supporting GK coaching in TD

At a macro level, further study would yield positive insights when exploring the barriers to effective GK development. With consideration of national organisation and geographic and cultural barriers, future research should critically examine how structural limitations within the developmental system restrict equitable access to specialised training for GKs. Disparities in resource allocation and the perceived uneven distribution of opportunities across regions suggest systemic issues that extend beyond individual commitment. Moreover, the influence of overarching NGB involvement may require examination, particularly looking at practices that influence GK development. At a meso level, future research should consider the range of factors that influence effective collaboration in the academy setting. For example, the cultural context surrounding the collaborative process, the interactions that take place between collaborators and the independent work that collaborators undertake. This would allow for a clearer examination of the mechanisms underpinning these processes. Finally, at a micro level, future research on the ground should explore the specific developmental gaps in GKs. Identifying these gaps and understanding how coaches can effectively address them would offer valuable insights for academy GKCs. For example, it would be beneficial to examine the unique developmental needs of GKs, particularly those that distinguish them from outfield players, and to

investigate the social constructs influencing GK development, including the roles played by key individuals in their environment. Consequently, we suggest this study has provided a platform to conduct further studies into TD and GKs in Ireland. Additional research in these three main areas should offer academics and practitioners the opportunity to expand upon our knowledge and understanding of TD and GKs and begin to propose research ideas in relation to RFS.

Conclusion

This novel study highlights areas in GK development in Ireland which require further research, emphasizing the multifaceted nature of the GK role within team sport. Using a co-production approach, this research found gaps in individual GK development with academies requiring further study. Secondly, the research underlines the importance of effective collaboration between academy staff to ensure a holistic and integrated approach to GK development, with future research needed to investigate how this is achieved. Finally, recurring challenges in the Irish soccer landscape are the reported barriers to effective GK development. Addressing all areas through future exploration is crucial for developing RFS questions, and for fostering a more robust goalkeeping culture in Ireland.

Key messages:

- A nested view can support practitioners to consider a broader range of factors that might create challenges for effective practice.
- Research that petitions different groups of practitioners such as this is important in conceptualising collaboration in an interdisciplinary context.
- Exploring the positionality of the individual athlete in the team setting paves the way for the development of improved TD practices.

Summary statement of key findings:

- Goalkeeping Coaches believed:
    - There is a general lack of understanding pertaining to the role of the GK coach.
    - The development requirements of GKs are different to those of outfield players.
- Academy managers believed:
    - The GK position is nuanced and there is a desire to understand it better.

    - There is scope for closer collaboration between all staff and coaches.
- Both groups believed:
    - Due to multiple barriers and challenges, most notably the part-time nature of academy positions, academies are often constrained from meeting their potential.
    - The psychological needs of the goalkeeping position are nuanced and underdeveloped in the Irish academy context.

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