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# The role of the analyst: comparative analysis of applied performance analyst job advertisements in the UK and Ireland (2021-2022)

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## ABSTRACT

This study examined the key roles, responsibilities, and skills sought when advertising for the recruitment of Applied Performance Analysts (APAs) in UK and Irish professional sports settings. Deductive and inductive content analysis of the job descriptions and personal specifications of 130 job advertisements from 2021 to 2022 across the entire APA spectrum was undertaken. This encompassed 21 different specific role titles. Despite unified advertisement formats, noticeable variations emerged regarding length and content focus, regardless of First-team or Academy positions. The findings revealed a greater focus on Sports Performance Analysis (SPA), sports, and technical expertise coupled with professional behaviours in APA advertisements, with less priority shown to relationship-building skills. First-team positions particularly requested more skill-specific analysis expertise. Academy APAs were expected to focus on collecting data, facilitating feedback, in addition to creating and approving infrastructure for various age groups. Comparatively, First-team roles involved more complex data analysis tasks, including interrogating data, trend identification, and stakeholder reporting. The analysis not only highlights role discrepancies but also serves as a potential framework for employers when creating job advertisements, assists applicants in identifying the key skills to highlight, and informs curriculum and training programmes to cover the entire APA spectrum.

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Advertisements;  
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## 1. Introduction

The continuing rapid growth of Sports Performance Analysis (SPA) is recognised as essential for coaching and player development, notably in association football (Butterworth, 2023; Mackenzie & Cushion, 2013; Sarmiento et al., 2018; Wright et al., 2014). This growth has led to increased diversification in the type of data used for decision-making and the roles of Applied Performance Analysts (APAs) in directly supporting the coaching process (Hughes, 2004; Martin et al., 2023). Whilst there is an increasing body of research surrounding objective data insights and their impact on

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individual and team success (Memmert & Rein, 2018), and how SPA is perceived by coaches, players, and support staff (Andersen et al., 2022; Reeves & Roberts, 2013), there is still a lack of both theoretical and practical guidance regarding the specific roles and responsibilities of APAs.

Hughes (2004) argued APAs conduct tactical, technical, and movement evaluations of individuals and/or teams, build databases and create predictive models for coaches and players to use in making future decisions. As SPA has evolved, APAs developed advanced methods to capture in-depth, in-event and post-event information, necessitating different ways of presenting this information to inform the coaching processes, which has been facilitated thanks to technological advancements (Hughes, 2015). Wright et al. (2013) reinforced many of these crucial principles and identified additional roles and skills APAs need, such as pre-event analysis to help coaches and players identify opponent's strengths and weaknesses. Additionally, the paper shed light on the different approaches for feeding back information (e.g. group, unit, or individual presentations), through which APAs would be required to gain knowledge of and expertise in communicating the most important performance insights gleaned from the gathered and processed data.

The International Society of Performance Analysis in Sports (ISPAS) accreditation framework attempted to summarise APA's roles (Hughes et al., 2020), but it focused heavily on technical skills of data collection and analysis, neglecting the importance of intra-/inter-personal skills that are required to translate key insights (Martin et al., 2021). Robertson (2020) reiterated this emphasising the need for more knowledge of an APA's soft skills. Subsequently, Martin et al. (2021) proposed a comprehensive framework for APA practice, encompassing five areas of expertise ((i) "Contextual Awareness", (ii) "Building Relationships", (iii) "Performance Analysis and Sporting Expertise", (iv) "Technical Expertise" and (v) "Professional Behaviours") and nine components of APA practice ((i) "Establishing Relationships and Defining Roles", (ii) "Needs Analysis and Service Planning", (iii) "System Design", (iv) "Data Collection and Reliability Checking", (v) "Data Management", (vi) "Analysis", (vii) "Reporting to Key Stakeholders", (viii) "Facilitation of Feedback to Athletes" and (ix) "Service Review and Evaluation"). The framework highlights the role of an APA involves more than data per se, but also learning from data, promoting behaviour changes, enhancing decision-making, and adding valuable performance knowledge. Mulvenna (2023) emphasised the framework produced by Martin et al. (2021) fails to acknowledge the complex nature of the sports landscape, and the socio-political influences, affecting a true reflection of the APAs role. Despite these points, there remains no consensus on the definition, objective, critical relationships, or competencies APAs require to determine an APA and SPA success (Robertson, 2020; Stanway & Boardman, 2020; Wright et al., 2013). Nevertheless, Martin et al. (2021) framework provides valuable insight into the roles and responsibilities of APAs' (Mehta et al., 2023).

We use the term SPA to represent what Martin et al. (2021) refer to as "Performance Analysis" (PA) to differentiate it from the abbreviation often used for "Physical Activity". This initial detailed examination of an APA's role adds valuable knowledge and understanding to the discipline of SPA, benefiting novice and experienced APAs, educators and strategic managers in sporting settings (i.e. clubs, organisations, and governing bodies). The emergence of more specialised roles and tasks within a SPA department (e.g. coach analyst, GPS analyst)

(Stanway & Boardman, 2020) has led to ongoing debates among APAs, sports settings and educators regarding the crucial tasks, obligations, and competencies APAs require, the potential deficit in applied practice in “value capture” (Martin et al., 2023) and how an APA’s skill set is integrated into the high-performance sport setting (Callinan et al., 2023). Whilst research has started to shed light on some of the core roles, responsibilities and skills required of an APA, there is still no understanding of whether sports settings align job descriptions and personal specifications with the recommendations made by the researchers in the field.

In the context of job advertisements, examining them is common practice in various fields to better understand the evolving requirements of workplace skills (Harper, 2012; Pitt & Mewburn, 2016). However, there remains limited research on how job advertisements specifically attract candidates’ interest. Petry et al. (2021) highlighted that advertisements often convey conflicting messages between employers and applicants. Therefore, a close examination of how job qualities are portrayed in advertisements can provide job seekers with valuable insights into an employer’s beliefs, values, and job preferences (Guillot-Soulez et al., 2014).

Furthermore, job advertisements should not only provide comprehensive details about the employer but also provide information about the work culture, key objectives, job-related tasks, salary, remuneration information and opportunities for career advancement within the setting (Bernal-Turnes & Ernst, 2023; Ng et al., 2010; Petry et al., 2021). This comprehensive approach to job advertisements becomes particularly evident when considering a recent study of the profile of the skills, qualities, development, and career possibilities for sports scientists in Australia (Bruce et al., 2022). The study highlighted the expectation that future roles will require greater specialism, demanding specific technical and interpersonal skills.

This aspect is especially critical in the discipline of SPA, which has been lacking such reviews and analysis. This gap is further highlighted by the fact that popular APA posts in association football can attract over 100 candidates and these roles are progressively diversifying (Butterworth, 2023). As a result, the shortlisting of these roles is often a highly competitive process, with qualifications, skills, and the quantity and quality of applied experience serving as crucial criteria in the decision-making process for future APA appointments.

To address the knowledge gap in APA roles, this study examined the key roles, responsibilities, and skills sought when advertising for the recruitment of APAs in UK and Irish professional sports settings from 1st January 2021 to 31st December 2022. The insights gained from this study have the potential to assist sports settings in tailoring their advertisements to meet specific needs across the entire APA spectrum. Furthermore, the findings could offer valuable insights into the career paths taken by APAs, both in educational institutions and junior APA employment. This knowledge would potentially be instrumental in improving the recruitment process and supporting the development of future APA in SPA.

## 2. Methods

### 2.1. Job advert selection

For this exploratory study, text from 130 publicly available job advertisements was collected between 1st January 2021 to 31st December 2022. The selection of job advertisements followed a multistep process. Throughout the duration of the study, text was scraped from various websites, including [thevideoanalyst.com/apfa.io](https://thevideoanalyst.com/apfa.io), Jobs in Football, Jobs4Football, British Association for Sport and Exercise Science, UKSport, the English Football League, professional football clubs' employment web pages and LinkedIn. Additional job advertisements were also obtained by using specific search strings through web browser search engines:

(job OR position OR post) AND (announcement OR ad OR advert OR advertisement OR description) AND (analysis OR performance analyst OR sports performance analyst). [all in the title]

To ensure a comprehensive collection of job advertisements, the researchers established automatic notifications of new job advertisements from the above-mentioned websites. Additionally, the researchers conducted manual searches at the beginning of each month to identify any job advertisements that may not have been captured through the automated notifications. Over the course of 24-months, this search process yielded 149 job adverts directly and indirectly related to APA roles within SPA. Job adverts were not considered if they did not include full-time positions within a professional sports setting where employment was within the United Kingdom or Ireland. Additionally, to ensure a sufficient sample size for analysis, a minimum of three advertisements over the two years were needed from a sport to be included in the study. These criteria reduced the list of job advertisements to 130 positions. Throughout the data collection processes, the list was continually checked to ensure content validity. Therefore, it is essential to acknowledge that our sample primarily reflects publicly advertised job opportunities across the broad spectrum of APA roles, acknowledging that other APA would have been recruited internally or without external advertisement during this time period.

### 2.2. Data preparation of eligible job adverts

Data from the 130 qualifying job advertisements were organised into three different tabs in a Microsoft Excel spreadsheet. The first tab, named "Overview", contained key information about each position including the Year, Sports Setting, Sport, Level, Specific Role Area, Gender, and Job Title, as well as information about the Frequency of Tasks/Responsibilities Requested, Frequency of Essential Components Requested, Frequency of Desirable Components Requested, and Salary Details. The second tab, labelled "Personal Specification", comprised 1,609 rows of data. Each row represented the skill or experience requirement specified in the job advertisements. It also indicated whether the skill or experience was classified as essential or desirable for the role, along with demographic information. The third tab, named "Tasks", contained data regarding the key tasks and responsibilities for each role. There were 1,408 rows of data, with each row representing a specified key task and demographic information about the role.

**Table 1.** Summary of specific role titles within APA advertisements.

Specific Role Title Area	Academy	First-Team	Overall
Assistant	1	15	16
Data		3	3
FDP	1		1
FDP & YDP	11		11
General Academy	1		1
Head	5	7	12
Lead	21	22	43
Opposition		2	2
PDP	7		7
Pre-Match		2	2
Recruitment		8	8
Research	1	1	2
Set-Piece		1	1
Technical		1	1
Training		1	1
U17-U21	1		1
U18	4		4
U23	6		6
Video & Data		2	2
YDP	5		5
YDP & PDP	1		1
Overall	65	65	130

As part of the study, we were interested in exploring the differences between two generally defined APA roles: Academy and First-team. The term “Academy” was used to describe positions where more than 50% of their time was dedicated to developing athletes to compete at the highest level. Examples of roles falling under this category were “Pathway Analyst” for England Netball and distinct APA posts in academy association football related to the Foundation, Youth, and Professional Development Phases (FDP, YDP and PDP). While “First-team” referred to positions where more than 50% of the employee’s time was spent on performance-related tasks. This included positions like “Insight Analyst” at the Welsh Football Association as well as “First Team Performance Analyst” and “First Team Recruitment Analyst” in association football and “Assistant Performance Analyst” roles in rugby union. It is important to note that we identified a total of 21 different specific role title areas falling under the umbrella term of APA, in which we have referred to the spectrum of APA (see [Table 1](#)). In some instances, “Head of Analysis” or “Lead APA”, which was featured 45 times, was used when the APA was the sole member of staff in the department, indicating a potential variation in the actual seniority of the roles represented by the title. Furthermore, our data inputting and cleaning processes revealed that leadership and management aspects were mentioned with similar frequency with “Head of Analysis”/“Lead APA” and non-head/lead roles in the tasks and personal specification sections of advertisements. Therefore, the data set contains the entire APA spectrum of roles from junior entry-level APAs through to senior APA roles, providing a balanced dataset for exploring the differences between Academy and First-team roles. The 130 job advertisements had an equal division between Academy APA roles ( $n = 65$ ) and First-team APA roles ( $n = 65$ ).

### **2.3. Content categories**

Content analysis of job advertisements provides a flexible method for detecting the current skill sets needed by different professions (Harper, 2012; Messum et al., 2016). This methodology involves segmenting data into linguistic units, locating specific words or phrases in the job advertisements, and providing a frequency of occurrences (Lipovac & Marina Bađić Babac, 2021).

In the coding process, we employed both deductive and inductive procedures (see Appendix: Code Book) to analyse the text. Initially, Martin et al. (2021) framework was used to generate the codebook for the analysis and identify potentially problematic areas. The five areas of expertise were used as primary codes for analysing the content of the “Personal Specification” sheet. During the process, we encountered challenges with the “Contextual Awareness” area, ultimately deciding to align with Martin et al. (2021, p. 13) comment that “contextual awareness and responding to context is the application of expertise in the other four domains”.

For the remaining four domains, we felt additional secondary codes needed to be generated to better capture the domain description from the original Martin et al. (2021) paper. As a result, we generated six secondary codes under the primary code “Building Relationships”, including general relationships, sports setting staff, multidisciplinary team relationships, multidisciplinary team and external relationships, SPA-dyad relationships, and SPA-triad-parent relationships. Similarly, secondary coding was applied to the primary codes “PA and Sport Expertise”, “Technical Expertise” and “Professional Behaviours”. Each is outlined in the Code Book: 13 primary codes and 59 secondary codes.

Martin et al. (2021) framework was then used to analyse the key tasks and responsibilities section of the job specification, mapping them to the nine components of APA practice. Each of the nine components was used as primary codes, and secondary codes were drawn from Martin et al. (2021) “processes” columns, as presented in Tables 3 to 13 in her work. No additional primary or secondary codes were generated for this part of the analysis.

### **2.4. Procedure**

The content analysis (Harper, 2012) process was undertaken manually by authors one and two from January to March 2023. Each task or personal specification text was assigned a single primary and secondary code using the created content categories. The primary coding for the 2021 job role data was completed by author one, while the primary coding for the 2022 job role data was completed by the second author. Following this, authors one and two collectively reviewed the primary codes together. Author one then performed the secondary coding for all the data, with author two independently cross-checking the coded data. The third author, an experienced APA and SPA researcher (10+ years) was also consulted throughout the first author’s secondary coding to gain their unbiased and unaffiliated opinions on the codes allocated. A new primary code labelled “Other” was introduced to the “Personal Specification” sheet to

encompass details such as driving, language proficiency, location, and visa requirements. All three authors engaged in discussions and reached a consensus on all the primary and secondary coded data, ensuring a collaborative and thorough content analysis of the job advertisements.

## **2.5. Data analysis**

Total frequency counts were calculated for each primary and secondary category code to explore the specific research aim and examine the overall distribution of codes across the dataset. Pearson's Chi-square analysis and Crammer's V ( $\phi_c$ ) analysis were also carried out to determine if there was a statically significant association between each of the primary and secondary codes, and "Level". Additional descriptive data was generated relating to the sport, number of roles, "Level", and means and standard deviations for the number of tasks or responsibilities requested, along with the number of essential and desirable characteristics. For data analysis and visualisation, the following packages in RStudio (2023.03.1 + 446) were used: GGplot2 (Wickham et al., 2023), TidyR (Wickham et al., 2023), VCD (Meyer et al., 2023), and WordCloud (Fellows, 2018). All statistical tests were conducted at the 5% level of significance.

## **3. Results**

### **3.1. General observations**

During the two-year period, 65 Academy and 65 First-team job advertisements were obtained and analysed. These advertisements were for a total of 75 different sports settings posted openings (see [Figure 1](#)). Most recruiters advertised on one (n: 43) or two occasions (n:19) over the 24 months. Some sports settings advertised more frequently, with Swansea City AFC (Academy: 4; First-team: 2) and Reading FC (Academy: 5) being notable examples. Association Football APA positions dominated the data (n: 115; Academy: 59; First-team: 56), followed by smaller numbers in Cricket (n: 3; First-team: 3), Netball (n: 3; Academy: 1; First-team: 2) and Rugby Union (n: 9; Academy: 5; First-team: 4) (see [Table 2](#)).

The advertisements generally followed a default structure. They began with a summary of the sports settings and a key description of the job, often referred to as "Job Purpose". This initial section often provided a suitable insight into the sports settings' values, but not necessarily the specific SPA department or their SPA values. Several subsections followed, addressing the specific tasks or responsibilities expected of the successful applicant, as well as the skills and experience the recruiters were seeking. It is important to note the length and content of these sections differed greatly across our sample.

Within the sample, Academy APA roles typically had a larger number of tasks or responsibilities to cover compared to First-team, except for Cricket APA advertisements. For example, Aston Villa FC, Swansea FC, and Munster RFC had over 20 job responsibilities or tasks in their Academy advertisements (see Supplementary Data File).





**Figure 1.** Word cloud summarising the frequencies of sporting organisations advertising APA roles (the larger the text, the higher the frequency count).

**Table 2.** Summary of general observations within APA advertisements.

Sport	Performance Level	Number of Roles	Tasks or Responsibilities	Essential Criteria	Desirable Criteria
Cricket	Academy	0 (0.00%)	0.00	0.00	0.00
	First Team	3 (2.31%)	13.00 ± 2.65	13.00 ± 5.20	1.67 ± 1.53
Football	Academy	59 (45.38%)	11.05 ± 4.96	10.17 ± 4.71	3.28 ± 2.44
	First Team	56 (43.08%)	9.34 ± 3.87	8.82 ± 4.03	2.09 ± 2.13
Netball	Academy	1 (0.77%)	13.00	16.00	7.00
	First Team	2 (1.54%)	10.5 ± 2.12	14.50 ± 4.95	5.5 ± 2.12
Rugby Union	Academy	5 (3.85%)	13.00 ± 5.70	8.8 ± 3.56	1.6 ± 1.34
	First Team	4 (3.08%)	10.25 ± 2.99	10.00 ± 6.32	1.5 ± 3.00
Overall	Academy	65	12.05 ± 4.94	10.16 ± 4.65	3.20 ± 2.44
	First Team	65	9.60 ± 3.77	9.26 ± 4.33	2.14 ± 2.21

Furthermore, the personal specification section for Academy positions also tended to list a higher number of essential criteria that applicants must demonstrate, except for Rugby Union and Cricket.

A total of 23 of the 130 advertisements displayed any financial details. In the case of 15 Academy roles, salaries ranged from £15,000 to £29,000. The highest salary was attributed to a role involving leading the SPA provision for a Category One Football Academy, whilst the lowest salaried role was with Rugby Union

overseeing the development of players across different age groups within a Premiership Rugby Academy. In contrast, eight First-team roles disclosed salary information ranging from £18,000 to £30,000. The lowest salary was advertised by a team competing in League One of the English Football League whilst the highest salary was offered by a team in League Two. Interestingly, there was no mention within any advertisement regarding career progression.

### 3.2. Personal specification observations

Analysis of the personal requirements in job advertisements show “PA and Sport Expertise”, “Technical Expertise”, and “Professional Behaviours” were requested more frequently than “Building Relationships”, regardless of job level (see Figure 2). Notably, the job advertisements for Academy positions emphasised “PA and Sport Expertise”, “Technical Expertise”, and “Professional Behaviours” to a greater extent than First-team roles. First-team roles requested more specific relationship expertise and experience at a higher frequency than Academy roles (see Figure 3(a)). However, this area of expertise only featured 27 times in the 130 job advertisements.

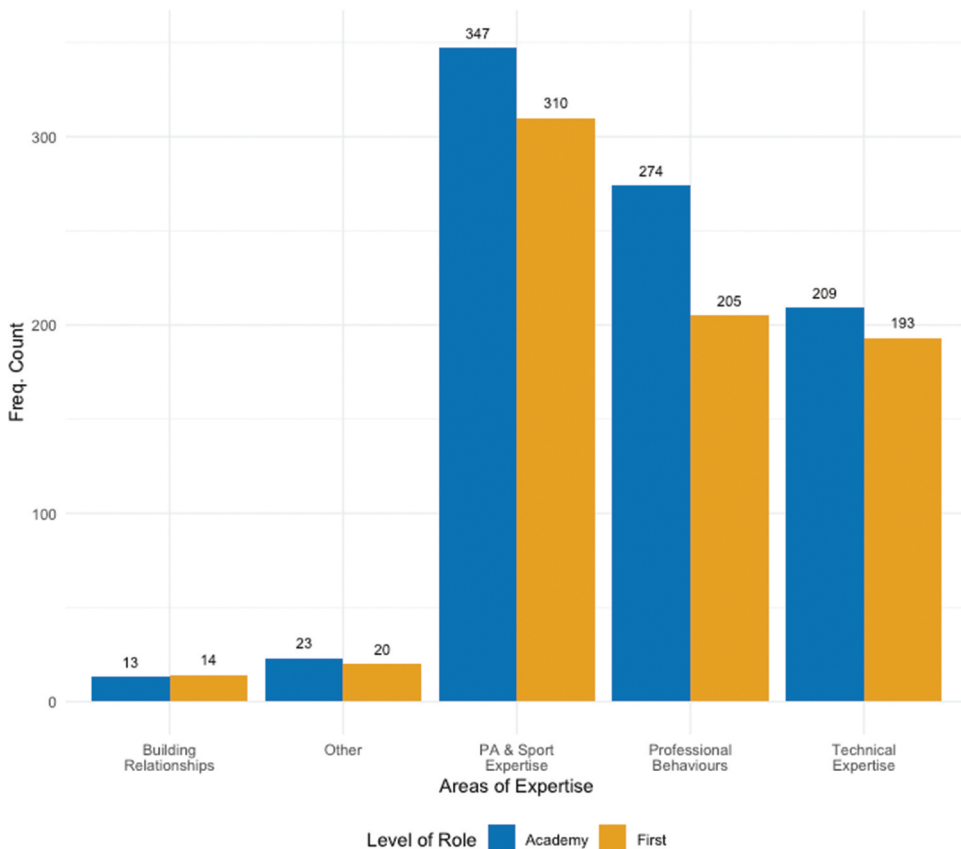
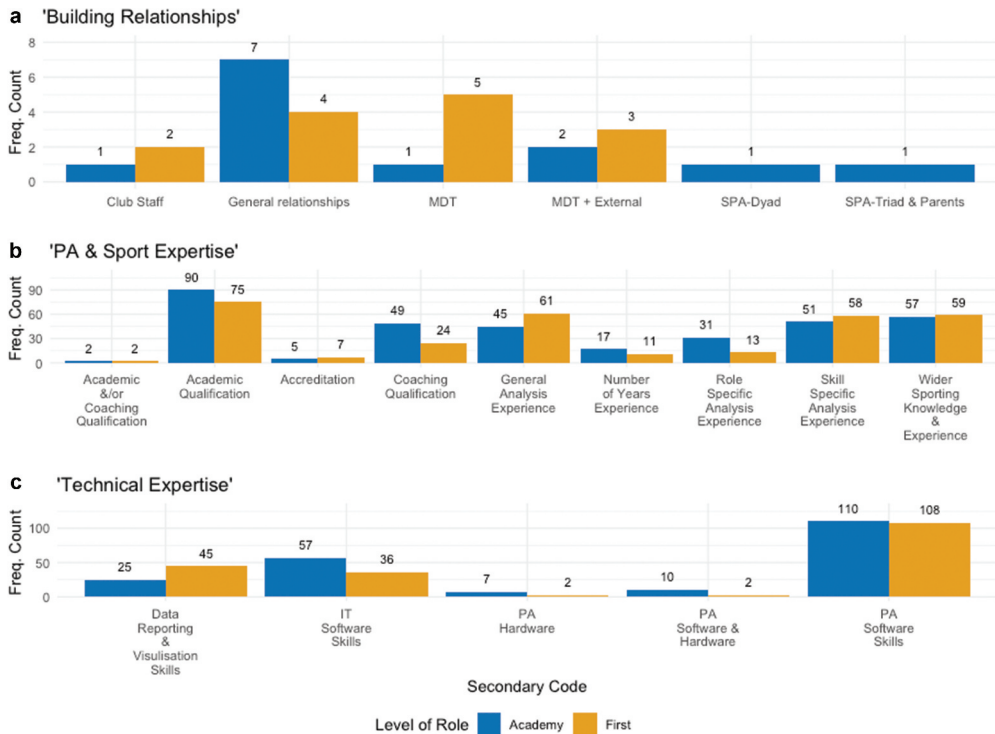


Figure 2. Areas of expertise underpinning APA against role level.



**Figure 3.** Sub-areas of expertise (a: ‘building relationships, b: “PA & sport expertise” and c: “technical expertise”) underpinning APA against role level.

In the “PA and Sport Expertise” category, academic qualifications were frequently requested, with Academy roles often requiring them significantly more often than First-team roles ( $X^2(8, N = 657) = 19.786, p = 0.011, V = 0.174$ ) (see [Figure 3\(b\)](#)). It is worth noting that an undergraduate qualification is often an essential requirement (Academy: 48; First-team: 43), while only nine job advertisements listed it as desirable (Academy: 3; First-team: 6). Additionally, post-graduate qualifications, UEFA B licences or Level 2 coaching qualifications were more frequently requested for Academy roles compared to First-team roles (Academy: 91 – Essential: 17; Desirable: 74; First-team: 50 – Essential: 6; Desirable: 44). First-team advertisements typically requested general experience or skill-specific experience. In contrast, Academy advertisements typically sought role-specific experience working with specific age groups.

Significant differences were observed in the “Technical Expertise” category based on role level, with varying skill and knowledge requirements ( $X^2(4, N = 402) = 17.977, p < .001, V = 0.211$ ) (see [Figure 3\(c\)](#)). First-team roles requested “Data Reporting and Visualisation Skills” more frequently (Academy: 25; First-team: 45), whereas Academy roles emphasised “IT Software Skills” (Academy: 57; First-team: 36). “PA Software Skills” were commonly requested, with advertisements often referring to industry-standard SPA software. In some cases, advertisements made specific references to specific software: data capturing software (e.g. Hudl SportsCode, SBG

Focus, Fulcrum Angles, NacSport) and handling and visualising software (Excel, Numbers, Tableau, PowerBI, Hudl Studio, Coach Paint, Piero, iMovie, Final Cut, R, Python).

“Professional Behaviours” were frequently mentioned in job advertisements, with attributes such as being proactive, having good time-management skills, and effective communication being highly requested (see Figure 4). Noticeably, Academy positions placed a stronger emphasis on “Professional Behaviours”, except leadership qualities which were sought more frequently in First-team advertisements.

### 3.3. Tasks and responsibilities observations

In the tasks and responsibilities sections, significant differences between Academy and First-team roles were identified ( $X^2(8, N = 1407) = 42.235, p < .001, V = 0.173$ ) (see Figure 5(a)). “Data collection and reliability checking” was the most frequently requested component, with Academy roles placing a higher emphasis (Academy: 175; First-team: 148). Academy positions requested “Facilitation of Feedback” (Academy: 145; First-team: 64) and “Needs Analysis and Service Planning” (Academy: 123; First-team: 77) more frequently than First-team roles. In contrast, “Analysis” and “Reporting to Key Stakeholders” were more frequently requested in First-team advertisements.

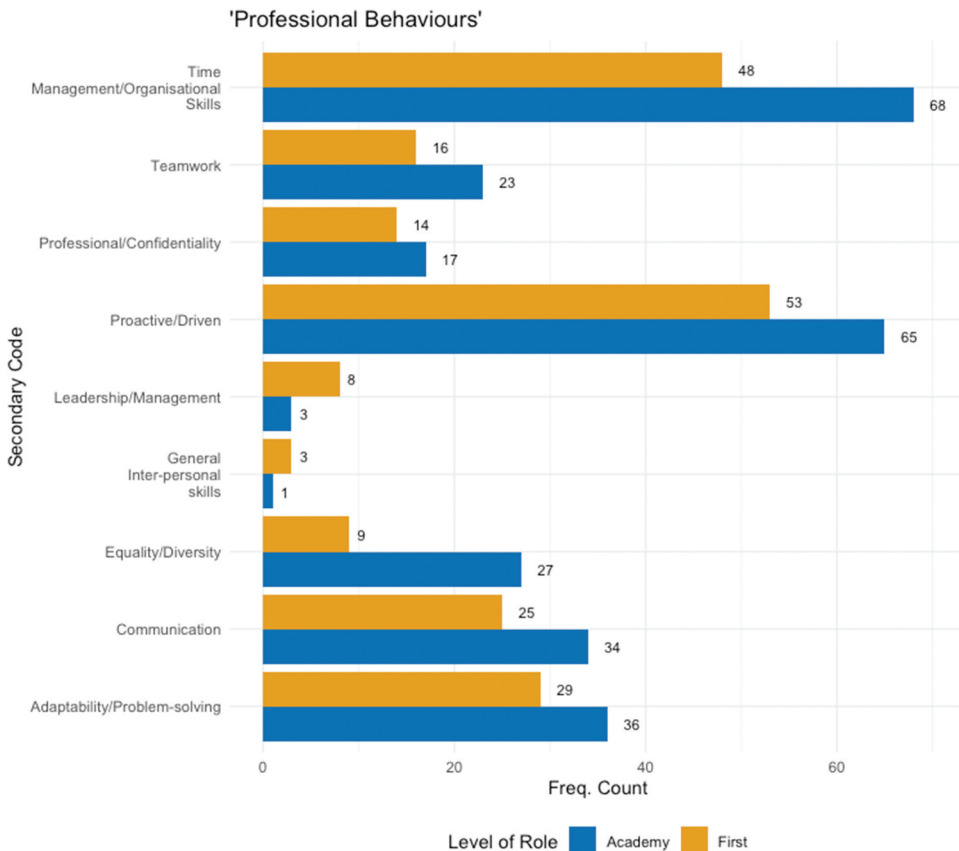


Figure 4. Sub-areas of expertise (“professional behaviours”) underpinning APA against role level.



**Figure 5.** Components of APA practice (a) and sub-components of APA practice (b: “analysis” and c: “data collection and reliability checking”) against role level.

In the “Analysis” category, there were minimal numerical differences in the task of creating “Profiles and Visualisations” (Academy: 63; First-team: 65) (see [Figure 5\(b\)](#)), while “Interrogation of Data” more frequently in First-team roles (Academy: 7; First-team: 19).

The “Execution Phase” was the most frequently requested task in the “Data Collection and Reliability” category (see [Figure 5\(c\)](#)); particularly in Academy advertisements (Academy: 145; First-team: 120). It’s noteworthy, the “Reliability Phase” only appeared in three advertisements.

In the “Data Management” component (see [Figure 6\(a\)](#)), Academy roles showed a higher frequency of requests for tasks related to “Manage Access to Data” (Academy: 52; First-team: 45), while First-team roles requested “Build Infrastructure” (Academy: 10; First-team: 15) tasks more frequently than Academy roles.

Tasks related to “Build Relationships” and “Define Roles” within the “Establish Relationships and Define Roles” component showed low-frequency counts and no notable differences (see [Figure 6\(b\)](#)). “Background Research” was more frequently requested in Academy advertisements (Academy: 47; First-team: 36).

Academy advertisements emphasised tasks related to “Facilitation of Feedback” (see [Figure 6\(c\)](#)); including “Planning Feedback Strategy” (Academy: 74; First-team: 42) and “Preparation” (Academy: 35; First-team: 11) of feedback. Despite being more frequently stated as a role in Academy advertisements, the “Delivery” of feedback (Academy: 26; First-team: 9) was not seen as an APA task in most advertisements.

Within the “Needs Analysis and Service Planning” component (see [Figure 7\(a\)](#)), Academy advertisements more frequently requested tasks related to “Agree Service Plan”, “Audit Available Resources” and “Capture Stakeholders Needs”.

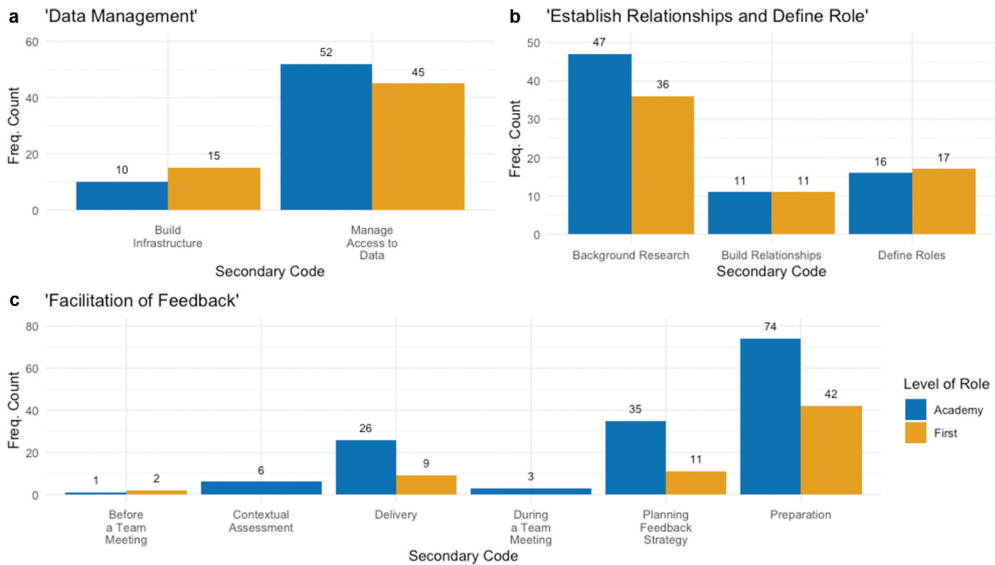


Figure 6. Sub-components of APA practice (a: “data management”, b: “establishing relationships and define role” and c: “facilitation of feedback”) against role level.

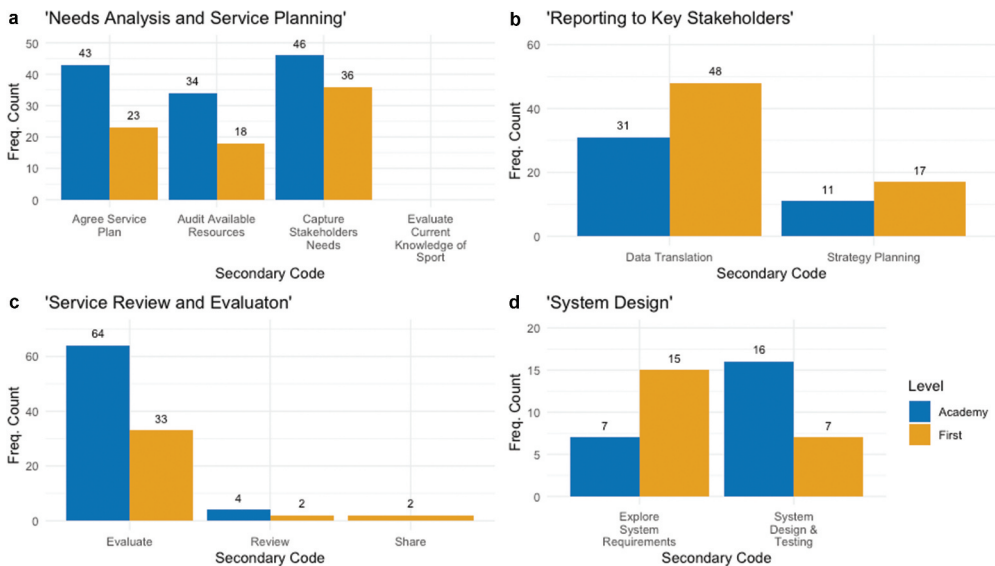


Figure 7. Sub-components of APA practice (a: “needs analysis and service planning”, b: “reporting to key stakeholders”, c: “service review and evaluation” and d: “system design”) against role level.

First-team job advertisements placed a greater emphasis on “Reporting to Key Stakeholders” (see Figure 7(b)), in particular, “Data Translation” (Academy: 31; First-team: 48) tasks were requested at higher frequencies.

The “Service Review and Evaluation” component was more prominent in Academy advertisements, particularly “Evaluate SPA Provisions” (Academy: 64; First-team: 33)

(see [Figure 7\(c\)](#)). The tasks of “Review” and “Share” recorded lower frequency counts, indicating less focus on formally capturing feedback and sharing practice, and a greater focus on APA reflecting on delivery in both roles.

The “System Design” component revealed significant differences between Academy and First-team roles ( $X^2(1, N = 45) = 6.412, p = .011, V = 0.377$ ) (see [Figure 7\(d\)](#)). First-team job advertisements emphasised “Explore System Requirements” (Academy: 7; First-team: 15), whereas “System Design and Testing” was mentioned more frequently in Academy advertisements (Academy: 16; First-team: 7).

## 4. Discussion

The purpose of this study was to examine the key roles, responsibilities, and skills sought when advertising for the recruitment of Applied Performance Analysts (APAs) in UK and Irish professional sports settings from 1st January 2021 to 31st December 2022. Our analysis encompassed APAs at all levels of the spectrum, ensuring a holistic view of the field. Despite variations in the quality and quantity of the content in the analysed job advertisements, our study identified distinct role and responsibility differences within the profession. By applying Martin et al. (2021) framework, we have started to build an understanding of the similarities and differences recruiters seek when advertising for Academy APAs or First-team APAs.

### 4.1. Variations in job advertisements

Association football emerged as the dominant sport in terms of the number of roles, with the largest variations in content. The volume of roles in association football can be attributed to the Elite Player Performance Plan (EPPP) (Premier League, 2021), which outlines standards for SPA and APA within club academies to aid player development. However, Hounsell et al. (2021) highlighted that Academy APAs juggle complex priorities over the use of SPA. In some instances, SPA is employed as a tool to solely enhance team performance, often taking precedence over the developmental aspects highlighted in the EPPP. This accentuates the significant role of comprehensive job profiles and frameworks within the industry.

Advertisements related to association football displayed the most substantial fluctuations in the number of requirements within tasks or personal specification sections, with wording varying significantly, from 4 or 5-word task descriptions to detailed 20+ word sentences explaining sports setting-specific tasks tailored to their language. In contrast, we observed more specific and detailed job advertisements by England Netball, supported by the England Institute of Sport (2015) (now UK Sports Institute). This serves as a prime example of such a framework, clearly outlining role and responsibilities expectations associated with various salary scales. This comprehensive job profile, utilised across various sports sciences disciplines, including APA, plays a pivotal role in ensuring role clarity and enhancing the perceived value of the role of the APA position (Martin et al., 2023).

Given the absence of a widely adopted framework in APA, delineating the roles and responsibilities, coupled with a lack of professional regulation governing these duties and their associated salary scales, it is unsurprising that only 23 out of the 130 job advertisements analysed included payment information. This omission potentially reflects an

underappreciation of the “value” of an APA, as suggested by Butterworth (2023), Dickey et al. (2022) and Martin et al. (2021). It is crucial, however, to recognise that the advertised pay level constitutes a pivotal aspect in job advertisements due to its profound impact on prospective applications (Petry et al., 2021). Moreover, providing actual pay ranges has been found to be the most substantial advantage of salary information (Verwaeren et al., 2017).

Applicants often perceive base pay as a crucial insight into other symbolic attributes related to the job (Muskat & Reitsamer, 2020), including the potential for career progression. Notably, the absence of career progression information in all advertisements has profound implications. The inclusion of specific career progression details not only assists job seekers in making informed decisions but also contributes to the professionalisation of SPA and the role of the APA. This practice communicates the value the sports setting places on the growth and development of their APAs. However, when this information is omitted, it leaves potential applicants uncertain of how and where they could develop their skills and expertise within their role as an APA. This ambiguity is particularly concerning given the widespread perception that many Academy APA roles are considered entry-level positions despite being requested to have more skills and tasks than First-team roles.

This absence of clarity, regarding what sports settings are seeking and expertise along with what they are offering in terms of compensation and career growth, is noticeable within the field of APA, particularly in sports such as association football. It underscores the pressing need for stronger regulation and industry standards for practitioners (Martin et al., 2023). Here, professional organisations including the International Society of Performance Analysis in Sport (ISPAS), the British Association of Sport and Exercise Science (BASES), the UK Institute of Sport, and the Football Association could play a pivotal role.

A potential starting point could be the development and dissemination of “standardised” job profiles, establishing a common language and remuneration based on the necessary skills and competencies, similar to those used by the UK Sports Institute. These findings shed light on the need to address this critical gap and explore the potential impact of including specific salary information in job advertisements within the sports industry based on role tasks and expertise. To truly appreciate and value the contribution of APA, sports organisations must gain a comprehensive understanding of the nature of their work, their expertise, and the associated resources needed for the quantity of SPA requested. Addressing these issues will be a significant step in acknowledging and recognising the contributions of APAs in sports settings.

#### **4.2. Qualifications, skills, and expertise**

Recruiters consistently prioritised academic and/or coaching qualifications when recruiting APAs, and these qualifications were more frequently requested in Academy APA advertisements. This emphasis is supported by Wright et al. (2013), who found that 58% of the respondents held coaching qualifications, while 85% had academic qualifications. These qualifications demonstrate an APA’s expertise in technical and tactical knowledge, underlining their understanding of the coaching processes (Butterworth, 2023).



While qualifications are pivotal for satisfying personal specification requirements, practical experience and proficiency in SPA software are key determinants of employability (Butterworth, 2023). This observation aligns with the 593 mentions of experience as an APA and proficiency in SPA software, again more frequently requested in Academy APA advertisements. These skills and experiences have remained important for APAs over time (Stanway & Boardman, 2020). However, the discipline is witnessing the emergence of various software skills and technologies (Robertson, 2020; Wright et al., 2013), complicating the choices for both recruiters and applicants. Previously, centred on data collection (Hughes, 2004) APAs are now expected to “generate, curate, and translate data” (Martin et al., 2023, p. 12) using specific software.

This evolution leaves recruiters unsure about whether to emphasise generic or specific software skills based on the sports setting’s infrastructure. This also leaves applicants uncertain about the number of software programmes to learn to demonstrate their SPA expertise. Additionally, roles are now diversifying (Stanway & Boardman, 2020). This evolution has led to dedicated APAs in First-team environments, focusing on specific functions that were traditionally consolidated into a single APA’s role. They have gained access to secondary data sources and now specialise in analysing their own team’s performance, monitoring opposition, evaluating goalkeepers, scrutinising set-pieces, and accessing training (Carling, 2019; Stanway & Boardman, 2020). Consequently, this transformation has liberated APAs from arduous data collection tasks, allowing them to concentrate on interpreting the data in their area of technical or tactical expertise. This shift marks a significant contrast when comparing job advertisements for Academy roles with those of a First-team. However, academies still adhere to the historical model of SPA in which the employment of a singular APA across multiple teams, functioning without the advanced tools and resources readily available in the First-team, arguably making an Academy role more challenging.

The job specifications extracted from the advertisements referred to 479 “Professional Behaviours”. This prominent observation aligns with the growing understanding of how APAs operate within high-performance environments, effectively transmitting their obtained knowledge to aid decision-making (Bateman & Jones, 2019; Butterworth & Turner, 2014). Bampouras et al. (2012) also highlighted the interdependency between APAs and coaches, whereby APAs are responsible for capturing, evaluating, and providing feedback, reinforcing the need to have a range of interpersonal skills. Similarly, McKenna et al. (2018) highlighted the pivotal role of building relationships in establishing an effective SPA provision. These relationships play a constraining role, influencing and shaping all aspects of an APA’s role and responsibilities. However, Pitt and Mewburn (2016) highlight these interpersonal skills have not traditionally received due attention.

Within the advertisements, it becomes evident that time management and organisation skills, along with qualities like being proactive and driven, featured more prominently in Academy positions than in First-team positions. This distinction arises from the fundamental differences between these roles. Academy APAs often work across multiple squads or focus on one squad and assist the wider Academy SPA infrastructure. In contrast, First-team environments typically involve multiple APAs dedicated to a single team. As a result, the requirements for effective time management skills become more profound for Academy APA, given the necessity to coordinate various conflicting

schedules. This coordination is essential for providing coaches with the necessary information to enhance their decision-making processes.

Academy roles are often viewed as entry-level APA positions, and it is commonly expected that individuals exhibit proactive and driven characteristics. This expectation aligns with the inherent need for good time management and organisation skills. As APAs begin their careers and enter new environments, they must learn to read the landscape and adapt to the expectations and demands of their roles. To establish job security and create a positive impression, APAs often find themselves going above and beyond what is expected of them (Butterworth & Turner, 2014; McKenna et al., 2018; Thompson et al., 2015). While these skills were more prominently requested in Academy roles, they remained a consistent theme throughout all advertisements, reinforcing the need to possess these skills in the context of high-performance sports. These demanding environments are often described as complex and somewhat messy (Wiltshire, 2014), making these skills invaluable in adding value as an APA. However, it is crucial to note these professional skills are not easily acquired through formal qualification programmes (Alfano & Collins, 2020; Butterworth, 2023). This emphasises the need for practical experience and on-the-job learning for the development and refinement of these essential professional skills.

#### **4.3. Components of academy and first-team APA practice**

Academy APAs were consistently tasked with “Data Collection and Reliability Checking” duties, reflecting previous research indicating their extensive involvement in filming and collecting primary data (McKenzie & Cushion, 2016). In contrast, First-team APAs often outsource these tasks to technology or external data providers (Robertson, 2020), such as Opta, StatsBomb or Wyscout. However, the reliance on external data providers, despite technological advancements, has raised questions about the quality and meaningfulness of the information provided (Worsfold & Macbeth, 2009). Carling (2019) highlighted that even with these advancements, the challenges remain in producing meaningful and accurate information to inform practice that is aligned with the sports setting’s performance measures. Given that Academy APAs typically lack access to such advanced technology and continue to face resource constraints (Stanway & Boardman, 2020), the higher frequencies of “Data Collection and Reliability Checking” requests in job advertisements is unsurprising.

Interestingly, the “Reliability Phase” was rarely mentioned in job advertisements, suggesting that APAs may not consistently allocate time for data quality control. This contradicts recommendations by SPA researchers who emphasise the central importance of data validity and reliability (O’Donoghue & Hughes, 2020). Neglecting these crucial aspects may have a detrimental impact on the quality of data used to support vital decisions regarding tactics, match preparation and individual development, along with the value an APA can add to a sports setting.

First-team job advertisements highlighted a greater emphasis on “Analysis” and “Reporting to Key Stakeholders”. Wright et al. (2013) and Callinan et al. (2023) corroborated this, highlighting First-team APAs in association football dedicate over four hours per week to analysing their own team’s performance and opponents, whereas Academy APAs typically allocate up to three hours for similar tasks. First-team APAs

typically engage in filtering and analysing complex metrics to communicate relevant information to key stakeholders (Wright et al., 2016). This critical step aids coaches in understanding what the numbers mean in a practical sense to inform strategic decisions. This pattern also emerged in the personal specification of job advertisements, where First-team advertisements more frequently emphasised “Data Reporting and Visualisation Skills”.

In contrast, Academy job advertisements placed a stronger emphasis on the role of “Facilitation of Feedback”. Academy APAs predominately are responsible for producing video compilations showcasing exemplary performances of other youth players and providing content of performance improvement (Carling, 2019). This emphasis on feedback and active self-reflection aligns with previous research and highlights the collaborative nature of feedback sessions involving the APA (Page, 2021; Stanway & Boardman, 2020; Wright et al., 2016). Importantly, the actions of delivering these insights were noted in only 35 advertisements, aligning with Wright et al. (2013) findings from over a decade ago in which coaches predominantly led feedback sessions. This shift may be attributed to the increased requirements for coaching qualifications for APAs, highlighting the need for them to have coaching knowledge to lead sessions for players (Bateman & Jones, 2019). The analysed job advertisements support these findings, as Academy APA advertisements mentioned “Planning Feedback Strategy” and “Preparation” more frequently.

Moreover, Callinan et al. (2023) highlighted that an APA’s role, regardless of the level, is responsible for using collected data to objectively interpret the game and provide information and feedback to key stakeholders. This aspect was also observed in certain job advertisements, where tasks such as “Develop and implement new strategies to enhance the player learning process” were mentioned (2022-Birmingham City FC-Women’s First Team APA). This aligns well with Martin et al. (2021) perspective of APAs, where they focus on designing learning opportunities to facilitate the co-creation of knowledge, benefiting various stakeholders, and enhancing future decisions and judgements.

Expanding on this, Callinan et al. (2023) emphasised the importance of establishing a strong alliance between the APA and the coach to fully maximise the potential of knowledge facilitation and its resulting benefits to stakeholders. This collaborative partnership between the APA and the coach is essential to ensuring a successful and effective support system for the players’ development, growth, and performance. While building strong relationships is crucial for maintaining effective communication, trust, and mutual understanding (Bampouras et al., 2012; Bateman & Jones, 2019), it is surprising that our analysis of the job advertisements reveals only 22 of the 130 advertisements mentioned the task of “Build Relationships”.

Sports settings might assume that APAs understand the importance of fostering positive relationships and creating a supportive environment, hence not explicitly mentioning it in the advertisements. However, tasks or responsibilities such as these should not be assumed by sports settings in advertisements (Petry et al., 2021; Pitt & Mewburn, 2016). Sports settings must acknowledge the value of this aspect in the APA’s role and actively promote the development of meaningful connections to optimise the overall coaching and SPA process. Communicating these assumed responsibilities and expectations in job advertisements is vital.

Moreover, it enhances the overall efficiency of the sports setting's recruitment process. Clear communication in job advertisements ensures alignment with the desired quality and responsibilities of prospective candidates, streamlining the selection of individuals who can contribute prospectively to the sports setting's goals.

#### **4.4. Limitations**

Whilst our study is the first of its kind in the field of SPA, specifically concerning the role of the APA, it is important to acknowledge the limitations. We primarily analysed job advertisements in the UK and Ireland, potentially missing culturally significant aspects of APA practice in other parts of the world. However, the substantial weight of our analysis provides valuable insight into APA practice in this specific population.

Focusing solely on the comparisons between Academy against First-team job advertisements, we may have overlooked essential and desirable characteristics along with specific tasks or duties for specific role titles. There was a total of 21 different specific role titles identified, reflecting the increasing diversity of the APA's role in the early 2020s. Future research should delve deeper into the data to examine role-specific skills and requirements, enabling a more comprehensive understanding. For instance, we did not explore roles like "Head" or "Lead", which may involve higher levels of leadership and management compared to FDP (Foundation Development Phase) and YDP (Youth Development Phase) Academy APA. Notably, it is becoming increasingly common for APAs to be "brought in" when a new coach or a manager is appointed at an organisation, without publicly advertising the opportunities. These APAs are typically more senior, which could account for some of the observed differences. However, given that our sample included a range of junior and senior positions, we believe our study provides a realistic overview of the current landscape.

We primarily relied on Martin et al. (2021) framework for our analysis, which may have limitations in capturing all nuances and dimensions of the APA role. The constant developments and variations in roles and responsibilities potentially require flexibility beyond a single deductive approach.

Our analysis was limited to the content of job advertisements, without insights from key stakeholders such as hiring managers, Human Resources professionals, and decision-makers. This omission may limit our understanding of the underlying motivations and expectations that shape the content of these advertisements.

#### **4.5. Recommendations**

Our study highlights the critical importance of clear and transparent communication in job advertisements to recognise and value the contributions of APAs, ultimately enhancing player development and team performance. To assist employers in designing effective job advertisements and developing comprehensive skills and competency training programmes for APAs, we highly recommend using the recommendations outlined in Table 3. These guidelines, inspired by concepts from the business world, emphasise the importance of providing detailed information

**Table 3.** Recommendations and guiding principles for organisations, applicants and employers when designing job advertisements.

	Organisations should:	Applicants will be able to:	Educational Providers can:
Employer familiarity information	Clearly outline the goals and values of the organisation. Provide information about the in infrastructure, staffing and philosophy of the SPA departments. Provide an insight for the reason behind the advertisement and the post.	Acquire insights into the organisation's aspirations are and understand how they would work and contribute to the environment.	Offer support to APAs creating their individual SPA philosophy and equip them with knowledge and skills to understand and navigate an organisation effectively.
Description of job-related tasks and personal specification	Job-specific tasks and the essential and desirable skills and experiences are tailored to align with the organisation's values and perceptions of SPA underpinned by an APA framework. Clearly out the specific levels of academic and/or coaching knowledge required for demonstrating technical/ tactical knowledge and the capacity to think critically and comprehend wider sports science processes. Detail whether specific or broad software competencies are necessary for capturing, collecting data, analysing information, and feeding back insight are required. Specify the need for evidence-informed awareness and understanding of processes related to collecting meaningful and accurate information. Additionally, emphasise the importance of knowing how to provide feedback these insights using a variety of appropriate learning strategies for the specific audience.	Attain a clear understanding of the potential tasks and responsibilities associate with the role they might undertake (role clarity). Comprehend the key aspects to discuss in their covering letter and curriculum vitae, and effectively draw attention to the positive impact they have made on others through their past experiences, emphasising how their academic and/or applied experiences have assisted their development and delivery of SPA to a range of audiences, aiding in learning and informing future decision-making processes. Identify areas for personal and professional development if they aspire to advance into similar roles in the future.	Understand the advancements in the disciplines and assess existing materials to determine alignment or the need for revision, considering the evolving roles, responsibilities, and skills of an APA. Develop specific content for First-team and Academy positions to ensure the curriculum covers the spectrum of APA roles. Assist APAs in refining their cover letter and curriculum vitae to effectively showcase their value and worth to prospective organisations. Support the creation of individual development plans based on the APA's career ambitions, strengths and areas of development.
Salary and remuneration	The salary bands, including specific details about increments and rewards, are presented clearly, indicating both the upper and lower limits.	Obtain an objective, tangible insight into the "value" of the job role perceived by the organisation, including insights into the indicators for going above and beyond and any potential associated rewards. Explore compensatory decision-making strategies and consider the intangible intrinsic work values and benefits associated with the role.	Facilitate APAs in effectively showcasing their value, negotiating based on the contributions they/could make to the role, and offer guidance on how to approach salary discussions during interviews and appraisals.

*(Continued)*

**Table 3.** (Continued).

	Organisations should:	Applicants will be able to:	Educational Providers can:
Opportunity for advancement	Comprehensive information about career progression opportunities within the SPA department and the wider organisation, including specific examples of CPD activities available to help develop the person in addition to the process.	Make informed decisions about their future with the organisation, considering their long-term career aspirations, and determining whether a short or long-term commitment aligns better with their long-term career aspirations.	Provide a comprehensive overview of potential career paths within the SPA discipline, whilst also highlighting transferable skills that can be utilised not only within various areas of sport but also outside of the sports industry.

about the sports setting, a clear description of job-related tasks, transparent information about salary and remuneration, and clear pathways for career advancement (Petry et al., 2021).

Additionally, we encourage sports organisations and employers to refer to the framework developed by Martin et al. (2021) as a valuable guide for creating effective job advertisements and enhancing skills and competency training programmes for APAs. These recommendations benefit not only employers but also provide valuable guidance for applicants and educational providers, contributing to the overall development of the APA role and the wider discipline of SPA. By adopting these strategies, recruiters can attract and retain talented APAs, fostering a more productive and successful environment for players and teams.

We further recommend that studies gather insights from both employers who create these advertisements for APAs and applicants who have experienced the recruitment processes. This approach enables researchers to gain a deeper understanding of the specific criteria, requirements, and expectations that sports settings prioritise when seeking APAs. Gathering insights from applicants can help identify discrepancies between employers' preferences expressed in job advertisements and how applicants interpret and respond to them, revealing potential barriers or areas for improvement in the recruitment process. This approach leads to a more comprehensive and nuanced understanding of the APA job market and the factors influencing successful development of future APAs.

## 5. Conclusion

Our findings highlight the need for tailored job profiles and frameworks that communicate role expectations, emphasising the importance of job advertisement design. Job advertisements revealed notable differences, in particular, neglecting key APA aspects, such as intra- and inter-personal skills, along with varying length and level of detail in the advertisements' narrative. Academy APA roles proved more demanding, encompassing a broader skill set and responsibilities. The absence of salary and career progression prospects suggests potential undervaluing of the APA position. We call upon professional organisations, academic institutions, and sports settings to establish standardised guidelines for job advertisements, including transparent salary details and career paths. Collaborative efforts are encouraged to develop comprehensive training programmes for APAs that align more closely with the skills

and expertise requested in advertisements; ultimately enhancing the contributions of APAs in generating, curating, and translating insights to positively impact and inform decision-making for stakeholders.

## Disclosure statement

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## Appendix: Code Book

### Areas of Expertise

Primary Code	Secondary Code	Description
<b>Building relationships</b>	General Relationships	The connections, associations and interactions between individuals, groups, or entities with no specific acknowledgement of whom they require to interact with., such as "Ability to develop and maintain professional working relationships"
	Sports Setting Staff	The connections, associations, and interactions between specific individuals within the organisation, such as "the ability to build meaningful, strong strategic relationships with Club staff".
	MDT	A Multidisciplinary Team (MDT), is a group of professional from different disciplines who collaborate and work together to provide support, such as "Able to work as part of a multidisciplinary team and develop intra/inter-departmental relationships"
	MDT+External	In addition to the MDT personnel, forming relationships with external individuals, groups or entities, such as "able to build relationships internally with key staff and externally with a network of contacts".
	Spa-Dyad	Relationship between the coach and the APA, such as "Experience of Analyst – Coach relationships".
	SPA-Triad+Parents	Relationship between the coach, the APA, the player and parents, such as "the ability to build relationships with players, parents and coaches both internally and externally".
<b>PA &amp; Sport Expertise</b>	Academic Qualifications	The specific educational credentials and achievements attained through formal education such as a BSc, BA, MSc, MA, PhD or equivalent qualification., such as "Related Master's Degree in Performance Analysis".
	Academic/Coaching Qualifications	The specific educational credentials and achievements attained through formal education BSc, BA, MSc, MA, PhD or equivalent qualification or hold a coaching qualification, such as "Industry recognised qualifications in Performance Analysis or Coaching".
	Accreditation	Be accredited by the International Society of Performance Analysis in Sport, British Association of Sport and Exercise Sciences or equivalent, such as "Professional membership or performance Analysis accreditation".
	Coaching Qualifications	Hold a coaching qualification, such as "Holds Intermediate Level Football Coaching Qualifications" or "FA Level 2 Award in Coaching Football or equivalent".
	General Analysis Experience	The applicant has previously obtained knowledge, skills, understanding and insights through direct participation or exposure to activities, such as "Experience of working in a high-performance rugby environment" but no specific reference to role, skills or duration of the various activities, events or situations.
	Role Specific Analysis Experience	The knowledge, skills and expertise acquired through practical involvement and specific responsibility, such as "Experience of working within the schoolboys phase".
	Skill Specific Analysis Experience	The knowledge, skills and expertise acquired through practical involvement and specific responsibility, such as "Experience of linking to a recruitment analysis provision".
	Year Specific Analysis Experience	The specific duration of the knowledge, skills and expertise acquired through practical involvement and specific responsibility is mentioned, for example "Minimum of 2 years' experience of working as a performance analyst"
	Wider Sporting Knowledge And Experience	The breadth of understanding and practical involvement in various sports disciplines and related activities, such as "Excellent football knowledge, can understand advanced tactical principles".

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<b>Technical Expertise</b>	Data Reporting And Visualisation Skills	The ability to effectively present and communicate data findings through clear and visually appealing formats, such as "Experience in the manipulation of performance data sets and visualisations".
	IT Software Skills	The proficiency in using specific software applications and tools to effectively navigate, operate and utilise programmes to perform tasks, such as "An understanding of Excel and other Mac/Microsoft products"
	PA Software Skills	The proficiency to use SPA software to perform key tasks, such as "Knowledge and expertise of industry standard Performance Analysis software".
	PA Hardware	The physical components and devices that are used by APA to capture information, such as "Experience with filming equipment, including capturing, converting, and processing video".
	PA Software And Hardware	The ability to use various applications and tools, and have knowledge of the components, and equipment, such as "Experience in working with performance analysis hardware and software"
<b>Professional Behaviours</b>	Adaptability/Problem-Solving	The ability to adjust and thrive in changing circumstances, environments, or situations to find effective solutions to challenges or obstacles, such as "Flexible and adaptable to the working patterns of elite sports environments"
	Communication	The ability to convey information ideas and thoughts to others effectively through various modes, such as "Must be able to communicate, interact and engage with colleagues".
	Equality/Diversity	The ability to promote fairness, inclusion and respect for individuals, regardless of their differences, such as "Committed to equality and diversity initiatives, and antidiscriminatory practice".
	General Inter-Personal Skills	The ability to effectively interact and communicate with others, but do not make specific reference to a particular skill, such as "Excellent soft skills, with an ability to excel in a modern footballing environment".
	Leadership/Management	The ability to guide and oversee individuals and resources to help the organisation or team achieve a goal, such as "Experience of managing other analysts and to help other develop as professionals within the department"
	Proactive/Driven	Taking initiative and responsibility of own actions, actively addressing situations and challenges to ensure goals are achieved, such as "Forward thinking and proactive towards personal and departmental development"
	Professional/Confidentiality	The ability to maintain certain standards of conduct, such as, "Be able to work in a professional and responsible manner"
	Teamwork	Ability to collaborate with others, leveraging skills, knowledge and perspective of team members to achieve a goal, such as "Possess the ability to work on own initiative and as part of a team"
Time Management/Organisational Skills	The ability to effectively manage tasks, prioritise responsibility and utilise time effectively to achieve goals, such as "Ability to plan and organise work effectively".	

Components of APA Practice

Primary code	Secondary Code	Description
<b>Establish relationships and define roles</b>	Background Research	Find out about the context, culture and environment of the organisation and people
	Build Relationships	Meet and build rapport with the key stakeholders and managers in the organisation Meet and build rapport with the coaching staff and multi-disciplinary team
	Define Roles	define and agree the role of the analyst and establish reporting relationships
<b>Needs analysis</b>	Audit Available Resources	determine available resources analyst capacity and expertise to deliver time demands of competition schedule available budget, hardware, software, and internet connectivity
	Evaluate Current Knowledge Of Sport	Evaluate the current body of knowledge in the sport
	Capture Stakeholder Needs	Design a strategy to capture needs of key stakeholders Capture the ideas, needs and preferences of the coach and coaching team Collaborate with the coaching team or other key stakeholders to defined the performance question or issue Consider if a research project should be conducted
	Agree Service Plan	Consider the impact of the coach's philosophy and leadership style on the service delivery plan Negotiate and agree aims and a plan for performance analysis service
<b>System Design</b>	Explore System Requirements	Establish what to measure and test valid operational definitions for the variables Research all potential technical solutions; Agree system parameters Seek ethical approval and consent if a research project is incorporated in the work
	System Design And Testing	Test and select most appropriate tools Collaborate with coaches/multi-disciplinary team to design and pilot test the system, considering the athlete experience Collaborate with coaches to agree strategy for reporting and feedback
<b>Data management</b>	Build Infrastructure	Devise data management strategy and related infrastructure Build integrated performance databases Develop/use consistent operating procedures for data handling and archiving
	Manage Access To Data	Manage access to and sharing of data Protect sensitive data Store and archive data

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<b>Data collection and reliability</b>	Preparation Phase	Undergo system training, upskill and prepare coaches/others to collect data if required Create a protocol for data collection and video capture including: obtaining permission to film/share data briefing athletes where required Prepare equipment Adapt to context and logistics “on location”
	Execution Phase	Engage with external analysis providers or mine public data sources to obtain data Systematically observe and judge what data to record Operate data collection technology, equipment and systems
	Reliability Phase	Systematically check and recode data, applying appropriate statistical tests if required Interpret and evaluate reliability results in the context of performance
<b>Analysis</b>	Prepare Data And Processes	Formulate standard operating protocol for the analysis workflow Import, tidy, transform, sort and organise data from multiple sources Mine and filter own and third party databases to extract and compare data
	Interrogation Of Data	Interrogate data to identify trends, selecting appropriate statistical techniques where appropriate
	Profiles And Visualisations	Create performance profiles, considering the stability of the data Create effective data visualisations and reports using simple or complex tools to illustrate trends
<b>Reporting to key stakeholders</b>	Manage Timelines	Manage timelines for the delivery of analysis outputs
	Data Translation	interpret and translate data into performance insights, and narrative if requested Facilitate delivery of live data and insight to coaching team Filter and prepare content for analysis by stakeholders, distilling data to manageable volumes Ensure understanding of the data provided, teach to use analysis tools where appropriate Prioritise and facilitate a coach review meeting to reflect, discuss and co- analyse data Ensure access to larger databases which can be referred to answer specific queries Consider when, where and how to challenge assumptions and biases
	Strategy Planning	Assist coaching team to build and articulate game and training strategy Agree strategy and content for the facilitation of feedback to athletes

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<b>Facilitation of feedback</b>	Contextual Assessment	<p>Consider best practice in the athlete experience of feedback: volume, timing, frequency, accessibility, empowerment, criticism</p> <p>Build trust and rapport with athletes through presence and small deeds</p> <p>Consider social and emotional needs of each athlete, impact of results and schedule on levels of mental fatigue individually and collectively;</p> <p>Consider the coach's leadership style and philosophy of feedback, &amp; the socio-emotional and micro-political needs of the coaching staff</p> <p>Observe and identify the power dynamics within the athlete group and how they relate to the coaching staff</p> <p>Consider the balance and timing of briefing versus debriefing, collaborate with performance psychologist if available</p>
	Planning Feedback Strategy	<p>Collaborate with coach/athletes to decide on key feedback aims, messages, content, tone, timing and mode of delivery</p> <p>Advocate for bespoke feedback design promoting discussion, athlete reflection, empowerment and ownership of analysis</p> <p>Ensure athletes are informed and can contribute to decisions about how feedback will proceed</p>
	Preparation	<p>Assist coaching team to design scaffolding materials to provide athlete learning opportunities through reflection</p> <p>meetings, questions, self-analysis or peer analysis, teaching coaches to use feedback technology where required</p> <p>Refine data visualisation – statistics for athletes; Edit feedback clips for athletes to ensure an appropriate volume</p>
	Delivery	<p>Facilitate and manage timely athlete access to appropriate feedback, during practice interventions, meetings or online</p> <p>Design a way to capture feedback of the athlete experience and outcomes to allow evaluation of the learning opportunities provided</p> <p>Be available to engage with athletes and staff informally and on an ad-hoc, casual basis</p>
	Before A Team Meeting	<p>Collaborate with coaching team to establish/plan their desired learning outcomes, content, and tone for the meeting</p> <p>Prepare required meeting content and brief for coaching team if required</p> <p>Assist coaching team to formulate appropriate questions based on content to achieve desired outcomes</p> <p>Prepare meeting room logistics, technology and environment in advance if possible</p>
	During A Team Meeting	<p>Support and ensure coach/athlete competence with video technology delivery, deliver feedback, or facilitate meeting if required</p> <p>Keep track of meeting duration, acting as timekeeper if agreed</p>
	After A Team Meeting	<p>Note if the meeting met the desired outcomes and capture any additional actions</p>

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<b>Service review and evaluation</b>	Review	Capture formal/informal feedback on PA support from key stakeholders Review engagement data and performance data in line with original project aims to evaluate if learning opportunities were appropriate
	Evaluate	Reflect on, and evaluate your role in delivery, strengths and weaknesses Based on collated evidence, debrief original service plan with relevant staff, evaluating if aims were achieved
	Share	Collate evaluation findings into a report for the organisation Consider if, and/or how, lessons from the work could be disseminated

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