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# The graduate employability cycle of learning: Preparation, practice, and presentation

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## Abstract

Change in the workplace is inevitable, intensified by the rapid development of global markets and demand for highly skilled and adaptable employees. One response to this demand is for higher degree students to immerse in workplace experiences aligned to their course discipline to build their employability. In consideration of higher education and industry practices in Australia, our paper examined the phases of student learning and development before, during and after workplace experiences that contribute to graduate employability and signalling capability. Three progressive methodological approaches were adopted: a job advertisement audit, semi-structured interviews, and an online employability survey. Deductive and inductive coding was applied to organise themes from interview transcripts and survey data, using non-parametric statistics to analyse data. Findings revealed a three-phased Graduate Employability Cycle of Learning. The Pre-Condition Phase 1 encourages student exploration of the industry discipline and self against defined awareness factors to prepare for practical experiences. Phase 2 comprises the Experiential Learning Cycle (Kolb, 1984) to validate the process of learning through practical experience. The Observed Signals Phase 3 identifies the experiential learning gained from practical experience and subsequent conversion into transferable graduate employability signals. Combined, the three-phased cycle guides theoretical knowledge and practical application of the employability signals, to assist job recruitment and selection, where employers can observe and recognise employable graduates who demonstrate their point of difference in the job market.

**Keywords**
graduate employability, practical experience, higher education, industry, signalling

## Introduction

Employable graduates require a holistic awareness of industry and the ability to recognise and satisfy industry requirements (Grant et al., 2023; Zimmer & Keiper, 2021). A graduate's level of employability is generally indicated by a recognition of pre-professional identity, personal adaptability, and human capital (Di Fabio, 2017; Jackson, 2016). Pre-professional identity associates an awareness of the 'skills, qualities, conduct, culture, and ideology' (Jackson, 2016, p. 925) of a student's course discipline and intended career path, while personal adaptability addresses the unpredictable adjustments applied in the workplace that are incited by changes in work and working conditions (Savickas, 2013). Connected

with graduate employability is the notion that an investment in education can result in gaining marketable skills and an ability to increase productivity and job performance (human capital) (Donald et al., 2019).

Featured prominently in the higher education curriculum in Australia are national graduate employability skills and graduate capabilities (institutionally driven) to enhance graduate employment prospects (Jorre de St Jorre & Oliver, 2018; Tomlinson et al., 2022). The skills and capabilities are adopted as learning and teaching strategies to encourage a student-centred understanding of work-readiness (Cavanagh et al., 2015). Essentially, applied learning in the workplace related to a course discipline, notably strengthens graduate capability through the transfer of knowledge, skills, and attributes, and for the organisation, determines the 'fit' of the graduate (Fleming et al., 2021; Grant et al., 2024). Problematic is the perceived alignment of higher education course coordinators and industry employers on respective industry requirements (Bean & Dawkins, 2021; Chen & Wang, 2020). Our study was conducted within the sport management discipline, prompted by a lack of consistent literature relating to the job classifications and standards of associated role functions, knowledge related to employer assessment and recognition of graduate employability, and a low investment in course discipline-related industry experiences (Bradbury et al., 2021; de Schepper & Sotiriadou, 2018; Piopiunik et al., 2020). To identify the perceived alignment of course discipline content with industry employer requirements, the purpose of our study was to examine the phases of student learning and development before, during and after workplace experiences, that contribute to graduate employability and signalling capability. Two research questions were examined:

1. What does student learning encompass when considering the preparation, practice and performance required to undertake workplace experiences?; and,
2. How can graduates transparently signal their employability to prospective employers during job recruitment and selection?

## Literature Review

The mounting competition for graduate jobs has intensified employer demands for graduates who are a strong organisation fit for the required skills, knowledge, attributes, and related competencies (Dinning, 2017; Nicholas & Handley, 2020). Traditionally, invested human resource practices, including job applicant assessment and screening, are conducted to recruit prospective employees that identify their motivation, skills, and capabilities (Capelli, 2015). Impacting this process is the limited knowledge and research into how prospective employers assess employable graduates (Grant et al., 2024; Piopiunik et al., 2020).

Increasingly, employers anticipate a university education will provide graduates with the required employability skills to perform their jobs and satisfy industry expectations (Aliu & Aigbavboa, 2023; Kinash et al., 2018). In Australia, the adoption of national employability skills into university-specific graduate attributes often relates to graduate employment outcomes, to imply measures of achievement in the workforce (Jackson, 2014; Shah et al., 2015). Notably, graduate employability rates have increasingly become subject to measured university rankings and used to attract government funding and subsequent university interest through respective marketing campaigns (Healy et al., 2020).

Despite the increasing pressure on higher education programs to create 'work ready' industry competent graduates, many employers report that graduates lack the requisite skills for employment in their industry discipline (Dinning, 2017; Majid et al., 2019). Job classifications (tasks and roles) and industry standards that are not clearly and consistently defined, can adversely impact the application of requisite subject knowledge, skills, and attributes into a respective discipline (DeLuca & Braunstein-Minkove, 2016; Lievens & Chapman, 2019). Subsequently, a lack of industry knowledge can potentially create disconnect between a student's expectation of the industry and reality (Jackson & Wilton, 2017;

Zimmer & Keiper, 2021). Sport management is one example where centrally administered/distinct job classifications and industry standards do not exist in Australia. In higher education, sport management programs include a suite of subjects encompassing sport finance, sport administration, sport sociology, and sport marketing, yet students still report that guidance lacks around navigating the industry (de Schepper & Sotiriadou, 2018, Schaillée et al., 2019).

Rosenberg et al. (2012) identified the basic employability skills required for job performance from the perspectives of human resource managers (employers), recent graduates, and university faculties. Eight Dimensions of Basic Employability skills were identified including: Basic Literacy and Numeracy Skills; Critical Thinking Skills; Leadership Skills; Management Skills; Interpersonal Skills; Information Technology Skills; Systems Thinking Skills; and Work Ethic (Disposition). Each Dimension comprises transferable core competencies representing the knowledge, skills, and attributes essential to successfully perform a range and level of roles in any workplace. Essentially, participation in practical experiences as part of a university course, is likely to enhance the familiarisation of the industry practice, subsequent experiential learning, and ultimately graduate employability (Bradbury et al., 2021).

## Practical Experience and Experiential Learning

Numerous employability models exist targeting employability including the Understanding, Skills, Efficacy Beliefs and Metacognition model (USEM) (Yorke & Knight, 2004), and the Decision Learning, Opportunity Awareness, Transition Learning and Self-awareness (DOTS) model (Law & Watts, 2003). These two models typically guide the development of employability by engaging learners in self-learning, the world of work and taking responsibility to navigate a successful and satisfying career (Law and Watts, 2003; Yorke & Knight, 2004). In the Key to Employability Model (Dacre Pool & Sewell, 2007), the element of experience (work, life, study) is recognised by the influence practical experiences have on a graduate's development of employability. In particular, to the development of key competencies and skills necessary for a graduate to reflect subjectively on workplace experiences and apply their learning (Peterson, et al., 2015). Learning from practical experiences (experiential learning) stems from the process whereby knowledge is generated from the ability to comprehend an experience and convey the learning through application, not simply from instruction (Bradbury et al., 2021).

During experiential learning, the workplace becomes a significant learning environment where practice becomes informal, contextual, and social including customer interaction (de Schepper & Sotiriadou, 2018). The Experiential Learning Cycle model (Kolb, 1984) is a 'framework for examining and strengthening critical linkages among education, work and personal development' (p. 4) and illustrates industry employment practices. The four-staged cycle of experiencing, reflecting, thinking, and acting, assists learners to holistically navigate their practical experiences and apply their learning (Peterson et al., 2015). Gains from practical experience and the ability to apply concepts within an associated workplace environment are regarded as more significant to the workplace than grade point averages, the university attended, awards, leadership positions, and interviewing skills (Bradbury et al., 2021; Burch, et al., 2019). Furthermore, practical experience is regarded less significant in terms of employability, if the experience was unrelated to the desired job or study discipline, indicating that experiential learning in course curriculum can enhance student preparation and employment prospects (Bradbury et al., 2021; Fleming et al., 2021).

## Signalling and Employability

Marketing individual employability from experiences undertaken to prospective employers to assess and interpret is unclear (Akkermans et al., 2023; Lievens & Chapman, 2019). The lack of clarity is concerning, as employers' perceptions of graduate workplace requirements is important to graduate transition to the workplace (Dinning, 2017; Popp et al., 2015). The Signalling theory (Spence 1973) guides how graduates can signal their successful transition from education to the workplace by

considering the origins of signals and the resultant impact these signals have on applications (Drover et al., 2018). Signalling theory has guided employers to assess business quality and employee productivity at the time of hiring (Drover et al., 2018; Piopiunik et al., 2020).

Consequently, the quality and performance of graduate employees observed by employers as signals of their employability and organisational fit often surface after job recruitment and selection is completed and the role has commenced (Rozario et al, 2019). The timing of this realisation after lengthy job recruitment and selection processes is time-consuming and costly (Lievens & Chapman, 2019). Signalling theories recognise using cues can advance employer decision-making on applicant capabilities during job recruitment and selection and reduce the likelihood of communication breakdown between the employer and applicant (Drover et al., 2018; Spence, 1973). Subsequently, the recognition of skills and an employer's understanding of how to assess employable graduates during job recruitment and selection will enhance the quality of selected applicants, which is significant to the graduate applicant (signaller) and the receiver (employer) (Drover et al., 2018; Grant et al., 2024).

## Methodology

A mixed method approach was adopted for this Australian study that interconnected qualitative and quantitative elements. Specifically, 'how' and 'why' were interconnected with 'what', to generate conclusions and minimise the weakness of adopting a single approach (Clark & Ivankova, 2016; Tashakkori & Cresswell, 2007). A job advertisement audit (quantitative) was implemented for Stage One, semi-structured interviews (qualitative) were conducted for Stage Two, and an online employability survey (quantitative) was distributed in Stage Three. Based on the simultaneous collection of qualitative and quantitative data, a convergent parallel design was adopted to allow merging of results to gain a complete understanding of a phenomenon (Bryman, 2016).

### Stage One Job Advertisement Audit

#### *Pilot design, data collection and analysis*

A three-week pilot was conducted to identify the selection criteria and terminology (including job titles) of sport management, graduate/entry-level positions (Kennan et al., 2008; Reeves & Hahn, 2010). Publicly advertised positions were collected from recruitment websites including six sport-specific (e.g., Sportspeople and Sport Australia) and six non-industry-specific (e.g., LinkedIn and Seek). Job descriptions that met the criteria were downloaded noting the website and date, and were screened for duplicates (Lubisco et al., 2019). Annual salaries were calculated from hourly or part-time rates or from a specific salary band and each was numbered and electronically stored. Key words, 'sport' and 'recreation' were used to distinguish sport management paid positions in addition to 'experience' and 'tertiary qualification' or 'degree'. Data was recorded onto an MS Excel spreadsheet and arranged into themes reflecting position, main functions, experience required, and suitable qualifications. Text coding, descriptive statistics and content were analysed using IBM SPSS 22 to detect distinguished themes and patterns connecting the sport management industry discipline and related job classifications. At the conclusion of the pilot, job titles referring to graduate/entry-level positions were identified, revealing the terms manager, coordinator, assistant, leader, and officer.

#### *Audit design, data collection and analysis*

Post-pilot, the job advertisement audit collected 200 advertisements and corresponding job descriptions on a weekly basis, over a six-month period. Job descriptions were collected from the same websites as the pilot and used the same key word search, data recording and analysis process. Job description content from each advertisement was grouped according to the associated position function/activity including requisite skills, knowledge, and applicable experience (Javed et al., 2015; Zhu et al., 2016). The grouping revealed six job classifications aligned with the sport management

industry discipline and identified from Sportspeople's 27 role classifications (Sportspeople, n.d.) which represent the sport, aquatics, and fitness job market in Australia (Smith & Smolianov, 2016). These classifications represented sport management graduate-entry level positions:

1. Administration/Finance /Operations
2. Coaching/High Performance
3. Customer/Membership/Athlete Services
4. Development/Participation/Programs
5. Events/Competitions, and
6. Marketing/Media/PR /Communications

Textual data were numerically coded (Pallant, 2013) for analysis e.g., Job Classification 1 = Administration/Finance/Operations and presented as frequencies and percentages. Salary and experience (years) data means, and standard deviation were calculated.

## Stage Two Semi-Structured Interviews

### *Participants*

Stratified random sampling of the job descriptions identified in Stage One was adopted to identify sport managers to interview (Stage Two). The audit identified 10 supervisors/managers (five men, five women) who represented organisations including state and national sporting organisations, local government, and peak sporting bodies. The main roles of the sport managers were grouped against the six sport management job classifications gained from Stage One.

### *Interview design, data collection and analysis*

Interview questions were designed to determine employer requisites of graduates. Specifically, graduate practical experiences and an indication of their employability during recruitment and selection. In-person interviews were audio-taped, transcribed, de-identified and sent to each interviewee for member-checking to confirm the accuracy of each transcription (Harper & Cole, 2012). Data was analysed using deductive and inductive coding and guided the identification of themes using NVivo12 for analysis. The four Experiential Learning Cycle stages: Concrete Experience, Reflective Observation, Abstract Conceptualisation and Active Experimentation were the pre-determined deductive codes (Kolb, 1984). Sub-themes were thematically categorised using inductive coding. Coding determined data saturation of themes and provided new information or perceptions and the number of interviews to conduct (Bryman, 2016).

## Stage Three Online Survey

### *Survey design*

The online survey comprised three sections. Demographic and job role information (Section 1) including income range, and context of employment e.g., sporting club. Eight Dimensions of Basic Employability Skills (Section 2), gained from the 'Human Resources Manager (HRM) Survey – Retail CPP questionnaire' (author permission granted from Rosenberg et al., 2012). An additional nine items, derived from inductive themes from the semi-structured interviews (Stage Two) were embedded into our survey on training and qualifications, referees, practical experience, and extra-curricular activities. An open-ended question was included (Section 3) to gain employability insights from respondents that may not have been addressed in the items.

### *Participants*

The survey targeted sport managers employed in a role relating to at least one of the six job classifications and who contributed to the recruitment and selection of graduates to roles within the six job classifications. A total of 166 anonymous respondents began the Qualtrics survey prior to data cleaning; the final sample size was 92. Senior managers representing Australian sports federations, non-profit community sport and leisure providers, professional associations, peak sport and recreation industry bodies and local government were invited to distribute the survey link to their members on social media platforms to attract respondents. Hence, the coverage/number of sport managers targeted is unknown.

### *Data collection and analysis*

Data was deductively analysed using the four stages of the Experiential Learning Cycle (Kolb, 1984) as themes under which the eight Employability Dimensions (Rosenberg et al., 2012) were aligned according to where each were developed in the experiential learning process. A minimum sample size of 60 was calculated using power analysis (Donnelly et. al., 2022). The process comprised screening/data cleaning, assessing the shape of distributions and testing the sub-scale reliability of the Dimensions. Data was analysed using IBM SPSS 25 and presented using descriptive text, frequencies and percentages, and variable scores were allocated to 5-point Likert response options, 1 'not at all important' to 5 'extremely important'. Mean and total sub-scale scores were calculated from the item scores (Likert response options) of each Employability Dimension sub-scale (Bryman 2016). The dependent variables of the eight Employability Dimensions and four Experiential Learning Cycle stages were tested for normal distribution. Implementation of Levene's test verified whether to conduct parametric or non-parametric analyses and box plots were used to detect extreme outliers (Field, 2009; Guarnieri, 2017).

Due to small sample sizes, Cronbach's alpha was applied to test the internal reliability and validation (Bonett & Wright, 2015; Field, 2009) of the sub-scales of the Employability Dimensions (Rosenberg et al., 2012) and Experiential Learning Cycle stages (Kolb, 1984). Small sample sizes also determined parametric and non-parametric test selection. Our survey response sample was not randomised nor was multivariate normality met, as determined by Shapiro-Wilk and Levene's tests (Field, 2009; Pallant, 2013). Subsequently, non-parametric testing was chosen, and the Kruskal-Wallis H Test was applied to ascertain statistical differences across the six job classifications by ranking the data (Field, 2009; Pallant, 2013). The total 'cleaned' sample of 92 was large enough to apply a Monte Carlo Exact test to accurately examine the statistical significance of the differences among the job classification groups (Field, 2009; Gavilanes, 2020). Themes derived from the open-ended response were categorised via text coding in NVivo 12 and checked by a secondary coder for analytical rigor (Bryman, 2016).

## Results

Our results are presented according to the three methodology sections: Job Advertisement audit (quantitative); Semi-Structured Interviews (qualitative); and Online Survey (quantitative).

### Stage One Job Advertisement Audit

Nine key themes emerged from the job descriptions, outlining frequencies and descriptive statistics related to: organisation type, graduate-entry terms, job status, salary, required tertiary qualification, required experience (type), experience (years), Working with Children Check and required training and requirements. The top three employment organisation types that advertised the highest number of entry-level graduate jobs were state sporting associations (19%), local government (13%) and sporting clubs (11%). The three common graduate-entry job titles included: manager (36%), coordinator (34%), and officer (20%).

Most jobs advertised were full-time (65.5%), followed by 'not stated' job status (18.5%). A salary was not defined in 70% of these job descriptions, thereby restricting efforts to gauge an average graduate-entry salary for sport management positions. Subsequently, of the salary brackets identified, AUD $61,000-70,000 represented 8% of respondents, the highest by only 1% to the next bracket $41,000-50,000.

A tertiary qualification or specific degree was mentioned 368 times, indicating that several job descriptions identified more than one qualification as desirable. In contrast, 17% did not state a required tertiary qualification. In total, 32 disciplines were identified highlighting the multitude of applicable knowledge and skills from a sport management discipline and interrelated disciplines. Sport management was the most requested tertiary qualification (18.5%), followed by recreation (10%), business/business management (7.9%), and marketing (7.6%).

Significantly, of the 534 mentions of a required type of industry experience, 65 industry categories were specified indicating that multiple job descriptions listed more than one type of desired experience. Collectively, a multitude of underlying knowledge, skills, and personal attributes valued in a sport management workplace were identified. Sport (5.8%), event management (5.6%), marketing (4.5%) were the top three preferred experiences, representing varying working environments.

Gauging the number of years of experience required/desired of applicants was difficult, 164 (82%) did not state the number of years, potentially indicating this factor may not be of importance. The overall mean and standard deviation were calculated from the 36 (18%) respondents that indicated preference for one-to-two and a half years' experience. Driver's licence (18.3%) and first aid (14.5%) were the most requested additional requirements and training, providing context of the sport working environment. Four key themes emerged including job status, salary, required tertiary qualification, and experience (years).

## Stage Two Semi-Structured Interviews

The 10 interviewees represented state (n=4) and national sporting organisations (n=2); with one manager represented in each of the other organisation types: local government; secondary and higher education sport services; elite athlete and marketing; and multicultural youth services.

### *Concrete Experience (1)*

Concrete experience refers to the skills, knowledge, and attributes a prospective applicant brings to job recruitment and selection. Four sub-themes evolved: the importance of a referee perspective; application of theory to practice; experience in terms of applicant performance; and a demonstrated commitment to industry.

Reference to referees was three-fold, first, it related to applicants providing suitable industry referees aligned to the respective sport sector. Second, referee checks afforded the recruiting organisation an insight into an applicant's job expectations, characteristics, and experiences, not evident from a written application. Finally, applicants were observed by referees over a period. As characterised by Nicholas, 'I am looking for referees to provide evidence of their [applicant] 'fit' in terms of their practical experience.'

Over half the participants noted that theory learned at university was insufficient without practical experience. Graduates need to practically connect theory into a learning environment (the workplace). Shannon refers this application to the importance of learning in the workplace, 'You learn a lot in the classroom but unless you actually have that practical experience, you pretty much get lost.'

Participants favoured applicants who transparently identified their performance during practical experiences and demonstrated how each experience was a potential asset to the organisation and advertised role. Jacinta acknowledged interns working at her organisation had embraced their experiences and demonstrated a strong work ethic and team contributions, to then gain subsequent

paid employment, 'The promptness of [the interns] to respond to an additional workload is vital, making it easier for the business. If there's extra work, there's a job there for them.'

Proactive, passionate, and committed to industry were applicant attributes that participants rated positively. Mark referred to his own voluntary sport experiences and the extent of understanding he gained on organisational operations and its application to paid employment, 'Understanding how a sports club operates assists to serve them better when you [are paid to] work, that's why we rank [voluntary experience] so highly.'

### *Reflective Observation (2)*

Reflective Observation refers to the applicant's ability to reflect on their practical experiences and outcomes (positive and negative) to assist with their interview preparation and performance. Three sub-themes evolved including: complementing role requirements; pre-interview preparation; and practical experience outcomes.

Favourably regarded by participants, was an applicant's recognition of transferable skills and use of examples to demonstrate the alignment of their sport-specific knowledge and experience to the advertised position. Applicant demonstration of their understanding of how sport operates from community to elite level was essential. David outlined how he recognises this knowledge, 'I ask our candidates to prepare a one-minute PowerPoint presentation on what their understanding of the sport is and what they think our priorities should be.'

Applicant's pre-interview preparation through their written application, verbal responses, and interview presentation were key participant considerations to selecting a candidate for employment. Shannon sought interview presentations from passionate applicants, 'I'd rather get someone that has passion and a love for what they're going to do because you can teach them the practical side of the role.'

Applicants who articulated their capabilities through practical experience outcome examples was a critical expectation of most participants. These examples included how the applicant reflected on their practical experiences to adapt to client needs, recognised experience gains, provided interview examples, and translated their knowledge from these experiences into job applications and interview performance. Angela associated an applicant's recognition of placement outcomes to their workplace contribution, 'they created a new kids' game that is now included in a booklet.'

### *Abstract Conceptualisation (3)*

Abstract Conceptualisation relates to how applicants interpret practical experiences to address the requirements of the advertised job. Two sub-themes emerged including articulation of practical experience and clarity and relay of the message.

Every participant expressed the significance of applicants to articulate their practical experiences through detailed examples of former positions while highlighting their level of responsibility and work ethic. The suitability of applicants and their potential satisfaction to the advertised position are important, as such Jacinta asks applicants 'to elaborate on what their role was, what they enjoyed, what they didn't enjoy' in previous roles.

Noted by half of the participants as essential to a job application, was the visual appeal, layout, and structure to enable quick assessment and shortlisting. Keighley substantiated this importance, 'I like to see more information in the application about experience and is clear to read because reviewing can be tedious when you've got 120 for one job.' Complementing the written job application, was the expectation of applicants in an interview, to verbally articulate their practical experiences to demonstrate their ability.

### *Active Experimentation (4)*

Active Experimentation refers to applicants who, throughout their practical experiences, exhibit their ability to adopt new knowledge and skills to make decisions and solve problems. Three sub-themes emerged including: demonstration of leadership; self-marketing; and a commitment and ability to contribute to the role.

Demonstration of leadership was evident in a range of settings including university social and community events. Voluntary experiences were considered by participants as a demonstration of leadership attributes and capability to perform a range of tasks. Keighley reflected, 'It just shows someone's a bit more open to take on new challenges/unconventional experiences, as it highlights leadership attributes in a different light, namely initiative, willingness to take on new responsibilities and tasks.'

Self-marketing that included the applicant's suitability to the advertised position was highly regarded by all participants. Specifically, applicant examples that highlighted their contributions to similar positions or tasks, and from extra-curricular activity. During interviews, Nicholas was particular about attracting associated responses, including, 'Can you talk about when you did this or how you did that?'

Commitment and an ability to contribute to a workplace were attributes most participants actively sought. Exhibiting an ability to collaborate with existing staff and understand the nature of the business and clients were participant considerations that demonstrated applicants were a good 'organisational fit'. David identified 'organisational fit' as staff diversification (age, gender, and skills) and an ability to assist colleagues in their roles. Jacinta referred 'fit' to the alignment of applicant to organisational values, 'Our core values are respect, excellence, accountability and passion, so demonstrating those through actions, not just words, are favourable.'

## Stage Three Online Employability Survey

### *Sample size*

Statistical analysis was reliant on the final sample sizes of the six job classifications (Grant et al., 2023) to enable inter-group comparisons of at least 10 for every estimated parameter (Iyer & Loxton, 2008). Four of the six job classifications had fewer than 10 respondents. Subsequently, these were amalgamated to increase numbers to allow group analysis comparisons. Similar job functions and role outcomes merged which resulted in three job classification groups:

- The Administration/Finance/ Operations group remained the same (Group 1);
- Coaching/High Performance and Development/Participation/Programs merged to Development/Coaching/Programs (Group 2); and
- Customer/Membership /Athlete Services, Events/Competitions, and Marketing/Media /PR/Communications groups merged to Marketing/Membership/Events/Communications (Group 3).

### *Demographics*

The gender ratio comprised males (55%), females (44%) and non-binary (1%). The state of Victoria was the most common residential location (77%), followed by significantly lower numbers residing in five other states and territory, and no respondents residing in Tasmania or the Australian Capital Territory. The primary age was between 24-44 years (67%), who were full-time employed (83%) and reported an annual income between AUD $60-90,000+ (77%). The top six organisation types were state sporting association (20%), local government (13%), sporting club (12%), national sporting organisation (12%), venue/facility management (12%) and higher education (8%). The 'other' organisation type category identified 13 respondents from organisations in non-profit (3%) aged care/homeless (2%), peak sporting body (2%), and international/national tourism/sport events (<1%).

### *Employability Dimensions*

A non-normal distribution of the eight Employability Dimensions and four Experiential Learning Cycle stages were identified, with one adjusted outlier (Field, 2009). A strong correlation with associated sub-scales was indicated from the strong internal consistency among the sub-scale Cronbach's Alpha values (>.78) and corrected item-total correlation scores for all sub-scales (between .32-.70). Four new sub-scale variables representing the stages of the Experiential Learning Cycle (Kolb, 1984) were created (Table 1) to indicate where in the cycle the Employability Dimensions were developed.

Presented in Table 1, column two, are the eight Employability Dimensions (numbered according to order presented in Rosenberg et al., 2012 e.g., ED1 represents Employability Dimension 1, Basic Numeracy and Literacy Skills), and the number of times each Dimension item appears in each of the four Experiential Learning Cycle (Kolb, 1984) stages, e.g., ED1 x3. Highlighted in grey, and revealed from the data analysis, is the highest number that each Employability Dimension appears in any of the four Experiential Learning Cycle Stages as distinguished from the dimensions appearing across several stages. In Stage 1, five items are evident in Employability Dimension 5 (ED5 - Interpersonal Skills) and Employability Dimension 8 (ED8 - Work Ethic). In Stage 2, three items exist in Employability Dimension 1 (ED1 - Basic Numeracy and Literacy Skills) and Employability Dimension 4 (ED4 - Management Skills). In Stage 3, four items emerged in Employability Dimension 2 (ED2 - Critical Thinking Skills). In Stage 4, three items in Employability Dimension 6 (ED6 – Information Technology Skills) and seven items in Employability Dimension 7 (ED7 - Systems Thinking Skills) appeared. Employability Dimension 3 (ED3 - Leadership Skills) appeared twice in each of the four Stages of the Experiential Learning Cycle, hence, ED3 is not highlighted in Table 1.

***Table 1: Employability Dimension Items Identified in the Experiential Learning Cycle Stages***

| **Experiential Learning Cycle Stages (Kolb, 1984)** | **Employability Dimensions (ED) and occurrences (Rosenberg et al., 2012)** |
|---|---|
| 1 Concrete Experience | ED3 x2; ED5 x5; ED7 x1; and ED8 x5 |
| 2 Reflective Observation | ED1 x3; ED4 x3; ED6 x2; and ED8 x1 |
| 3 Abstract Conceptualisation | ED1 x1; ED2 x4; ED3 x2; ED4 x1; ED5 x1; ED6 x2; and ED7 x2 |
| 4 Active Experimentation | ED2 x3; ED3 x2; ED5 x1; ED6 x3; ED7 x7; and ED8 x2 |

## Discussion

The purpose of our study was to examine the phases of student learning and development before, during and after workplace experiences that contribute to graduate employability and signalling capability. Findings highlighted a positive association between preparing and undertaking practical experiences, to develop and signal employability. Alignment of the Experiential Learning Cycle (Kolb, 1984) with interview findings has provided an avenue to gauge the importance placed on practical experience from an industry employer's perspective, development of student employability, and the knowledge gained from experiential learning. Subsequently, new perspective was gained through this alignment from a) an indication of the phases of the learning cycle in which the Employability Dimensions items are developed; and b) identification of where the projections of these Employability Dimensions occur as indicators of signals in the learning process. Two of the three progressive employability phases emerged from our study (Phases 1 and 3) with an indication of their association with workplace experiences and the development of employability signalling: Pre-Condition Phase 1 (Preparation), the Experiential Learning Cycle (Kolb, 1984) Phase 2 (Practice), and the Observed Signals Phase 3 (Presentation/Performance).

### Pre-Condition Phase 1 – Preparation

Positive association between practical experience and graduate employability is recognised (Bradbury et al., 2021; Dacre Pool & Sewell, 2007) and supported in our study. Pre-Condition Phase 1 emerged from the job advertisement audit (Stage One) where nine key themes converged into six industry awareness and four self-awareness factors. The six industry awareness factors are: job classifications; advertised employment; structure of industry sector; interrelated industries; additional requirements and training; and job status and salary. These factors signify the individual constituents essential to working within sport management. The four self-awareness factors were: degree knowledge, skills, and application; career development learning; emotional intelligence: and reflect, assess, and evaluate. The industry awareness and self-awareness components build on the Opportunity Awareness and Self-Awareness elements of the DOTS career development framework (Law & Watts, 2003), to outline the importance for higher education students strengthening their ability and application to learning through workplace practical experience. The Pre-Condition Phase interconnects with the Experiential Learning Cycle (Kolb, 1984) to become the preliminary step for students to address prior to undertaking practical experience. The positioning of the Pre-Condition Phase before the four stages of the Experiential Learning Cycle, allows students to foster their understanding, consider the composition of industry and respective opportunities, and build self-capacity and practical experiences.

### *Industry Awareness component*

Our job advertisement audit indicated that sport managers assume graduate applicants have an industry awareness. The recognition of distinct industry awareness factors suggests well-structured and detailed job advertisements are essential to guide graduates' expected satisfaction of a specific career (Jackson & Wilton, 2017; Keiper et al., 2019). Accurate depictions or transparency of an industry are likely to influence an applicant's expected career satisfaction, for example, a high level of detail included in job descriptions can decrease the disconnect between student expectations and reality (Nicholas & Handley, 2020). Skills recommended by employers for sport management graduates include an ability to conceptualise, provide leadership, adopt all forms of communication, critically think and reflect, and problem-solve (de Schepper & Sotiriadou, 2018; Tsitskari et al., 2017). Despite these skills, no guideline exists on the required standards/association of role functions (job classifications) typically performed within the industry (Emery et al., 2012; Heathfield, 2019).

Addressing this omission, 'job classifications' are identified as one of six industry awareness factors from our study and becomes the first in Australia to recognise the qualifications, skills, job knowledge, and responsibilities specific to the sport management industry discipline. These six classifications represent the main functions in job advertisements by sport managers including:

- Administration/Finance/Operations;
- Coaching/High Performance;
- Customer/Membership/Athlete Services;
- Development/Participation/Programs;
- Events/Competitions; and
- Marketing/Media/PR/Communications.

The job titles of 'advertised opportunities' provides an avenue to determine graduate entry-level jobs within sport (Emery et al., 2012; Reeves & Hahn, 2010). The titles of assistant, officer, coordinator, leader, and manager, identified from our study, relate to entry-level sport management positions. These titles provide an indication, upfront, of the types of suitable jobs and respective opportunities for entry-level graduates.

The 'structure of industry sector' awareness factor refers to sport management workplace settings. Our study identified state sporting associations and local government as the main sectors that

advertised sport management jobs ranging from sporting services to community-based organisations. The 'interrelated industries' awareness factor represents an interconnection within the sport management industry discipline and identification of discipline qualifications sought by employers of graduate applicants. Marketing and business/business administration for example are in the top four discipline qualifications emerging from the results. The most desired type of requisite experience of graduate applicants are sport (sector) experience, event management, marketing, and customer service, signifying the need for cross-discipline knowledge and skills, that closely connect and are highly transferable across various industry sectors (Foundation for Young Australians (FYA), 2016).

The 'additional requirements and training' awareness factor relates to employer expectations in addition to the graduate applicant's degree. A driver's licence provided employer assurance that the applicant can assume roles requiring travel (Hoye et al., 2018). The requirement of a Working with Children and Police check indicates the age range of participants who utilise services from community-based organisations, typically within a sporting club or school sport setting (Eime et al., 2016). Training requirements include advanced level coaching certification, Cardio-Pulmonary Resuscitation and first aid are indicative of a physical workplace setting and/or where large groups of people gather (Kolar & von Treuer, 2015).

'Job status and salary' formed the final industry awareness factor. The preference to advertise full-time graduate-entry positions potentially indicates the importance placed on entry-level sport positions in workplace structures, which is positive considering the reliance of the sport sector on volunteers (Hoye et al., 2019; Wallrodt & Thieme, 2020). Although job salary was not stated in 70% of job advertisements collected, it is identified as an important factor influencing the career choice of graduates within a specific career (Mathner & Martin, 2012). Most managers surveyed in our study earned more than AUD $90,000 annually. Although this figure does not represent the salary of graduate-entry level positions, instead, it positively reinforces a career pathway, the earning potential, and opportunities for job advancement in sport management (Emery et al., 2012).

### *Self-Awareness component*

Four self-awareness factors were identified from our study to align a graduate's ability to develop and apply key competencies and skills, through reflection of their practical experiences. Fundamentally, factors associated with an awareness of the self, assist with contextualising learning from practical experiences and are essential in any industry (Nicholas & Handley, 2020; Parker & Ohly, 2008).

'Degree knowledge, skills and application' awareness factor identified from the job advertisement audit, signified the preference for applicants to have more than one desirable degree qualification. Required practical experience was also identified. The extensive list of suitable experiences evident in the job advertisements, support the notion that individuals who train for one job will gain transferable skills applicable across 13 other jobs due to the similarity of the skills employers' demand (FYA, 2016). The notion that students who are aware of their degree content, and self-aware of the requisite knowledge, skills and attributes and how they apply to the workplace, can be considered as assets they bring to the workplace while demonstrating employability and a point of difference (Nicholas & Handley, 2020; Parker & Ohly, 2008).

The 'career development learning' awareness factor emerged from the underpinning knowledge, skills and personal attributes depicted in the top six types of preferred experiences. These six included: sport; event management; marketing; customer service; project management; and sport/business management, each representing varying working environments. Subsequently, the foundations of career development learning are reinforced in our study which requires students to be self-aware and explore the working environment while considering the essential requisite skills to transition into the workplace and pursue a satisfying career (Nová, 2015; Yorke, 2006).

'Emotional intelligence' and the connection with employability occurs with the association of emotion and learning, commonly experienced by students undertaking tests, examinations, homework,

meeting deadlines, and producing best performance (Tyng et al., 2017). Relating to emotional intelligence, in terms of leadership and evolving from the audit, were three of the top six graduate experience requisites: event, project, and sport/business, all of which relate to management. As such, students who act ethically, communicate ideas successfully, motivate and persuade others responsibly, and demonstrate a level of self-awareness of their own emotional being, possess management qualities (Majeski et al., 2017; Rosenberg et al., 2012).

The 'reflect, assess, and evaluate' awareness factor evolved from the audit relating to additional requirements and training for the workplace. Highlighted are the essential and desirable certifications or qualifications for the sport management workplace. These findings demonstrate that completing additional training or adhering to workplace requirements demonstrates an ability to reflect, assess, and evaluate practical experience. Each action promotes a social awareness of organisational and working contexts (de Schepper & Sotiriadou, 2018), associated roles and transferable skills, and provide an indication of the training and tangible industry requirements that complement individual capability with making informed career choices (Jackson & Wilton, 2017).

## Observed Signals Phase 3 – Presentation/Performance

Typically, the impressions of employers on graduate employability (job performance) are formed quickly and with limited information (Bol & Van de Werfhorst, 2011; Gillath et al., 2012). The descriptions and definitions of industry skill lists featured in reports characteristically exclude information to assist employers assess the presence and transparency (presentation) of these skills (National Skills Commission, 2021). Addressing this limitation and recognised from our study are 32 indicators (Table 3) which collectively form 10 signals to assist employers assess the employability skills of graduate applicants during job recruitment and selection. The 10 signals evolved from semi-structured interview and online survey findings and were guided by the Employability Dimensions (Rosenberg et al., 2012). Collectively, these are the first graduate employability signals with indicators (Table 2) for sport management in Australia, and to our knowledge globally, and form the Observed Signals Phase 3.

The Observed Signal indicators signify employability aspects that employers assume students have upon graduation. For example, the Observed Signal 'Unpaid experience as a pathway to employment' has three indicator signals: enhanced familiarity of sporting industry; realistic expectations gained; and requisite skills to demonstrate capability are developed. These indicators expand the limited research on how employers assess a job applicant's employability during job recruitment and selection (Briggeman & Norwood, 2011; Piopiunik et al., 2020), and provide depth to a signal, where typically, signals represented a one-dimensional/single indicator signifying an assumed outcome (Bol & Van de Werfhorst, 2011; Pogatsnik, 2018). For example, that reputable education institutions generate productive and high-quality students and Grade Point Averages suggest the level of an applicant's cognitive ability (Piopiunik et al., 2020). The notion that applicant skills, productivity, and work ethic are not directly observable during job recruitment and selection, further complicates the assessment of employable graduates (Briggeman & Norwood, 2011; Piopiunik et al., 2020). Our study addresses this complication by providing multiple indicators per signal to provide depth into recognising employable graduates.

Multiple Employability Dimensions (Rosenberg et al., 2012) are present in the signal indicators of our study. Each signal and respective indicators align to one of the four stages of the Experiential Learning Cycle (Kolb, 1984). The ten Observed Employability Signals and their indicators provide evidence that a graduate applicant is employable based on gaining practical experience(s) and provide a foundation for employers to assess employable graduate applicants (Table 2). The purpose of alignment in Table 2 is to connect the dimensions and phases according to where these signal indicators are developed in the Experiential Learning Cycle during a practical experience. Represented in some of the indicators below, is the student's ability to articulate their learning through an action, for example, self-

marketing, which enables the respective signal to become transparent during job recruitment and selection.

***Table 2: Observed Employability Signals and Respective (Multiple) Indicators***

| **Experiential Learning Cycle stage (Kolb, 1984)** | **Observed Signal (10) *(of graduates)*** | **Signal Indicators** |
|---|---|---|
| 1 Concrete Experience | Experienced industry referees. | Selects reputable industry employers who only referee for quality applicants.<br>Selects referees with a strong industry understanding and an ability to recognise hard working applicants. |
| | Referee check: alignment of applicant and referee. | Understands their interpersonal, communication and critical thinking capabilities have been observed by referees.<br>Understands referee observations occur over a period while providing mentorship and industry preparation.<br>Selects referees in similar roles to recruiting managers to articulate their observations and address the alignment of the applicant to the role.<br>Recognises the benefits of conversations they have had with referees about the industry throughout the practical experience. |
| | Voluntary experience(s). | Indicates proactivity, passion, leadership, commitment to the industry, and a positive work ethic from voluntary experiences.<br>Contributes to sustaining the social and economic wellbeing of communities and the industry.<br>Enhances systems thinking skills related to industry and operations. |
| | Unpaid experience as a pathway to employment. | Recognises that experiences afford familiarity of the sporting industry.<br>Understands that realistic expectations are gained from industry familiarity.<br>Develops the requisite skills to demonstrate capability gained. |
| 2 Reflective Observation | Practical experience related to advertised role. | Recognises and articulates transferable and related skills and knowledge from industry on broad job functions, e.g., administration.<br>Relates prior practical experiences, skills, knowledge, and attributes to an advertised position.<br>Applies all forms of communication and critical thinking. |
| | Practical experience outcomes. | Recognises learning has occurred using critical thinking and thorough reflection.<br>Appreciates the nature of the workplace, range of job roles, clients, and values that represent the sport management workplace.<br>Confirms an interest in the industry and what it has to offer. |

| | | |
|---|---|---|
| Abstract Conceptualisation | Presentation. | Articulates capability through all forms of communication.<br>Creates visually appealing written documentation signifying an ability to use information technology and software programs.<br>Uses verbal presentation to demonstrate intrapersonal skills; and the leadership traits required to maintain and nurture business relationships. |
| | Articulation (content). | Communicates experience and connections to advertised roles that demonstrates research (of organisation) and the associated contribution the applicant can make.<br>Articulates working relationships and customer engagement.<br>Displays confidence levels required to work in teams, manage tasks, and learn new workplace technologies and systems. |
| Active Experimentation | Leadership attributes. | Undertakes voluntary experience and forges close working relationships.<br>Displays initiative and self-motivation to undertake new tasks and make decisions.<br>Completes mundane and exciting tasks and projects. |
| | Self-marketing. | Provides evidence through examples.<br>Seeks outcomes for organisation and respective clients.<br>Demonstrates ability through writing, verbally, and in interviews.<br>Aligns suitability to position.<br>Establishes a point of difference. |

## Graduate Employability Cycle of Learning

Combined, the three phases described above form the Graduate Employability Cycle of Learning. The cycle guides the student through a series of revelations from exploring and experiencing, to applying, reflecting, and connecting with their learning and employability. The Pre-Condition Phase 1 distinguishes industry and self-awareness factors to encourage industry exploration and enhance student preparation for practical experiences by considering their knowledge, skills, and attributes to apply in discipline-specific practical experiences. The Experiential Learning Cycle Phase 2 (Kolb, 1984) builds student capability and validates the process of learning through practical experience. The Observed Signals Phase 3 converts the experiential learning, post-practical experience, into transferable graduate employability signals.

These three phases can be portrayed in a circular rotation to validate continuous learning about industry, self, and the workplace associated with each practical experience (Figure 1) with the intention that the graduate demonstrates the 'observed signals' throughout job recruitment and selection, and then starts the cycle again within a new role/experience. The cyclical motion depicts the development of a student similar to the Key to Employability Model (Dacre Pool & Sewell, 2007), USEM Model (Yorke & Knight, 2006) and the DOTS Model (Law & Watts, 2003). The cycle prepares higher education students to increase their graduate capacity to perform in a progressively competitive job market. Fundamentally, the Graduate Employability Cycle of Learning centralises

practical experience as the basis from which graduates can transcend their experiential learning to self-market as an employable graduate to prospective employers.

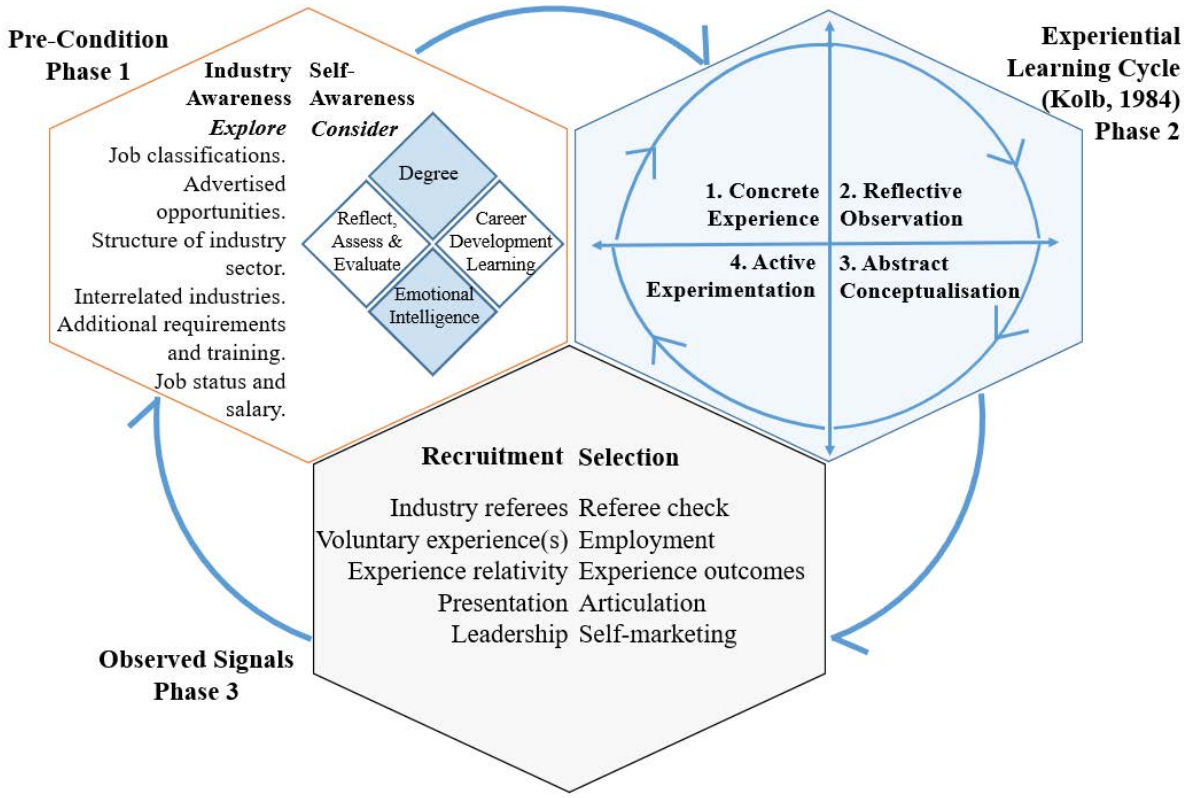


**Figure 1:** ***Graduate Employability Cycle of Learning***

The Graduate Employability Cycle of Learning theoretically extends knowledge on employability development cycles by providing context to define employability, in this case to sport management. Visually, the cycle depicts how individual learning and development from practical experience can be transparently signalled by a graduate applicant during job recruitment and selection when pursuing a career. Essentially, this Cycle of Learning builds on limited sport management signalling literature addressing signalling expertise in sport entrepreneurship (Hayduk & Newland, 2020), athlete brand image (Na et al., 2020) and volunteering (Van den Berg et al., 2015) to strengthen an awareness of employability signalling and employer assessment of graduate applicants.

Emerging from our study are recommendations for course discipline coordinators (higher education) and industry (employers) on how the Graduate Employability Cycle of Learning framework and signals can be a resource to benefit them and students. The Framework recommendations provide guidance to course discipline coordinators and industry employers, connecting industry requirements with higher education curriculum and provides examples of approaches to be collaboratively adopted. Essentially, through collaboration, the Framework and respective recommendations act as a resource from which to enhance student practical experience opportunities, professional development, and transparent employability signalling to prospective employers during job recruitment and selection. Although our study focused on the industry discipline of sport management, the Graduate Employability Cycle of Learning is subjective and can potentially be adapted to any industry discipline.

## Conclusion

Increased graduate competition for employment within the sport management industry has heightened demand for practical experience opportunities and employer expectations of graduate job

applicants (Brown et al., 2018; Zimmer & Keiper, 2021). Graduates developing employability skills by undertaking direct industry experiences is supported theoretically through employability frameworks (e.g., Dacre Pool & Sewell, 2007; Rosenberg et al., 2012). In this context, our study examined the phases of student learning and development before, during and after workplace practical experiences that contribute to graduate employability and signalling capability. Subsequently, a new Graduate Employability Cycle of Learning emerged.

The Graduate Employability Cycle of Learning forms a practical experience model to map employability advancement of higher education sport management students. The cycle commences with enhancing student industry and self-awareness to manage workplace expectations and consider their point of difference (Pre-Condition Phase 1). The Industry and Self-Awareness components of this phase comprise multiple awareness factors introducing student learning as a foundation of an industry profile and pathway to the attainment of graduate employability through practical experience. Undertaking a practical experience follows (Experiential Learning Phase 2), concluding with translating experiential learning to providing evidence of employability during job recruitment and selection (Observable Signals Phase 3). Findings reinforce the expectations of recruiting managers, on the employability skills and marketability of sport management graduate applicants (Zimmer & Keiper, 2021). Prior to our study, no known models existed to guide higher education and industry to support the student employability journey before, during and after undertaking practical experiences in sport management. Findings present a visual and practical Graduate Employability Cycle of Learning to foster student learning and employability beyond the classroom.

Our study is not without its limitations. The geographic collection of job advertisements focused on the state of Victoria in Australia. The reason for limiting the audit to this state was to keep the audit to a manageable size. From the sport management industry discipline perspective, Melbourne (Victoria) is also recognised as the world's sporting capital (Rovere, 2016). Furthermore, data collected is from Australia presenting a global limitation that could potentially constrain the transferability in representing the sport management industry discipline on a global scale. The absence in our job advertisement audit of required years of experience and salary range limited the ability to gauge employer expectations of graduate experience and industry transparency of which salary is an important factor influencing career choice and graduate expectations of a sport management career (Popp et al., 2015). Time has also lapsed since the job advertisement audit was conducted in 2015, noting the growth of sport may have affected the job criteria within advertised positions (Hoye et al., 2018; Lubisco et al., 2019). For example, a broader range of job criteria related to practical experience for graduate applicants from sport management may now be applicable, however, our study provides a benchmark in time for future research.

Globally, future research could expand the six job classifications identified in our study, to explore the range and depth of information provided in job descriptions to graduates of higher education sport management programs. Notably, limited research exists on the expectations of sport management graduates to specifically define job standards, industry standards and align sport management curriculum and learning. Finally, the Graduate Employability Cycle of Learning could be piloted to industry disciplines other than sport management that offer programs with practical workplace experiences. An associated implementation guide with tools and resources could be developed to strengthen student development of employability throughout a university course and collaborations between higher education and industry disciplines to work towards graduate employability.

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