



## Article

# A Psycho-Educational Curriculum Package for Sports Career Transition Practitioners: A Pilot Intervention Case Study

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**Abstract:** This study investigates the efficacy of a psycho-educational curriculum package in enhancing the practitioners' competence to support high-performance athletes' career transitions. This curriculum was integrated into academic modules at higher education institutions in Singapore (n = 18) and the UK (n = 14). Using online pre- and post-intervention questionnaires, along with open-ended questions, participant feedback on the curriculum was collected. Paired *t*-tests were used to assess the within-group differences pre- and post-intervention and two-way repeated-measures ANOVAs were conducted to examine the between-group differences pre- and post-intervention. The results revealed a significant difference between pre- and post-intervention scores for four factors and for both countries: Singapore and the UK. The curriculum enhanced participants' confidence in working with athletes and helped identify areas for development. Three key themes were identified from the thematic content analysis of open-ended responses: (a) informative and insightful content, (b) interactive and engaging delivery (strengths), (c) overlapping content, and reading demands and time constraints (areas for improvement). By incorporating this feedback, supported by the results, the current study contributes to the existing body of knowledge by furnishing insights into an effective psycho-educational curriculum for helping the career transitions of high-performance athletes.

**Keywords:** career development in sport; cross-country analysis; dual careers of athletes; research-driven curriculum; sports career transitions



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## 1. Introduction

Dual careers (DCs), involving the combination of elite sport with education or work, present challenges for student athletes (Stambulova et al., 2021). As training and competition demands have risen to maintain international performance standards (Küttel et al., 2020), academic expectations persist (Augste et al., 2021), requiring dedication to both sport and study (Stambulova et al., 2021). While it is critical to balance dual careers during an athletic career and to complete degrees as part of pre-retirement planning (Park et al., 2013), this increased pressure may lead to premature retirement from high-performance sports without adequate DC support (Hong & Hong, 2024). Consequently, athletes' DCs have become a focus for researchers, practitioners, and policymakers, especially in Europe (Stambulova & Wylleman, 2019). In Stambulova and Wylleman's (2019) critical review, DC research enhances the European discourse on DCs and sports psychology. It also highlights significant gaps in understanding the balance of sport and education or of sport and work, supportive environments, athlete wellbeing, and support provider training, which is a critical topic to be addressed for advancing practical applications and policy development in the DC context.

European policy documents (European Commission, 2012, 2016) and researchers (Stambulova et al., 2021) emphasize the importance of quality DC support services and competent dual career support providers (DCSPs; Defruyt et al., 2019). Quality DC support services positively impact athletes' performance (Fahrner & Burk, 2023) while poor support may lead to dropout from high-performance sports (López-Flores et al., 2021). Effective support can potentially help athletes to manage transitions throughout their careers (Defruyt et al., 2019), including junior-to-senior transitions (Franck & Stambulova, 2020), entry into high-performance environments (Cupples et al., 2021), and transitions out of sport (Park et al., 2013; Hong & Fraser, 2023). The significance of DC support has been studied from various perspectives (Defruyt et al., 2019), such as organizational and structural aspects (Hong & Hong, 2024; Hong & Coffee, 2018), the psychosocial and environmental issues faced by athletes (Franck & Stambulova, 2020; Chang et al., 2020), and athletes' perspectives on support programs (Stambulova et al., 2021). Robnik et al. (2022) noted that athletic successes are associated with the DC support provided to an individual athlete. Their findings also suggested that educational and financial support in relation to DCs can greatly enhance the quality of transitions to post-athletic careers. Despite the emphasis on DC support (European Commission, 2012, 2016), research and practice on quality support services remain limited (Hong & Coffee, 2018).

Previous studies did not identify the key competencies required for DCSPs to better support athletes (Defruyt et al., 2019), leaving a significant gap in the literature. To address this, the Erasmus+-funded Gold in Education and Elite Sport (GEES) project (Wylleman et al., 2017), involving academic experts and professional practitioners from nine European Member States to enhance student-athlete DC support quality, developed and validated the Dual Career Competency Questionnaire for Support Providers (DCCQ-SP) with 38 competence items for five factors, namely, (a) DC management, (b) self-regulation and resilience, (c) social, (d) career planning, and (e) other competencies in their Handbook for Dual Career Support Providers. Subsequently, Defruyt et al. (2019) conducted two studies within the GEES project. They identified 33 key competencies grouped according to six factors: (a) advocacy and cooperation; (b) reflection and self-management; (c) organization; (d) awareness of the student athletes' environment; (e) empowerment; and (f) relationship competencies.

Hong and Coffee (2018) applied this initial DCCQ-SP (Wylleman et al., 2017) in their study focusing on four factors (i.e., DC management; self-regulation and resilience, social, and career planning), a study that focused on the development and evaluation of a psycho-educational curriculum for sports career transition practitioners. They developed a psycho-educational curriculum with a dual focus: first, to enhance the competence of practitioners supporting high-performance athletes during their career transitions, and second, to improve organizational support and management for athlete support services. The curriculum, based on five themes from the existing literature and their prior study, undertook an evaluation using a two-round Delphi method. Consequently, they created a curriculum package with six core contents: (a) Introduction; (b) Part 1 (key readings and video resources); (c) Part 2 (case study); (d) Part 3: Section 1 (writing a dual career athlete's CV); (e) Part 3: Section 2 (dual career SWOT analysis); and (f) Part 3: Section 3 (dual career SWOT strategies guidelines). Participants accessed the curriculum package through a portal and completed pre- and post-intervention questionnaires assessing their confidence in four key competency areas (Wylleman et al., 2017). This established a foundation for future studies to examine the curriculum's potential through exploratory investigation. A comparative analysis of the pre- and post-intervention questionnaires revealed that the curriculum package effectively enhanced the participants' development in the four competencies, demonstrating its efficacy in improving practitioners' skills. Although

the exploratory study did not aim to generalize its findings, [Hong and Coffee \(2018\)](#) acknowledged the limitation of a small sample size ( $n = 4$ , including three Master's/Ph.D. students in sport psychology and one practitioner working with high-performance athletes). They recommended examining the curriculum package with a larger sample. Following their recommendations, the present case study evaluated the curriculum package using a larger sample ( $n = 32$ ), with the goal of incorporating a research-evidenced curriculum into an academic module to improve the overall experience and employability of students aspiring to support athletes as staff members.

Studies on DCs have been conducted in different countries such as South Korea ([Hong & Hong, 2024](#); [Nam et al., 2019](#)), Hong Kong and Taiwan ([Sum et al., 2017](#)), and Singapore ([Chambers & Lim, 2022](#)). However, it is important to note that while studies on DC and DC support studies in Europe are well-established, these topics remain under-researched in the context of Asia. Given that the present study examines two groups of participants, with Singapore as one of the Asian countries and the UK as one of the European countries, it intends to expand the body of the literature by providing two cases. Whilst Singapore and the UK cannot fully represent the broader Asian and European contexts, respectively, exploring both locations will enrich our understanding of DC and DC support in these respective countries. Singaporeans value success and wealth in material terms ([Cheang & Choy, 2024](#)). A good education is, thus, highly regarded as it leads to well-paid jobs and greater financial security. This perspective reflects the nation's emphasis on a practical approach, which prioritizes the building of physically fit citizens through sports rather than pursuing sporting excellence ([Horton, 2002](#)). Despite this, a career assistance program for high-performance athletes has been established in Singapore to assist its athletes in athlete life management. While further efforts are needed to achieve balance in the micro-level sporting ecosystem, such as reducing athlete workloads, there are encouraging signs that suggest progress. These include changes in government policies, increased recognition of dual career paths, and the fostering of a stronger sporting identity, all of which hold promise for the future ([Chambers & Lim, 2022](#)).

The current study adopts critical realism as a research paradigm that incorporates depth realism and ontological assumptions along with a neo-realist epistemology ([Blaikie, 2019](#)). Critical realism recognizes "the existence of knowledge independent of humans but also the socially embedded and fallible nature of scientific inquiry" ([Clark, 2008](#), p. 167). In other words, critical realism does not reject the possibility of discovering reality. Rather, it contends that our understanding of reality is always mediated, and is, thus, inherently fallible. Moreover, critical realism encourages a deeper exploration of the underlying mechanisms and structures that cause observable events, going beyond mere description of patterns or correlations ([Downward, 2005](#)). This rigorous approach to exploring the underlying realities of social phenomena makes critical realism not only suitable but also critical as the philosophical foundation of this study. Thus, critical realism provides a suitable philosophical underpinning for the present research. The focus here is not to predict that something will occur after the psycho-educational curriculum package is completed (i.e., positivism/hypothetical deduction), nor to solely understand and interpret the curriculum package and then draw a conclusion, which would align with the interpretivist approach. Instead, the primary objective of the current research is to ascertain and elaborate on the participants' perceptions, especially the intervention effect of the curriculum, while following an abductive approach. This allows for an exploration of the underlying mechanisms responsible for the observed differences between groups (e.g., the UK and Singapore). This approach aligns with the principles of critical realism, where the focus is on uncovering and understanding the effect of the curriculum that led to the observed phenomena, rather than describing or predicting them. Thus, the present study

aims to assess the existing curriculum package’s efficacy (Hong & Coffee, 2018) with a larger sample and to investigate its potential integration within an academic course. It seeks to examine the efficacy of a psycho-educational curriculum package in enhancing practitioners’ competence in supporting high-performance athletes’ career transitions, with a focus on Dual Career Transition Management, Skill Transfer, Social Support, and Career Planning. To this end, it investigates differences in pre- and post-intervention effects within each group and between groups, as well as the interaction effect between groups and time points across these categories.

Drawing on empirical evidence from dual career research, which consistently demonstrates the measurable benefits of interventions on a psycho-educational curriculum package (Hong & Coffee, 2018), this research establishes Hypothesis 1. This hypothesis anticipates the presence of significant differences in the pre- and post-intervention effects within each group across four critical career-related categories. In addition, based on the experiential learning theory (Kolb et al., 2014), which posits that educational effect and learning are enhanced through experiences followed by reflection, and Hofstede’s (2001) cultural dimensions, which suggest that cultural variables (e.g., individualism and collectivism) influence educational outcomes, this study assumes the presence of significant differences in pre- and post-intervention effects between the participants in Singapore and those in the UK (Hypothesis 2). This study established two hypotheses with a higher-level classification format according to GEES categories to examine the program’s effectiveness (see Figure 1 for the hypotheses).

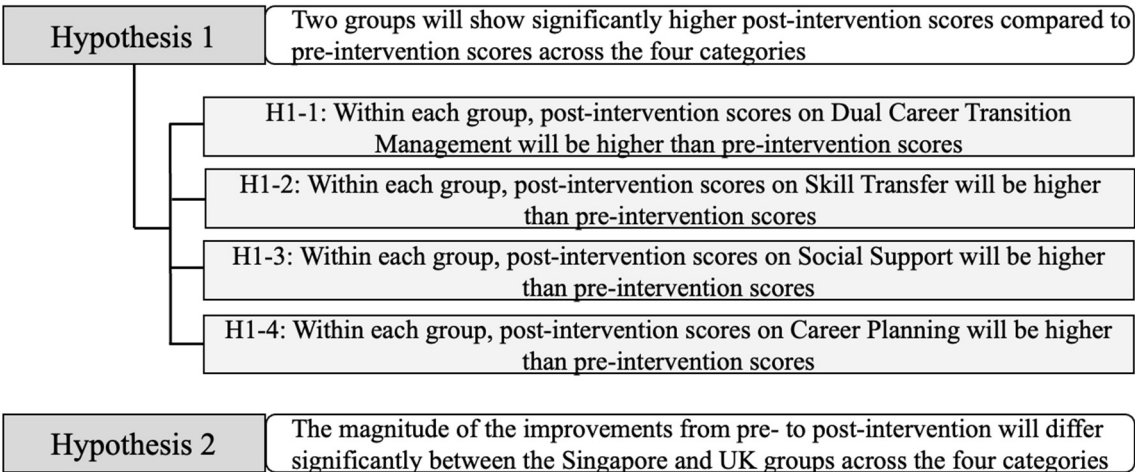


Figure 1. Hypotheses of the study.

2. Materials and Methods

2.1. The Case Study

This case study examines the psycho-educational curriculum package developed and evaluated by Hong and Coffee (2018). As previously mentioned, the package’s content was incorporated into a module coordinated by the lead author at the time of data collection. The module focused specifically on career transitions in sport, particularly the dual careers of athletes. The students were expected to engage with 10 different key readings related to career transitions in sport. Each reading was grouped into one of the following sub-topics: (a) career transitions in sport, (b) sports career transitions and the theoretical framework, (c) dual career athletes, (d) available resources for adaptation to career transitions, and (d) sports career transition support services and interventions. For each key reading, students were asked to complete a reflective exercise in which they identified the three key points they learned from each article. They then discussed these points while in small

groups. In addition to reading and discussing articles, they participated in a case study analysis, where they examined the context of a dual career athlete using a theoretical framework that they had studied. Students also practiced a SWOT analysis exercise for dual career athletes, using the dual career SWOT strategies guidelines that they had learned during the teaching sessions. The content of the package and the relevant materials can be found in the Supplementary Materials, labeled 'Curriculum Package Content'.

Since the students were taking those modules that were coordinated by the lead author, the ethics review panel highlighted the significance of mitigating the issue of any perceived obligation that the student might feel to participate, which could potentially influence their grades. Thus, the lead author highlighted that the research team would not be able to identify the participants by name, as they were asked to provide codenames instead of their actual names during their introduction to the study. This procedure was approved by the panel and implemented as planned.

## 2.2. Participants

The same module and topic were delivered to students at two different higher education institutions in Singapore and the UK. Both groups were enrolled in sports studies programs at their respective institutions. This synchronous learning process was achievable since the British institution offers its degree program to the Singaporean institution, with the lead author coordinating the modules for both institutions. Consequently, we also investigated the differences between students in Singapore and the UK. Out of the 45 Singaporean and British students recruited, 32 participants completed all study stages (18 of 25 Singaporean [72%], and 14 of 20 British [70%] students). Incomplete data sets were excluded from the analyses. All 32 participants (18 female and 14 male) were in their fourth year of higher education.

To confirm the required sample size, the current study conducted power analyses using G\*Power 3.1 (Faul et al., 2009), with a medium effect size ( $f = 0.25$ ), an alpha level of 0.05, and a target power of 0.80 in a  $2 \times 2$  mixed ANOVA. The results indicated that a minimum of 28 participants would be needed to secure an actual power of 0.80. As our sample included 32 participants, we exceeded this requirement and, thus, ensured sufficient power to detect the expected effects.

## 2.3. Curriculum Package Content and Delivery

A one-group pretest–post-test design was employed, involving a single pre-test measurement, intervention implementation, and post-test measurement to measure the effect of an intervention (Dimitrov & Rumrill, 2003). The study utilized the same questionnaire as did Hong and Coffee (2018) and Wylleman and colleagues (Wylleman et al., 2017), which featured 38 competence items for sports career transition practitioners, categorized into four factors: Dual Career Transition Management, Skill Transfer, Social Support, and Career Planning (see Appendix A). Two open-ended questions were added to the questionnaire to gather insights into students' experiences with the curriculum package (e.g., strengths and areas for improvement). The questionnaire was formulated employing an online survey platform ([www.onlinesurveys.ac.uk](http://www.onlinesurveys.ac.uk)) and was disseminated to the participants through a link.

Five sessions (of 2 h each) were delivered across the semester for British students. In contrast, Singaporean students received all sessions during five consecutive days of block teaching (6 h per day, including 4 h of delivering the teaching materials and allowing the students to read relevant articles, as well as 2 h for breaks and lunchtime), due to differing teaching delivery systems at the respective institutions. It is important to note that the curriculum package content remained identical for both groups, despite the different



delivery systems. This is because the students in both the UK and Singapore were enrolled in the same degree program, which is offered by the British institution. The curriculum delivery could be consistent across both groups because it included in-depth readings. While British students read articles from the reading list in their own time between teaching sessions, Singaporean students were given time to read during the teaching sessions. After obtaining institutional ethical approval, participants were informed about the case study during the first session and completed the pre-intervention questionnaire. The curriculum package content was delivered using various platforms and methods, including key readings (independent study), institutional platforms for teaching materials (e.g., video clips, readings, worksheets), and in-class discussions. Unlike [Hong and Coffee's \(2018\)](#) study, which employed online learning, our participants experienced blended learning, as initially recommended by the authors.

#### 2.4. Instruments

To examine the efficacy of the curriculum package, the current study adopted [Hong and Coffee's \(2018\)](#) 38 items, grouped into four categories, which were developed on the Dual Career Competency Questionnaire for Sports Professionals (i.e., Dual Career Transition Management [10 questions; 1, 3, 4, 7, 8, 9, 12, 14, 18, 19], Skill Transfer [10 questions; 2, 5, 11, 13, 17, 22, 27, 28, 36, 38], Social Support [8 questions; 23, 24, 25, 26, 29, 30, 33, 35], and Career Planning [5 questions; 6, 10, 15, 16, 37]). Five questions regarding other competencies were omitted from the present study, as well as those from [Hong and Coffee's \(2018\)](#) study, since the factors of Dual Career Transition Management, Skill Transfer, Social Support, and Career Planning were the main themes to be measured, which followed the work of [Wylleman et al. \(2017\)](#). Each factor was measured using a set of items specifically designed to assess the targeted competencies. In adapting these instruments for our study, we carefully preserved the integrity of the original items while ensuring that they were contextually appropriate for our curriculum (see Appendix A). With these items, this study analyses the effect of time (i.e., pre- and post-intervention) and different groups (i.e., Singapore and the UK), including within and between groups.

The reliability of the measurement scales used in the current study was assessed using Cronbach's alpha values, which showed strong internal consistency across four dimensions. The measurement scales for Dual Career Transition Management ( $\alpha = 0.97$ ), Skill Transfer ( $\alpha = 0.95$ ), Social Support ( $\alpha = 0.97$ ), and Career Planning ( $\alpha = 0.89$ ) demonstrated acceptable reliability ([Hair et al., 2010](#)), confirming their robustness for assessing the constructs.

#### 2.5. Data Analyses

To test the hypotheses, two statistical analyses were conducted. Initially, a paired *t*-test was employed, followed by a two-way repeated ANOVA. The latter test was selected due to the nature of the data, which consisted of two time points (i.e., pre- and post-intervention) and two groups (i.e., Singapore and the UK). As a preliminary analysis, a test to assess the equality of variance was conducted, which substantiated that the data were homoscedastic. Regarding the two open questions included in the online questionnaire, the participants' responses were extracted from the questionnaire data and documented in a Word file (561 words for strengths/positive aspects; 325 words for areas for improvement/negative aspects). The answers to the two open-ended questions were analyzed using [Patton's \(2002\)](#) thematic content analysis, a method for examining written, verbal, or visual communication messages systematically and objectively ([Downe-Wamboldt, 1992](#); [Sandelowski, 1994](#)). Following [Patton's \(2002\)](#) suggestions, four steps were undertaken using both inductive and deductive approaches: (a) reading and re-reading the transcripts from the online survey

platform to familiarize the reader with the data; (b) breaking down the data into meaningful codes, then identifying and classifying them; (c) developing themes from the codes; and (d) categorizing themes based on the initial questions (strengths/positive aspects and areas for improvement). To ensure methodological rigor, the lead author documented the analytical procedures as an audit trail, allowing other authors, acting as critical friends, to review and provide feedback on the procedure and the identified themes (Brown et al., 2018; Marshall & Rossman, 2006).

### 3. Results

#### 3.1. Results of the Quantitative Data Analysis

The results of H1-1 to H1-4 confirmed that participants in both Singapore and the UK achieved significantly higher post-intervention scores compared to their pre-intervention scores across all four categories. These results suggest that both sets of students from Singapore and the UK showed substantial gains in the categories of Dual Career Transition Management (Singapore:  $t = -17.89$ ,  $p < 0.001$ ; the UK:  $t = -11.93$ ;  $p < 0.001$ ), Skill Transfer (Singapore:  $t = -16.30$ ,  $p < 0.001$ ; the UK:  $t = -19.54$ ;  $p < 0.001$ ), Social Support (Singapore:  $t = -16.33$ ,  $p < 0.001$ ; the UK:  $t = -19.54$ ;  $p < 0.001$ ), and Career Planning (Singapore:  $t = -8.43$ ,  $p < 0.001$ ; the UK:  $t = -11.85$ ;  $p < 0.001$ ). These findings reveal significant within-group improvements across all four categories following the delivery of the curriculum package, showing the effectiveness of the implemented intervention for dual careers in both regions (see Table 1).

**Table 1.** The results for Hypothesis 1.

Category	Singapore						UK					
	Score			Statistical Significance			Score			Statistical Significance		
	Pre	Post	Difference	t-Value	Cohen's d * (Effect Sizes)	p-Value	Pre	Post	Difference	t-Value	p-Value	Cohen's d * (Effect Sizes)
DCTM	6.18	7.19	−1.01	−17.89 *	0.19	$p < 0.001$	4.74	6.42	−1.68	11.93	$p < 0.001$	0.61
Skill Transfer	6.32	7.34	−1.03	−16.30 *	0.42	$p < 0.001$	4.52	6.75	−2.13	19.54	$p < 0.001$	0.43
Social Support	6.32	7.34	−1.02	−16.33 *	0.18	$p < 0.001$	4.52	6.75	−2.22	19.54	$p < 0.001$	0.34
Career Planning	5.85	7.07	−1.22	−8.43 *	0.32	$p < 0.001$	4.29	6.73	−2.44	11.85	$p < 0.001$	0.46

Note 1: DCTM denotes Dual Career Transition Management; \* Cohen's d-values are typically interpreted as follows: small ( $0.2 \leq d < 0.5$ ), medium ( $0.5 \leq d < 0.8$ ), and large ( $d \geq 0.8$ ).

Hypothesis 2 examined the significant improvement between regions in terms of pre- and post-intervention effects (i.e., between-group differences pre- and post-intervention). Results from the two-way repeated-measures ANOVA revealed significant differences between the group (G) across all four categories ( $p < 0.001$ ), indicating a substantial difference in effect between the UK and Singaporean groups (see Table 2). The current study conducted Bonferroni post hoc comparisons to explore these differences further. The results confirmed significant within-group improvements from pre- to post-intervention for both countries, as well as significant differences between the groups across all four categories (see Table 3). Although this is not a main point, the results confirmed that the interaction effect between groups and time was significant, meaning that the change of effectiveness over time differs according to group. In summary, the statistical analyses performed on the two hypotheses suggest notable findings. There were significant positive effects within each group from pre- to post-intervention, alongside considerable positive effects when comparing between groups across four different categories in the curriculum.

**Table 2.** The results for Hypotheses 2.

Category of the Curriculum	Source	Degree of Freedom	F-Value	Significance	$\eta_p^2$
DCTM	Group (G)	1	234.65	$p < 0.001$	0.84
	Time (T)	1	198.77	$p < 0.001$	
	G*T	1	12.01	$p < 0.001$	
Skill Transfer	Group (G)	1	116.99	$p < 0.001$	0.91
	Time (T)	1	283.55	$p < 0.001$	
	G*T	1	34.49	$p < 0.001$	
Social Support	Group (G)	1	82.99	$p < 0.001$	0.84
	Time (T)	1	624.86	$p < 0.001$	
	G*T	1	85.68	$p < 0.001$	
Career Planning	Group (G)	1	77.21	$p < 0.001$	0.74
	Time (T)	1	211.67	$p < 0.001$	
	G*T	1	23.41	$p < 0.001$	

Note 1: DCTM denotes Dual Career Transition Management.

**Table 3.** The Results of the Bonferroni post hoc test.

Category of the Curriculum		Results		
DCTM		Singa-post	Singa-pre	UK-post
	Singa-pre	$2.40 \times 10^{-9}$	-	-
	UK-post	$1.10 \times 10^{-6}$	0.28	-
	UK-pre	$2.00 \times 10^{-16}$	$2.40 \times 10^{-13}$	$2.10 \times 10^{-15}$
Skill Transfer		Singa-post	Singa-pre	UK-post
	Singa-pre	$7.20 \times 10^{-9}$	-	-
	UK-post	0.0046	0.0012	-
	UK-pre	$2.00 \times 10^{-16}$	$1.70 \times 10^{-14}$	$2.00 \times 10^{-16}$
Social Support		Singa-post	Singa-pre	UK-post
	Singa-pre	$3.80 \times 10^{-7}$	-	-
	UK-post	0.0018	0.0353	-
	UK-pre	$2.00 \times 10^{-16}$	$7.20 \times 10^{-13}$	$2.00 \times 10^{-15}$
Career Planning		Singa-post	Singa-pre	UK-post
	Singa-pre	$9.70 \times 10^{-6}$	-	-
	UK-post	0.3296	0.00044	-
	UK-pre	$8.60 \times 10^{-11}$	$3.90 \times 10^{-7}$	$6.30 \times 10^{-10}$

The statistical analysis conducted on the experiment's findings demonstrated a significant disparity in effectiveness between pre- and post-intervention measures. Additionally, the regional comparison reveals a contrast, showing the effectiveness of the program for both countries. As a result, the program's efficacy is well-supported by the data.

### 3.2. Results of the Qualitative Data Analysis

Regarding the two open questions included in the online questionnaire, three themes were identified from the qualitative data analysis: (a) informative and insightful content, (b) interactive and engaging delivery (strengths/positive aspects), and (c) overlapping content, along with reading demands and time constraints (areas for improvement/negative aspects). These findings were complemented by insights from the lead author's reflections.



### 3.2.1. Informative and Insightful Content

Both British and Singaporean students emphasized that the sessions were highly informative and insightful: “Very informative and helpful. The discussions in class were very helpful in terms of gaining a greater understanding of the topic” (Participant 1—the UK). Participant 19 (Singapore) also mentioned: “Good background knowledge on the topics taught. Highly relevant to area of study”. Many students found the topic of sports career transitions particularly interesting, appreciating the opportunity to learn about high-performance athletes’ experiences, challenges, coping skills/strategies, and the support needed for transitional issues. Some students, less familiar with the subject, regarded the sessions as an eye-opener as they had not previously considered these aspects of athletes’ careers and experiences. The lead author’s reflections confirm that the topic of sports career transition promoted significant engagement and motivated active discussion, particularly among Singaporean students.

### 3.2.2. Interactive and Engaging Delivery

Importantly, students reported that the sessions were interactive and engaging, boosting their motivation to stay focused and complete all tasks. Specifically, short quizzes each session via Kahoot effectively reinforced their learning and enhanced content comprehension. In addition, students recognized class discussions as a session strength, as one participant noted: “Enjoy hearing discussion and getting to know different points of view from my different classmates. Discussion was engaging” (Participant 25—Singapore). Participant 14 (the UK) also highlighted,

“I enjoyed the quizzes as they refreshed our memory of the articles we had read. The discussions were helpful as they allowed the group to share their opinions on different matters in this module and examine situations from various perspectives.”

The interactive and engaging delivery of material not only increased student engagement during the sessions but also enhanced their understanding of a significant topic in high-performance sports settings. This knowledge can help them better understand how they might be able to support high-performance athletes, whether by working directly with them or through sports governing bodies and organizations that provide support schemes. This insight is specifically valuable when the students pursue careers in the sports industry. The author’s reflections also support this perspective, highlighting the significant role of interactive activities in maintaining student engagement, especially in the Singaporean context, where the daily teaching sessions were significantly longer. However, the longer teaching sessions enabled the lead author and students to build strong bonds with each other, which positively influenced the high level of engagement over time, as the students seemed more comfortable asking questions and providing feedback on materials and activities. While the UK students also demonstrated a high level of engagement, the lead author reflected on the limitation of not being able to integrate a similar level of interactive activities due to the constrained timeframe in the UK sessions.

### 3.2.3. Overlapping Content, Reading Demands, and Time Constraints

Approximately half of the students did not identify any areas for improvement or negative aspects of the sessions. However, among those who provided feedback, some students mentioned that they found certain examples or content repetitive, with overlaps in some readings: “Some articles may discuss the same issue with similar examples” (Participant 28—Singapore); “Quite repetitive and don’t entirely understand some questions” (Participant 12—the UK). Concerning the readings, Singaporean students noted that it was time-intensive to read and fully comprehend the study materials within the given timeframe, suggesting that they needed more time to complete tasks and contribute

more insightfully to discussions: “Many readings need to be done prior to the class. Perhaps if we were given more time, our readings would be more productive” (Participant 21—Singapore). The author’s reflections on the intensive teaching schedule in Singapore highlighted the challenge of balancing the coursework between comprehensive coverage and workload considerations. These insights from both the students and the lead author’s reflections suggest that addressing the concerns related to content redundancy and allocating extra time for students to thoroughly engage with reading materials would significantly enhance the learning experience in any future delivery of the curriculum.

#### 4. Discussion

The objective of this case study was to examine the efficacy of a psycho-educational curriculum package (Hong & Coffee, 2018) by incorporating it into a relevant academic module delivered at two higher education institutions in Singapore and the UK. This study’s significant contribution lies in expanding our understanding of the key competencies of DC support providers and in providing empirical evidence for the efficacy of the psycho-educational curriculum package, which was developed based on the results of comprehensive research (Hong & Coffee, 2018).

The results indicate that the curriculum package enhanced students’ competence in supporting DC athletes, confirming Hong and Coffee’s (2018) findings that participants gained increased confidence across the competence items after completing the package. This also confirms the curriculum’s efficacy in developing key competencies (i.e., DC management; self-regulation and resilience, social, and career planning). Since practitioners supporting high-performance athletes’ career development and transitions are advised to provide proactive services (Lavallee et al., 2014), it is critical to develop competencies aligned with DC athletes’ needs, as identified by Wylleman et al. (2017) and covered by the 38 competence items. Thus, integrating a practitioner-training program into the educational curriculum, as proposed in this study, represents a proactive approach to developing relevant competencies among aspiring students aiming to build careers in the field of supporting high-performance athletes. In addition, the curriculum package that was evaluated in this study can be offered not only to students but also to practitioners currently working with high-performance athletes. The package could be delivered as a certificate or diploma course run by higher education institutions or the sports governing bodies responsible for the professional development of their employees.

Researchers have highlighted the importance of exploring ways to apply research findings in practice when working with high-performance athletes (Wylleman et al., 2017). In this regard, this study enriches the limited literature on training and development support programs for practitioners assisting high-performance athletes, including DC athletes (Hong & Coffee, 2018). As the findings indicate that the participants considered the topic of sports career transition engaging, offering a new understanding of athletes’ difficulties and the support that they require, the significance of the topic, as well as the competencies that practitioners need to develop to better support high-performance athletes, has been confirmed. As such, it is critical to embed topics that are highly valued in the field into the educational curriculum, to repeatedly deliver and evaluate them, and to further develop practitioner training programs that are more accessible and evidence-based. This approach can competently provide more opportunities for current practitioners and individuals preparing for such roles to build relevant competencies, as evidenced in the present study. This represents the integration and mutual reinforcement of research and practice within the curriculum, serving as a foundation to encourage further related studies in the future.

While this study adopts [Hong and Coffee's \(2018\)](#) methodological approach, it represents an original attempt to incorporate the curriculum package into a higher education module. The British students' greater levels of improvement may be attributed to the delivery method. Singaporean students may have needed more time to internalize their learning and achieve further changes. As described in the lead author's reflection, the 6-h daily sessions may contribute to explaining the less significant difference in data from the students in Singapore, but it also shows that the lead author could build a strong rapport with the students, which may have positively influenced their overall experiences and knowledge. In this regard, building on [Hong and Coffee's \(2018\)](#) study, the present study made a significant contribution by providing in-depth insights into the participants' experiences with the curriculum package, achieved through the collection and analysis of qualitative data. This also highlights the importance of implementing and evaluating an evidence-based curriculum as a full process to make it more practical and better aligned with the needs and expectations of the target population. In this respect, the strengths, positive aspects, and areas for improvement identified in this study can inform the refinement and enhancement of the curriculum package. Future research could focus on implementing and evaluating an updated curriculum package, applying the evidence from this study to deliver a more advanced training program that is tailored to the target population.

The results of this study also offer practical implications for higher education institutions and practitioners from sports governing bodies and organizations. It should be noted that the curriculum package in this study was delivered as a form of blended learning, while [Hong and Coffee \(2018\)](#) used an online approach. This provided more opportunities for participants to interact with each other and with the lead author. This is an important point, considering the increasing adoption of blended learning in higher education institutions, which combines face-to-face and technology-mediated delivery ([Porter et al., 2014](#)) and may become the "new normal" ([Norberg et al., 2011](#), p. 208). As previously mentioned, the findings also demonstrate that the curriculum package can be incorporated within higher education modules to benefit those students interested in the sports industry, particularly those aiming to work with high-performance athletes. Integrating research-based curricula within academic modules can enhance the students' overall experience and employability by developing critical skills such as analytical thinking and problem-solving, ensuring access to up-to-date knowledge, and providing practical application opportunities ([Healey & Jenkins, 2009](#)). Moreover, the curriculum package can be used for continuing professional development (CPD) courses to train sports practitioners working with high-performance athletes, expanding their competence. In such cases, support from sports governing bodies, organizations, and/or clubs is significant for providing opportunities for practitioners to participate in these CPD courses and improve their performance across essential competencies.

In light of the practitioners' professional development, practitioners equipped with competencies through an evidence-based curriculum are expected to more efficiently support the career development and transition of high-performance athletes. As highlighted in both the curriculum package and the key competencies developed by the GEES project, high-performance athletes play a significant role in preparing for their future careers and developing as competitive individuals post-retirement by pursuing dual careers, in particular by obtaining degrees from higher education institutions during their athletic careers. Practitioners can guide high-performance athletes to apply and adapt the skills and abilities they have developed through training and competitions, such as self-regulation and resilience, in non-athletic domains. This guidance not only helps athletes to solidify their current performance but can also significantly contribute to overcoming transitional challenges and demands during their transition out of sport. Support from competent prac-

tioners, thus, plays a critical role in athletes' career planning for the future, particularly in pre-retirement planning. While each athlete may have different aspirations, plans, and interests, receiving such guidance and support during their athletic careers can enhance not only their performance but also their preparation for long-term career success and post-retirement life. This enables athletes to grow as well-prepared individuals who are capable of balancing both their athletic and non-athletic careers.

## 5. Limitations and Future Research

While this study offers valuable academic and practical contributions to the field of competence training for sports career transition practitioners in DC support, there are limitations that future research can address. In this study, key demographic information, such as gender and age, was not collected due to an oversight during the online questionnaire's design phase. Future studies could collect such information to identify additional factors impacting changes before and after the intervention. As a result, it is imperative to incorporate characteristic variables into the analysis to account for these dissimilarities. This can be accomplished by including variables such as age, gender, socioeconomic status, and other relevant factors in the model to minimize underlying differences, albeit to a limited extent.

We acknowledge that while our study provides insights into student experiences with the psycho-educational curriculum across different settings, it does not implement a detailed examination of the pedagogic methods or their direct effects on learning outcomes since the study was not initially designed to measure them. However, future research could maintain consistent pedagogic approaches across different settings to isolate other variables influencing the learning outcomes. Alternatively, for studies with a stronger focus on educational methodologies, a comparative analysis of pedagogic approaches could be conducted to determine how specific teaching styles impact student engagement and the effectiveness of the curriculum.

Although beyond the scope of this study, future research may explore the impact of cultural or political influences on competency development related to DC athlete support and existing DC career support systems, government investment in high-performance sports, social expectations, and more. While we provided insight into students' experiences with the curriculum package through open-ended questions, future studies could employ qualitative approaches (e.g., focus groups and interviews) to gather more in-depth narratives, helping researchers and practitioners to refine the curriculum package and enhance its delivery quality. In addition, as this study utilized the GEES project questionnaire, initially developed in 2017, future research could apply the updated DCCQ-SP (Defruyt et al., 2019) when examining the competence of interested students or practitioners. Finally, while it is significant to support and examine practitioners' competence, future research could examine the effect of the practitioners' enhanced competence on the quality of athletes' career transitions. This may require a longitudinal study to track the long-term effects of practitioner competence on athletes' career transitions. In collaboration with sports organizations, implementing and evaluating the curriculum in various settings in relation to athletes' transition quality could provide comprehensive insights into its effectiveness, potentially leading to more effective strategies in supporting both practitioners and athletes.

**Supplementary Materials:** The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/educsci15020127/s1>, Curriculum Package Content.

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Methodology, formal analysis, writing—original draft, and writing—review and editing. All authors have read and agreed to the published version of the manuscript.

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**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the General University Ethics Panel (GUEP) of the University of Stirling (GUEP481 and 19 September 2018).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to their containing information that could compromise the privacy of the research participants.

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**Conflicts of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Appendix A. The 38 Competence Items for Sports Career Transition Practitioners

Competence Items	
1	Dedication to succeed in both sport and study
2	Perseverance during challenging times and in the face of setbacks
3	Ability to make your own responsible choices with regard to your study and sports career
4	Self-discipline to manage the demands of your study and sport combination (e.g., working independently without the supervision of others)
5	Awareness of your strengths, weaknesses, and capabilities
6	Being curious to explore career plans outside elite sport
7	Ability to prioritize what needs to be done
8	Willingness to make sacrifices and make choices to succeed in sports and study
9	Clear understanding of what it takes to succeed in sports and study
10	Vision of where you want to go in life after your dual career
11	Ability to focus on the here and now, without being distracted
12	Ability to create individualized routines (for sport and study)
13	Belief in your own ability to overcome the challenges in sports and study
14	Belief that studies and sport can positively complement each other
15	Being prepared for the unexpected and having back-up plans
16	Ability to be flexible and change plans if necessary
17	Ability to regulate emotions in different situations
18	Ability to use your time efficiently
19	Ability to plan conscientiously in advance
20	Ability to set realistic goals in sport and study
21	Ability to critically evaluate and modify your goals when needed



Competence Items	
22	Being patient about the progression of your sport and study career
23	Understanding the importance of rest and recuperation
24	Ability to collaborate with support staff in study and sport (e.g., coach, teacher, and support provider)
25	Eagerness to listen and to learn from others and from past experiences
26	Asking for advice from the right people at the right time
27	Assertiveness (being self-assured and acting with confidence)
28	Ability to negotiate (in order to stand up for your own interests)
29	Ability to maintain relationships with important people
30	Ability to adapt well to new situations
31	Ability to spend and manage your own money
32	Ability to live independently with competent life skills (e.g., cooking)
33	Ability to make social contacts with peers in study and sport
34	Ability to keep sport and study performances in perspective
35	Ability to resolve conflicts
36	Ability to use setbacks in sport and/or study as a positive stimulus
37	Having knowledge about your career options in study and sport
38	Ability to cope with stress in sport and study

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