https://studentsuccessjournal.org/
Volume **17**(1) 2026 https://doi.org/10.63608/ssj.3944

The Influence of Pre-Arrival Confidence and Perceived Importance on Retention and Achievement Outcomes Among UK First-Year Undergraduate Sports Students

Angela Hibbs
Northumbria University, United Kingdom
Rick Hayman
Northumbria University, United Kingdom
Remco Polman
Queensland University of Technology, Australia
The Education University of Hong Kong, Hong Kong, China

Abstract

This study examined whether pre-arrival confidence and perceived importance across four domains (learning, community, employability, and health and well-being) predict academic achievement and retention among first-year undergraduate sports students. A quantitative study at a United Kingdom post-92 university involved 368 first-year sports students (56% male, 44% female) across six programmes. Pre-arrival surveys measuring confidence and importance perceptions were distributed, with academic performance and retention data collected after one year. Regression analysis revealed that female students demonstrated significantly higher academic performance than males while reporting higher pre-arrival confidence. Three factors significantly predicted academic achievement, explaining 10% of variance. Lower employability confidence and higher health and well-being confidence and importance were associated with better outcomes. Community importance was the only significant predictor of withdrawal risk, with higher importance associated with increased departure likelihood. Pre-arrival surveys can identify at-risk students, though relationships are complex.

***Keywords**:* Student transition; higher education; confidence; academic performance; student retention.

Introduction

A successful transition to higher education (HE) is characterised by students' confidence in navigating both academic and social aspects of university life, accompanied by a robust sense of belonging within their programme and the wider institution (Nallaya et al., 2022). This process often involves building constructive relationships with academic staff, forming new peer connections, and maintaining motivation for learning (Meehan & Howells, 2019; Pedler et al., 2022; Thompson et al., 2021). Research within HE consistently highlights the multifaceted challenges encountered by individuals progressing from sixth form or college (SFC) into HE (Fellingham et al., 2024; Gravett & Winstone, 2021; Rawlings Smith et al., 2022; Taylor & Harris-Evans, 2018). Regardless of students' backgrounds or previous educational experiences, limited integration (Williams & Roberts, 2023), diminished sense of belonging (Strayhorn, 2023), and unmet academic and social expectations (Gillen-O'Neel, 2021; Turner et al., 2017; Young et al., 2020) are all associated with increased risks of disengagement,

underperformance, and withdrawal from HE programmes. The ways in which HE institutions design learning environments and transition support also play a central role in shaping these outcomes.

Research shows academic confidence, students' belief in their ability to succeed academically, is linked to better performance (Farrand et al., 2006; Porter et al., 2013; Sander & Sanders, 2009). Transitioning to HE often challenges students due to new teaching and assessment methods (Fellingham et al., 2024; Hale, 2020; Hayman et al., 2021). Many report confidence issues related to employability, self-regulation, and workload (Hayman et al., 2021; Jonker et al., 2011; Pather & Dorasamy, 2018), and lack experience with independent study, collaboration, and critical thinking (Hayman et al., 2017; Hayman et al., 2018; Hockings et al., 2018; Lowe & Cook, 2003). Higher academic confidence promotes greater learning ownership; reduces stress and fear of failure; and is linked to improved attendance, engagement, and performance in HE (Habel, 2012; Kleitman & Gibson, 2011; Sander & de la Fuente, 2020). Confident students are more likely to persist (lower withdrawal rates), have clearer career goals, and use advanced thinking skills, whereas low confidence is associated with perceiving tasks as harder, increased anxiety, problem-solving difficulties, and concerns about employability and independent study (Farhat et al., 2017; Hayman et al., 2021; Hayman et al., 2024; Lowe & Cook, 2003; Pather & Dorasamy, 2018; Rowley et al., 2008).

Research on gender differences in self-confidence is equivocal. For example, Blanch et al. (2008) observed that male medical students displayed greater self-confidence, but Tasneem and Panwar (2019) found no notable gender difference in academic self-confidence among applied science undergraduates. Sandar and de la Fuente (2020) surveyed 1,523 Spanish undergraduates and found that women reported higher confidence in earning good grades. On the other hand, Sander and Sanders (2009) discovered that male students studying psychology, education, and healthcare courses felt more confident in their academic abilities and expected assessment results than female students. In the United Kingdom (UK), females entering higher education from A-level or BTec pathways typically report lower confidence than males, even though they have consistently outperformed men since 1992 (HESA, 2024; Morgan, 2023).

Sport-related degree programmes have expanded rapidly in the UK, with 125 universities offering 639 courses (Universities UK, 2024). However, retention and progression rates lag behind the sector average, with just 74% graduating compared to 85% overall (HESA, 2024). First-year sports students often struggle with academic expectations, independent learning, and social integration (Hayman et al., 2017; Hayman et al., 2021). Research highlights a mismatch between prior SFC education and the student-led nature of HE (Hibbs et al., 2024; Timmis et al., 2024). Although some students report positive transitions, difficulties with independent study and assessments persist (Gill, 2019, 2020). Additionally, males from low participation areas without A-Levels face the highest withdrawal risk (Tomlinson et al., 2024).

Research has mostly focused on academic confidence and perceived learning importance in relation to performance, with less attention on pre-arrival confidence and its impact on community engagement and employability. Female sports students report higher pre-arrival confidence in social integration and value learning, health, and community more than males (Hibbs et al., 2025). Participation in sports and extracurriculars fosters belonging and acceptance for first-year sports students (Hayman et al., 2022). However, males place less emphasis on health and well-being, which is linked to lower engagement and retention (Thomas et al., 2021). Academic resilience predicts attainment and retention, while mental well-being is influenced by resilience, gender, qualification, disability, and literacy (Wixcey et al., 2024).

Students with degrees matching their career goals tend to be more confident and motivated (Ayala-Calvo & García, 2021; Donald et al., 2019). For instance, physiotherapy students often value learning more than those in sport-related fields (Hibbs et al., 2025). This is supported by research that has demonstrated a direct association between sense of purpose and academic success in HE (Alderson et al., 2025). However, transitioning from SFC to HE poses challenges, especially for new sport programme entrants (Hayman et al., 2025; Timmis et al., 2024), and research on their experiences is limited (e.g., Gill, 2019). Existing studies cite academic integration and self-confidence issues but seldom track their impact over time or by demographic. Sports students show varied preparedness at entry (Hibbs et al., 2024), and females are more likely to persist in HE sports (Tomlinson et al., 2024). This study builds on Hibbs et al. (2025) by analysing how pre-arrival confidence and perceived value of learning, community, employability, and well-being relate to first-year retention and achievement, considering gender and program differences. Institutional data from 2023–2024 show that 72% of withdrawals from sport programmes were new entrants, with nearly half leaving in the first three months. The study explores if pre-arrival survey (PAS) responses can predict first-year retention and achievement.

The study is grounded in the view that student success is shaped not only by individual characteristics but also by the institutional environments in which students learn and transition. Instead of seeing students as the problem, this study emphasises the responsibility of institutions to create conditions in which all students can succeed, regardless of background or experience. This perspective guided how the findings were interpreted, with attention to how university structures, practices, and cultures influence students' experiences, sense of belonging, and longer-term outcomes such as progression and achievement. The implications for practice therefore focus on changes universities can make, rather than on students themselves.

Method

Research Design

This study used a quantitative approach and was conducted at a UK HE institution (referred to as YFC) that gained university status in 1992. YFC has a longstanding tradition of offering vocational education, which remains part of its curriculum today. The institution is recognised for being active in research, inclusive in its social outreach, and celebrated for its teaching quality. According to its *Education Strategy* and *Access and Participation Plan*, YFC prioritises fair access and tackling educational inequality. This aligns with the study's focus on understanding how institutional contexts shape student transition and success, rather than locating challenges solely within students themselves. It was also one of the first universities in the UK to introduce degree programmes in sport. Over the past four decades, YFC has broadened its sports-related courses to keep up with developments in the field and shifts in graduate career prospects. Since launching its inaugural Sport Studies degree in 1979, the subject has expanded to encompass six undergraduate and four postgraduate programmes.

Participants

Of 555 eligible participants, 368 (67%) completed a PAS (evasys, 2024), representing 205 (56%) males and 163 (44%) females. All six undergraduate sport degree programmes at YFC were represented in the sample: Physiotherapy (P), Sport and Exercise Science (SES), Sports, Exercise and Nutrition (SEN), Sports Coaching (SC), Sports Management (SM), Sports Foundation Year (FY). Demographic data for each programme can be seen in Table 1.

Table 1

Respondent Demographics per Programme of Study and Gender

		P	SES	SEN	SC	SM	FY	Total
Total		51	139	37	48	39	54	368
Gender	Male	17	77	18	31	29	33	205
	Female	34	63	18	17	10	21	163

Note. P = Physiotherapy, SES = Sport and Exercise Science, SEN = Sports, Exercise and Nutrition, SC = Sports Coaching, SM = Sports Management, FY = Sports Foundation Year.

Procedure

At the end of August 2024, all new and pre-enrolled first-year undergraduate and foundation year sports students were invited to take part in the study. After ethical approval was granted (Project ID #7783, 16th August 2024), student information, including name, gender, course, and personal email, was collected from YFC's academic registry post-clearing database. This information was securely shared, using a password-protected document, with a third-party company (evasys; www.evasys.co.uk) responsible for distributing and collecting survey responses. Each student received a personalised, branded email containing a unique link to complete the survey. The survey began by explaining the study's aims, objectives, and procedures. Participants gave written informed consent before starting the PAS. The introduction page also reassured them about confidentiality and voluntary participation, stating that their data would remain private and that they could withdraw at any time without giving a reason. To maintain anonymity, each participant received a unique student number. Surveys were distributed in four rounds: week 1 to all pre-enrolled students and weeks 2, 3, and 4 to newly enrolled first-year students (excluding those already contacted). The survey closed four weeks after opening, ending one day before YFC's welcome week in mid-September 2024. Students who did not respond to the initial email received a follow-up opportunity to participate a week later.

The PAS used has been reported previously (evasys, 2024) and has been established as a valid and reliable tool to assess student perceived confidence and importance (Hibbs et al., 2024). The survey structure was developed by Lawson at Middlesex University, UK and comprises mainly closed questions to ensure prompt and simple completion, including a mix of yes or no and Likert scale options. In the survey, participants provided responses to four domains (learning, L; community, Co; employability, E; and health and well-being, H) and reflected on two factors within each domain: confidence (C), "I am confident with ...", and importance (I), "I think it is important to …". The survey contained 45 statements which related to one of the eight factors (LC [7 items], LI [5 items], CoC [6 items], CoI [4 items], EC [7 items], EI [7 items], HC [6 items], and HI [3 items]). Participants responded by rating their perceived level of confidence or importance within each statement on a 5-point Likert scale of strongly agree (5) to strongly disagree (1) where a score of 5 represented the highest level of confidence or importance. A copy of the survey is available on request from the first author.

In June 2025, student retention status (i.e., whether the student was still enrolled or not) and first year academic achievement data (overall grade average %) for the 2024–2025 academic year was obtained from the academic registry at YFC. One student from the sample had taken a break in study and as a result was still enrolled but did not have a first-year academic achievement grade so was excluded from any further analysis. Academic performance data and retention status were matched to the survey responses using student ID data for the remaining 333 enrolled students.

Analysis Strategy

Descriptive statistics (mean and standard deviation) were obtained for the PAS as a whole and for the eight factors (LC, LI, CoC, CoI, EC, EI, HC, HI) by gender and programme of study. Prior to analysis, the data were examined for normality (Levene) and outliers. Q-Q plots were normally distributed and Levene test was non-significant, suggesting homogeneity of variance. Following this, univariate analysis of variance (ANOVA) was conducted with gender (n = 2) and programme of study (n = 6) as independent variables and academic performance as the dependent variable. Sidak post-hoc comparisons were conducted for a significant main effect for programme of study or interaction effect. Significance level was set at P <.05. Effect sizes were calculated using partial eta squared (ηp^2) with 0.01 - <0.6 = small; 0.06 - <0.14 = medium; and >0.14 = large (Cohen, 1988). Multiple linear regression was used for statistical testing to identify any predictors within the PAS score on student academic performance whereas binomial logistic regression was used for student retention (students still on their respective course or not). All data were analysed in SPSS (v. 28).

Results

Pre-arrival scores by programme of study and gender can be seen in Table 2. Student retention and academic performance data by programme of study can be seen in Table 3. ANOVA for the effect of gender and programme on academic achievement showed a significant main effect for gender ($F[1,321] = 15.10$; $p < .001$; $\eta p^2 = .05$) and programme ($F[5,321] = 3.95$; $P = .002$; $\eta p^2 = .06$) but no interaction ($F[5,321] = 0.68$; $P = .64$; $\eta p^2 = .01$) effect. Female students scored higher compared to male students, and post-hoc comparisons for programme of study showed that the physiotherapy students had a higher average grade compared to all other programmes of study ($P < .01$; see Table 3).

The multiple linear regression model for academic achievement and PAS factors was significant ($F[8,324] = 4.29$; $P < .001$), explaining 10% of the variance. However, only EC ($\beta = -.203$; $P = .004$), HC ($\beta = .163$; $P = .01$), and HI ($\beta = .156$; $P = .01$) were significant predictors. Lower EC score was associated with increased academic achievement, whereas higher HC and HI scores were associated with increased academic achievement.

The binomial logistic regression, examining which of the PAS factors predicted drop-out, was not significant (χ^2 [8] = 11.4; P = 0.17) and explained 7% of the variance (Nagelkerke). Examination of the contribution of the different factors on the model showed that only CI reached significance (Estimate = -1.15; P = .03).

Table 2

Mean and Standard Deviation for the Eight Factors for Each Programme of Study by Gender and Enrolment Status.

	Programme of Study												Enrolment Status	
	Sport & Exercise Science		Physiotherapy		Sports, Exercise & Nutrition		Sports Coaching		Sports Management		Sports Foundation Year		Enrolled	Withdrawn
	M	F	M	F	M	F	M	F	M	F	M	F		
LC	3.72 0.46	3.77 0.56	4.11 0.34	4.11 0.32	3.90 0.53	3.91 0.32	3.74 0.46	3.73 0.58	3.69 0.50	3.77 0.50	3.80 0.54	3.72 0.49	3.82 0.48	3.71 0.53
LI	4.06 0.49	4.37 0.64	4.54 0.32	4.51 0.39	4.12 0.56	4.31 0.53	4.16 0.61	4.18 0.50	4.08 0.51	4.30 0.33	4.03 0.59	4.33 0.59	4.24 0.55	4.08 0.58
CoC	3.29 0.65	3.53 0.63	4.01 0.48	3.87 0.38	3.23 0.93	3.66 0.64	3.45 0.62	3.54 0.68	3.41 0.57	3.83 0.42	3.60 0.62	3.67 0.72	3.55 0.65	3.39 0.69
CoI	3.85 0.55	4.06 0.55	4.19 0.47	4.24 0.43	3.68 0.86	4.08 0.56	3.91 0.54	4.04 0.59	3.68 0.55	4.05 0.39	3.82 0.62	4.05 0.57	3.94 0.58	4.04 0.56
EC	3.85 0.65	3.68 0.74	4.10 0.48	4.11 0.49	3.69 0.56	3.87 0.64	3.92 0.62	3.75 0.71	3.74 0.62	3.40 0.66	3.66 0.65	3.73 0.66	3.81 0.65	3.71 0.70
EI	3.83 0.50	3.85 0.49	4.18 0.43	4.03 0.32	3.66 0.69	3.94 0.54	3.92 0.49	3.61 0.46	3.65 0.43	3.72 0.43	3.88 0.41	3.91 0.40	3.87 0.47	3.74 0.62
HC	3.93 0.62	3.92 0.64	4.22 0.50	4.08 0.52	3.89 0.56	4.18 0.67	3.93 0.62	3.68 0.85	3.84 0.59	3.88 0.47	3.82 0.62	3.89 0.63	3.94 0.62	3.89 0.59
HI	3.96 0.73	4.24 0.63	4.33 0.58	4.29 0.52	3.89 0.95	3.96 0.98	3.87 0.77	4.10 0.81	3.87 0.71	3.93 0.63	3.56 1.07	4.29 0.71	4.02 0.80	4.08 0.61

Note. LC = Learning confidence; LI = Learning importance; CoC = Community confidence; CoI = Community importance; EC = Employment confidence; EI = Employment importance; HC = Health and well-being confidence; HI = Health and well-being importance; M = Male; F = Female. *Highlighted cells indicate the factors that contributed to the significant variance in the model*

Table 3

Student Retention and Academic Achievement Data per Programme of Study and Gender.

	Programme of Study												
	Sport & Exercise Science		**Physiotherapy**		**Sports, Exercise & Nutrition**		**Sports Coaching**		**Sports Management**		**Sports Foundation Year**		**Overall**
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	
Retention													
Enrolled	65 (86%)	55 (89%)	16 (94%)	33 (97%)	16 (84%)	15 (83%)	28 (90%)	17 (100%)	27 (92%)	10 (100%)	32 (97%)	19 (91%)	333 (91%)
Withdrawn	10 (13%)	6 (10%)	1 (6%)	1 (3%)	3 (16%)	3 (17%)	2 (6%)	-	1 (4%)	-	-	2 (9%)	29 (8%)
No Show	1 (1%)	1 (1%)	-	-	-	-	1 (4%)	-	1 (4%)	-	1 (3%)	-	5 (1%)
Academic Achievement													
Level Average (%)	54.03 ±13.72	58.02 ±11.57	64.69 ±11.89	67.09 ±12.76	53.88 ±13.68	61.47 ±8.42	48.46 ±20.40	60.06 ±14.92	54.67 ±14.15	62.40 ±5.40	55.44 ±16.90	63 ±12.12	57.61 ±14.61
Overall	55.86 ± 12.88		66.31 ± 12.41		57.55 ± 11.90		52.84 ± 19.20		56.76 ± 12.81		58.25 ± 15.61		57.61 ± 14.61

Note. Brackets represent % of population sample. *Highlighted values indicate a significant difference ($p < .05$)*

Discussion

This study investigated the extent to which pre-arrival confidence and perceived importance across four domains: learning; community; employability; and health and well-being; predict academic achievement and retention outcomes among first-year undergraduate sports students at a UK post-92 university [1]. The results provide valuable insights into the transitional experiences of these students and challenge conventional assumptions regarding the relationship between confidence and academic performance. Notably, female students attained significantly higher academic grades compared to their male peers and reported greater pre-arrival confidence across several domains. This outcome diverges from earlier research indicating that male students generally exhibit higher self-confidence upon entering HE (Sander & Sanders, 2009). While the stronger academic performance among female students is consistent with broader trends observed since 1992 (HESA, 2024; Morgan, 2023), the finding of elevated pre-arrival confidence among women within this cohort represents a marked shift from established expectations. This change may signal evolving social dynamics and educational cultures, particularly in sports-related fields where traditional gender stereotypes are being reconsidered. One possible interpretation is that female sports students in this cohort may be entering HE with more accurate self-assessments and more developed metacognitive skills, which could contribute to both increased confidence and enhanced academic outcomes. However, this was not directly tested in the present study. Nonetheless, further research is required to elucidate the mechanisms underpinning this relationship.

Physiotherapy students demonstrated both the highest pre-arrival scores and the strongest academic performance, significantly outperforming all other programmes. A plausible explanation is that this pattern may reflect the more selective entry requirements for physiotherapy programmes and the clearer career pathway alignment that characterises health professions, which could foster greater academic preparedness and motivation among these students. The variation in performance across programmes highlights the heterogeneous nature of sports-related HE, where disciplines ranging from theoretical exercise science to applied coaching practice attract students with diverse backgrounds, motivations, and career aspirations. This diversity necessitates programme-specific approaches to pre-arrival student support and transition interventions, which have been observed to be beneficial for both academic staff and students post arrival in the HE setting (Lawrence et al., 2021; Maymon et al., 2019).

Three pre-arrival factors were identified as significant predictors of academic performance, collectively accounting for 10% of the variance. This level of variance is consistent with previous research, which has established levels between 3–16% (Molnár & Kocsis, 2024). The observation that higher confidence in, and greater emphasis on, health and well-being correlated with improved academic outcomes reinforces the integral relationship between physical, mental, and academic well-being among sports students. This finding is consistent with prior research, which indicates that participation in sports and extracurricular activities enhances both academic achievement and a sense of institutional belonging (Hayman et al., 2022; Thomas et al., 2021). The inverse association between employability confidence and academic achievement is unexpected and warrants thoughtful consideration. One interpretation of this finding is that students with lower employability confidence may compensate by dedicating increased effort to their studies, perceiving academic excellence as vital to their future careers. Conversely, those with high employability confidence may be less focused on academic attainment if they assume their career trajectories are already assured. However, as the mechanisms underlying this association were not directly examined in the present study, it should be treated as a direction for future inquiry rather than an established finding. These results suggest that a moderate degree of uncertainty regarding career readiness could act as a motivational factor for academic engagement, though this requires further investigation.

The findings on health and well-being have significant implications for institutional policy and practice. According to Burn (2025), sport participation plays a vital yet often overlooked role in student retention, well-being, and employability by fostering community, resilience, and transferable skills that keep students engaged in university life. Yet many universities still fail to integrate and promote participation in sporting activities strategically, viewing it as optional rather than as a crucial factor in student outcomes. Institutions should rethink how they promote student participation in health and wellness activities, seeing them not simply as lifestyle choices but as strategies for academic success. Approaches might include weaving physical

[1] Post-92 refers to higher education institutions in the United Kingdom who were granted university status through the Further and Higher Education Act 1992. This can include both former polytechnic colleges and institutions that have been created since 1992.

activity into academic programmes, encouraging use of campus recreation facilities, and highlighting the academic advantages of maintaining both physical and mental well-being.

The binomial logistic regression analysis of retention predictors did not yield statistically significant results overall, likely attributable to the low withdrawal rate (8%) among students who completed the PAS, which constrained statistical power. Notably, the total withdrawal rate across all programmes at YFC was 5%, indicating no response bias in the survey sample. Interestingly, community importance emerged as the sole significant predictor, with higher perceived importance paradoxically correlating with an increased likelihood of withdrawal. This unexpected association invites tentative interpretation. One possibility is that students placing greater emphasis on community engagement may experience heightened disappointment when their social integration goals are not realised, ultimately resulting in disengagement and withdrawal. This interpretation is consistent with prior research indicating that unmet expectations are influential in student attrition (Gillen-O'Neel, 2021; Turner et al., 2017; Young et al., 2020). Alternatively, those who strongly value community may prioritise social activities over academic obligations when conflicts arise. These remain plausible but untested accounts that future research should seek to examine more directly. The fact that many withdrawals occurred within the first three months suggests that challenges in early social adjustment may precipitate departure decisions, particularly among students who highly value community belonging.

Implications for Practice

The present findings offer several practical considerations for facilitating sports students' transitions. However, it is important to acknowledge that the modest explanatory power of the academic model and the non-significant overall retention model mean that PAS measures should be regarded as one potentially useful source of insight within a broader student success framework, rather than as strong predictive tools in themselves. Firstly, institutions are encouraged to design targeted interventions that highlight the positive connections between health, well-being, and academic achievement. Potential strategies may include implementing mandatory wellness modules, establishing peer support programmes that integrate physical activity with academic outcomes, or developing residential initiatives that promote healthy living.

Secondly, the nuanced relationship between employability confidence and academic success indicates that career development interventions may require thoughtful planning. Rather than focusing solely on boosting confidence, such programmes should guide students in conducting realistic self-assessments and understanding the linkage between academic performance and career readiness. This could be achieved by incorporating structured reflection activities, opportunities for employer engagement, and explicit discussions about how academic results translate into professional competence. Thirdly, the findings related to community importance underscore the potential necessity of managing student expectations around social integration. Orientation programmes should offer accurate previews of university social life while providing structured avenues for meaningful community involvement. Furthermore, institutions may wish to monitor students who express elevated expectations regarding community engagement and offer additional support to address their social integration needs.

Limitations and Avenues for Future Research

Several factors limit how these results can be interpreted. The single-institution study design limits the generalisability of the findings, especially considering the distinct nature of post-92 universities and their diverse student groups. The small number of survey respondents who withdrew limited the statistical power for analysing retention, though the 8% withdrawal rate is encouraging compared to sector averages in sports programmes. Collecting data before students arrived allowed for early intervention but only gave a single snapshot of attitudes and confidence. Using longitudinal research designs that track student changes throughout their first year would provide deeper understanding of how students adjust. Future studies should also test whether these results hold true in other types of institutions, such as research-intensive universities with different student demographics and programme features. Furthermore, exploring the reasons behind the unexpected employability confidence patterns through qualitative research could help inform programme development. Since pre-arrival factors explained only a small proportion (10%) of academic achievement, it is clear additional factors influence student outcomes. Including predictors like previous academic records, entry qualifications, socioeconomic status, and first-generation student status in future models to account for some of the unexplained variance would allow for more thorough analysis of the predictors of success in HE.

Conclusion

This study demonstrates that PASs may offer one useful source of insight into factors associated with first-year sports student outcomes, though the relationships are more complex than might initially be expected and the modest explanatory power of the models warrants a cautious interpretation of the findings. The findings challenge simple assumptions about confidence–performance relationships while highlighting the importance of health and well-being factors for academic success. The counterintuitive patterns regarding employability confidence and community importance generate plausible hypotheses, that moderate uncertainty and realistic expectations may be more beneficial than high confidence in certain domains. However, these interpretations were not directly tested and should be regarded as directions for future research rather than established conclusions. For institutions seeking to improve sports student outcomes, these findings tentatively suggest that holistic approaches addressing physical well-being, realistic career development, and carefully managed social integration expectations are likely to be most effective. The gender differences observed also indicate that targeted interventions may be needed to address the specific needs of male students in sports programmes. Most importantly, this research points to the potential value of understanding student transition experiences as one component of a broader evidence base. As the sports HE sector continues to grow and evolve, evidence-informed approaches that draw on multiple sources of data, of which PASs represent just one, will be important for supporting student success and institutional effectiveness.

Declarations

Informed Consent

The participants in this study provided written informed consent prior to completing the survey. The introduction page of the survey outlined the study's objectives and assured participants about the confidentiality of their responses. They were informed that participation was entirely voluntary and that their data would remain confidential.

Funding Details

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Disclosure Statement

The authors report there are no competing interests to declare.

Data Availability

The dataset will be made available upon acceptance for publication.

Ethical Approval

Ethical approval was obtained from the participating institution prior to data collection.

Author Contributions

All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by Dr Angela Hibbs and Prof Remco Polman. The first draft of the manuscript was written by Dr Angela Hibbs and all authors commented on previous versions of the manuscript and were involved in the reviewing and editing process. All authors read and approved the final manuscript.

Acknowledgements

The authors would like to thank evasys Ltd for the assistance in compiling, distributing, and collating the survey responses and for their ongoing support.

References

Alderson, J. E., Lewis, N. A., Hill, P. L., & Turiano, N. A. (2025). Sense of purpose in life predicts university performance and attrition. *Student Success*, *16*(1), 48–60. https://doi.org/10.5204/ssj.3612

Ayala-Calvo, J., & García, M. (2021). The influence of psychological capital on graduates' perception of employability: The mediating role of employability skills. *Higher Education Research & Development*, *40*(2), 293–308. https://doi.org/10.1080/07294360.2020.1738350

Blanch, D. C., Hall, J. A., Roter, D. L., & Frankel, R. M. (2008). Medical student gender and issues of confidence. *Patient Education and Counselling*, *72*(3), 374–381. https://doi.org/10.1016/j.pec.2008.05.021

Burn, H. (2025, March 27). Why is higher education sidelining sport? *Wonkhe*. https://wonkhe.com/blogs-sus/why-is-higher-education-sidelining-sport/

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Donald, W., Baruch, Y., & Ashleigh, M. (2019). The undergraduate self-perception of employability: Human capital, careers advice, and career ownership. *Studies in Higher Education*, *44*(4), 599–614. https://doi.org/10.1080/03075079.2017.1387107

evasys (2024) Supporting Student Transition – How evasys partnered with Northumbria University's School of Sport, Exercise and Rehabilitation, https://evasys.co.uk/evasys-partnered-with-northumbria-universitys-school-of-sport/

Farhat, G., Bingham, J., Caulfield, J., & Grieve, S. (2017). The Academies Project: Widening access and smoothing transitions for secondary school pupils to university, college and employment. *Journal of Perspectives in Applied Academic Practice*, *5*(1), 23–30. https://doi.org/10.14297/jpaap.v5i1.229

Farrand, P., McMullan, M., Jowett, R., & Humphreys, A. (2006). Implementing competency recommendations into pre-registration nursing curricula: Effects upon levels of confidence in clinical skills. *Nurse Education Today*, *26*(2), 97–103. https://doi.org/10.1016/j.nedt.2005.06.002

Fellingham, A., Shuwara, T. H., Saint Amand, T., Gunawan, F., Gould, S., & Elbediwy, A. (2024). Investigating the transitional barriers university students face when moving from further education; what are the potential issues they may meet? *New Directions in the Teaching of Natural Sciences*, *19*(1). https://doi.org/10.29311/ndtns.vi19.4670

Gill, A. (2019). Student transition into higher education: Exploring BTEC sport and exercise students forthcoming transition to higher education taught within a further education setting. *Innovative Practice in Higher Education*, *3*(3), 90–112. https://journals.staffs.ac.uk/index.php/student-transition-into-higher-education-exploring-btec-sport-and-exercise-students-forthcoming-transition-to-higher-education-taught-within-a-further-education-setting/

Gill, A. J. G. (2020). The thoughts, feelings and perceptions of sport and exercise students progressing from vocational education and training to academic education. *Journal of Further and Higher Education*, *44*(6), 795–808. https://doi.org/10.1080/0309877X.2019.1605499

Gillen-O'Neel, C. (2021). Sense of belonging and student engagement: a daily study of first- and continuing-generation college students. *Research in Higher Education*, 62, 45–71. https://doi.org/10.1007/s11162-019-09570-y

Gravett, K., & Winstone, N. (2021). Storying students' becomings into and through higher education. *Studies in Higher Education*, *46*(8), 1578–1589. https://doi.org/10.1080/03075079.2019.1695112

Habel, C. (2012). 'I can do it, and how!' Student experience in access and equity pathways to higher education. *Higher Education Research and Development*, *31*(6), 811–825. http://dx.doi.org/10.1080/07294360.2012.659177

Hale, A. (2020). Not scraping the bottom of the barrel: Disadvantage, diversity and deficit as rich points. *Arts and Humanities in Higher Education*, *19*(3), 244–262. https://doi.org/10.1177/1474022219832453

Hayman, R., Allin, L., & Coyles, A. (2017). Exploring social integration of sport students during the transition to university. *Journal of Perspectives in Applied Academic Practice*, *5*(2), 31–36. https://doi.org/10.14297/jpaap.v5i2.284

Hayman, R., Coyles, A., & Allin, L. (2021). The profile of higher education sport students in england: Implications for successful transition and effective teaching and learning practice. *Innovative Practice in Higher Education*, *4*(2), 133–152. https://journals.staffs.ac.uk/index.php/the-profile-of-higher-education-sport-students-in-england-implications-for-successful-transition-and-effective-teaching-and-learning-practice/

Hayman, R., Wharton, K., Bell, L., & Bird, L. (2024). Navigating the first year at an English university: Exploring the experiences of mature students through the lens of transition theory. *International Journal of Lifelong Education*, *43*(1), 39–51. https://doi.org/10.1080/02601370.2023.2297671

Hayman, R., Wood, M., Wharton, K., & Shotton, L. (2022). Supporting the integration of first-year undergraduate widening participation sport students into university: The role of online programme induction. *SN Social Sciences*, *2*, Article 268. https://doi.org/10.1007/s43545-022-00574-7

HESA. (n.d.). *Higher education student data*. Retrieved March 19, 2024, from https://www.hesa.ac.uk/data-and-analysis/students

Hibbs, A., Hayman, R., Fox, E., Wilson, S., Timmis, M., Stephens, D., & Polman, R. (2024). Sport students' experiences of teaching and learning in the United Kingdom: A comparison between further and higher education settings. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *35*, Article 100516https://doi.org/10.1016/j.jhlste.2024.100516

Hibbs, A., Hayman, R., & Polman, R. (2025). Self-confidence and perceived importance of pre-arrival sport students at an English higher education institution: exploring gender and programme of study differences. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *36*, Article 100555. https://doi.org/10.1016/j.jhlste.2025.100555

Hockings, C., Thomas, L., Ottaway, J., & Jones, R. (2018). Independent learning: What we do when you are not there. *Teaching in Higher Education*, *23*(2), 145–161. https://doi.org/10.1080/13562517.2017.1332031

Jonker, L., Elferink-Gemser, M., & Visscher, C. (2011). The role of self-regulatory skills in sport and academic performances of elite youth athletes. *Talent Development and Excellence*, *3*, 263–275. https://www.researchgate.net/publication/285933758_The_role_of_self-regulatory_skills_in_sport_and_academic_performances_of_elite_youth_athletes

Kleitman, S., & Gibson, J. (2011). Metacognitive beliefs, self-confidence and primary learning environment of sixth grade students. *Learning and Individual Differences*, *21*(6), 728–735. https://doi.org/10.1016/j.lindif.2011.08.003

Lawrence, J., Brown, A., Redmond, P., Maloney, S., Basson, M., Galligan, L., & Turner, J. (2021). Does course specific nudging enhance student engagement, experience and success?: A data-driven longitudinal tale. *Student Success*, *12*(2), 28–37. https://doi.org/10.5204/ssj.1914

Lowe, H., & Cook, A. (2003). Mind the gap: Are students prepared for higher education? *Journal of Further and Higher Education*, *27*(1), 53–76. https://doi.org/10.1080/03098770305629

Maymon, R., Hall, N. C., & Harley, J. M. (2019). Supporting first-year students during the transition to higher education: The importance of quality and source of received support for student well-being. *Student Success*, *10*(3), 64–75. https://doi.org/10.5204/ssj.v10i3.1407

Meehan, C., & Howells, K. (2019). In search of the feeling of 'belonging' in higher education: Undergraduate students transition into higher education. *Journal of Further and Higher Education*, *43*(10), 1376–1390. https://doi.org/10.1080/0309877X.2018.1490702

Molnár, G., & Kocsis, Á. (2024). Cognitive and non-cognitive predictors of academic success in higher education: A large-scale longitudinal study. *Studies in Higher Education*, *49*(9), 1610–1624. https://doi.org/10.1080/03075079.2023.2271513

Morgan, M. (2023). *Prior learning experience, study expectations of A-Level and BTEC students on entry to university and the impact of Covid19: Findings from the undergraduate Pre-Arrival Academic Questionnaire 2019 and 2021*. Office for Institutional Equity. https://www.advance-he.ac.uk/knowledge-hub/prior-learning-experience-study-expectations-level-and-btec-students-entry-university

Nallaya, S., Hobson, J., & Ulpen, T. (2022). An investigation of first year university students' confidence in using academic literacies. *Issues in Educational Research*, *32*(1), 264–291. http://www.iier.org.au/iier32/nallaya.pdf

Pather, S., & Dorasamy, N. (2018). The mismatch between first-year students' expectations and experience alongside university access and success: A South African university case study. *Journal of Student Affairs in Africa*, *6*(1), 49–64. https://doi.org/10.24085/jsaa.v6i1.3065

Pedler, M., Willis, R., & Nieuwoudt, J. E. (2022). A sense of belonging at university: Student retention, motivation and enjoyment. *Journal of Further and Higher Education*, *46*(3), 397–408. https://doi.org/10.1080/0309877X.2021.1955844

Porter, J., Morphet, J., Missen, K., & Raymond, A. (2013). Preparation for high-acuity clinical placement: Confidence levels of final-year nursing students. *Advances in Medical Education and Practice*, *4*, 83–89. https://doi.org/10.2147/AMEP.S42157

Rawlings Smith, E., Hodgkin, K., & Young, N. (2022). Student transitions to university in Wales: A mixed-methods study of the enablers and barriers of first-year engagement. *International Journal of Educational Research*, *3*, Article 100216. https://doi.org/10.1016/j.ijedro.2022.100216

Rowley, M., Hartley, J., & Larkin, D. (2008). Learning from experience: The expectations and experiences of first-year undergraduate psychology students. *Journal of Further and Higher Education*, *32*(4), 399–413. https://doi.org/10.1080/03098770802538129

Sander, P., & de la Fuente, J. (2020). Undergraduate student gender, personality and academic confidence. *International Journal of Environmental Research and Public Health*, *17*(5), Article 5567. https://doi.org/10.3390/ijerph17155567

Sander, P., & Sanders, L. (2009). Measuring academic behavioural confidence: The ABC scale revisited. *Studies in Higher Education*, *34*(1), 19–35. https://doi.org/10.1080/03075070802457058

Strayhorn, T. L. (2023). Widening the aperture on college students' sense of belonging: A critical ecological perspective. In T. Lowe (Ed.), *Advancing student engagement in higher education: Reflection, critique and challenge*. Routledge.

Tasneem, S., & Panwar, N. (2019). Academic confidence and mindfulness: A study on gender differences. *International Journal of Social Science and Economic Research*, *4*(6), 4690–4702. https://ijsser.org/more2019.php?id=360

Taylor, C. A., & Harris-Evans, J. (2018). Reconceptualising transition to higher education with Deleuze and Guattari. *Studies in Higher Education*, *43*(7),1254–1267. https://doi.org/10.1080/03075079.2016.1242567

Thomas, N., Barr, P., Hottell, D., Adkins, A., & Dick, D. (2021). Longitudinal influence of behavioural health, emotional health and student involvement on college student retention. *Journal of College Student Development*, *62*(1), 2–18. https://dx.doi.org/10.1353/csd.2021.0001

Thompson, M., Pawson, C., & Evans, B. (2021). Navigating entry into higher education: The transition to independent learning and living. *Journal of Further and Higher Education*, *45*(10), 1398–1410. https://doi.org/10.1080/0309877X.2021.1933400

Timmis. M. A., Hibbs, A., Hayman, R., & Stephens, D. (2024). Previous education experience impacts student expectation and initial experience of transitioning into higher education. *Frontiers in Education*, *9*, Article 1479546. https://doi.org/10.3389/feduc.2024.1479546

Tomlinson, A., Smith, L., Wilcox, C., & Simpson, A. (2024). Academic survival: Student retention in sport and exercise sciences. *Journal of Further and Higher Educatio*n, *48*(5), 524–537. https://doi.org/10.1080/0309877X.2024.2356567

Turner, R., Morrison, D., Cotton, D., Child, S., Stevens, S., Nash, P., & Kneale, P. (2017). Easing the transition of first year undergraduates through an immersive induction module. *Teaching in Higher Education*, *22*(7), 805–821. https://doi.org/10.1080/13562517.2017.1301906

Universities UK. (2024). *Higher education in numbers*. Retrieved March 17, 2024, from https://www.universitiesuk.ac.uk/latest/insights-and-analysis/higher-education-numbers

Williams, H., & Roberts, N. (2023). 'I just think it's really awkward': Transitioning to higher education and the implications for student retention. *Higher Education*, *85*, 1125–1141. https://doi.org/10.1007/s10734-022-00881-1

Wixcey, H., Cropley, B., & Shearer, D. (2025). An examination of the influence of mental well-being and resilience on academic outcomes in Further Education learners in Wales. *Journal of Further and Higher Education*, *49*(2), 137–152. https://doi.org/10.1080/0309877X.2024.2440501

Young, E., Thompson, R., Sharp, J., & Bosmans, D. (2020). Emotional transitions? Exploring the student experience of entering higher education in a widening participation HE-in-FE setting. *Journal of Further and Higher Education*, *44*(10), 1349–1363. https://doi.org/10.1080/0309877X.2019.1688264

Please cite this article as:
Hibbs, A., Hayman, R., & Polman, R. (2026). The influence of pre-arrival confidence and perceived importance on retention and achievement outcomes among UK first-year undergraduate sports students. *Student Success*, *17*(1), 105-116. https://doi.org/10.63608/ssj.3944

This article has been accepted for publication in *Student Success.* Please see the Editorial Policies under the 'About' section of the Journal website for further information.

Student Success: ***A journal exploring the experiences of students in tertiary education.***