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**FINAL
REPORT**

***UNDERSTANDING ELITE-STUDENT ATHLETE
EXPERIENCES WITH UNIVERSITY SUPPORTING
SERVICES***



Research Report

Research Team: Prof Popi Sotiriadou – *Griffith University*
Dr David Fleischman – *University of the Sunshine Coast*
Dr Bridie Kean - *University of the Sunshine Coast*
Ms Rubiana Cury – *Griffith University*

Presented to: Mr Joshua Sear
UniSport Elite Student-Athlete Pathway Manager

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Executive Summary

Universities around the world have created programs which offer supporting services assisting elite student-athletes to manage study and sport commitments. Although these programs are well embraced among Australian universities, many of them are in their early phases of establishment and it is important to evaluate the experiences of the elite student-athletes engaged in such programs. To address this need, this study administered a questionnaire to student-athletes who participate in elite student-athletes programs offered at Australian universities. The purpose was to understand their perceptions regarding the range, importance and general satisfaction with the services and support offered. This report presents the results of the $n=867$ valid responses collected from a total of 27 universities across seven Australian states and territories.

The key findings of this study indicate:

- **The majority of elite student-athletes are undergraduate (93%) full-time (83%) on-campus (88%) students;**
- **The majority of study participants (81%) indicated they were overall *satisfied* or *very satisfied* with services offered in their elite student-athlete program;**
- **Academic support (85%) is the most important service area followed by athletic support (71%), miscellaneous support (68%) and self-development support (57%);**
- **91% of the elite student-athletes *strongly agreed* or *agreed* that they would recommend joining a program to other elite student-athletes;**
- **67% of the participants *strongly agreed* or *agreed* that the program has had a positive impact on their general physical health and well-being;**
- **71% of participants *strongly agreed* or *agreed* that the program has had a positive impact on their academic performance;**
- **Qualitative data highlighted the benefits of the programs on elite student-athlete mental health and well-being promotion, life balance improvement and ability to cope with academic demands;**
- **Findings also show that although universities are able to provide the basic services, there are unexplored opportunities to optimise their offerings (e.g., gender specific requirements).**

Therefore, the current services Australian universities provide via elite student-athlete programs deliver supporting services with success and positively impact on student-athlete career management. It was found that the programs allowed and encouraged elite student-athletes to pursue dual-career, sustain mental health and well-being and influence their ability to perform academically whilst maintaining a sporting career. The positive impact of services offered reinforce the need for the government to maintain support and funding as well as conduct frequent reviews to ensure elite student-athlete needs are met. Specific recommendations to optimise and sustain the program success are presented in this report.

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1. Research Context

Balancing tertiary education commitments and elite sport demands can exert pressure to elite student-athletes, which may deter them from following a dual-career pathway (Cosh & Tully, 2015; Ryan et al., 2017). Accordingly, universities around the world have developed programs addressing the needs and requirements of elite student-athletes. By offering a suite of supporting services, universities perform a crucial role in facilitating student-athletes dual career management. In Australia, elite student-athletes (in particular, athletes recognised by the Australian Institute of Sport [AIS]) can access supporting services in order to successfully complete tertiary education. To facilitate access to support services, the AIS launched the *Elite Athlete Friendly University* (EAFU) program in 2004.

The EAFU program is classified as a *state-sponsored formal system* (Henry, 2013), in which there is a formal system acknowledging elite student-athlete needs, authorising universities to offer special conditions to athletes (Henry, 2013). In 2004, 53% of the Australian universities ($N=21$, $total=39$) joined the program and agreed to offer services to elite student-athletes in order to facilitate their pathway through tertiary education. The proposed services included flexible study options, and advice and guidance on academic planning. Presently, 95% ($N=41$, $total=43$) of the Australian universities endorse the program, supporting a total of 3,427 elite student-athletes.

Although Australian universities embrace the EAFU program, research suggests that many of the benefits and services in elite student-athlete programs are not well communicated and some of the services offered are not necessarily of high importance to elite student-athletes (Kean, Fleischman, & English, 2019). In order to examine the satisfaction and impact of the current services and activities that the university elite student-athlete programs deliver across Australia, this study investigated the elite student-athlete perceptions regarding the range, importance and satisfaction with the services and support they received. To achieve this aim, the study objectives included:

Objective 1: *Understand why elite student-athletes participate in university elite student-athlete programs.*

Objective 2: *Explore the range and importance of supporting services that Australian elite student-athlete programs offer.*

Objective 3: *Glean an understanding of elite student-athletes' general satisfaction with support services offered by elite student-athlete programs.*

Objective 4: *Explore the impact of university elite student-athlete programs on elite student-athlete dual-career management.*

2. Methodology

A nationwide questionnaire was used to collect data from elite student-athletes between 27th August and 17th September 2018. The questionnaire was comprised of the following sections: 1) Demographics; 2) Academic Supporting Services; 3) Athletic Supporting Services; 4) Self-Development Services; 5) Miscellaneous Services; 6) Factors Influencing the Participation in a University Elite Student-Athlete Program, and 7) Impact of services on dual careers (study and sport). In most of the questionnaire sections, the participants were asked to indicate if the services were offered/not offered/unknown and select the level of importance. Level of importance and agreeability were measured using Likert scales (1=not important and 5=very important; 1=strongly agree and 5=strongly disagree). The questionnaire also incorporated three open-ended questions inviting participants to provide further input regarding (a) why they choose to be part of the program, (b) describe the program impact and (c) justify the selected level of overall satisfaction with the program.

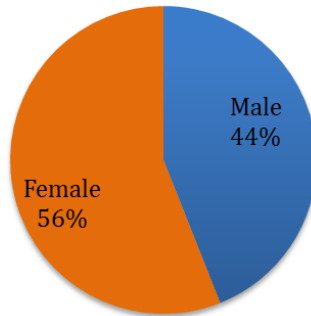
The study participants were elite student-athletes. For the purpose of this report, an elite student-athlete was defined as an elite athlete, enrolled in tertiary study, receiving support and servicing as part of an Australian university elite student-athlete program. Generally, Australian universities categorise elite student-athletes as per the EAFU guidelines available [here](#). However, it should be noted that some universities may choose to apply additional criteria at their discretion.

Of the 42 invited university elite student-athlete programs, 27 universities representing 7 states and territories (VIC, NSW, WA, QLD, TAS, SA and ACT), agreed to participate in the study and offer access to their students to respond to the questionnaire. The elite student-athlete program contact person from the participant universities received the link of the questionnaire and was responsible for its distribution to elite student-athletes engaged in the program. Once the initial data was cleaned, $n=867$ valid responses were analysed. Quantitative analysis included descriptive and comparative analysis of variance (ANOVA). The qualitative responses to the open-ended questions in the questionnaire were analysed using an inductive approach and content analysis techniques.

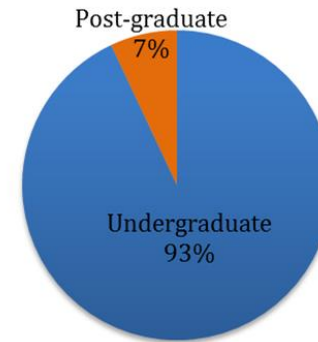
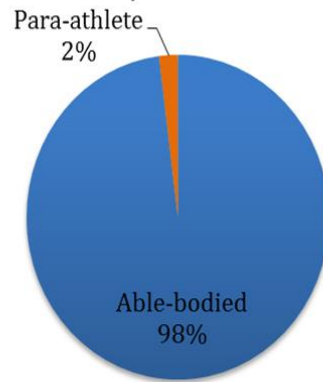
3. Results

3.1 Demographics

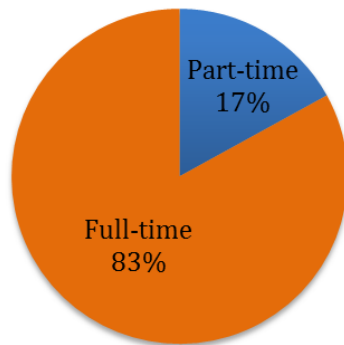
Gender Distribution



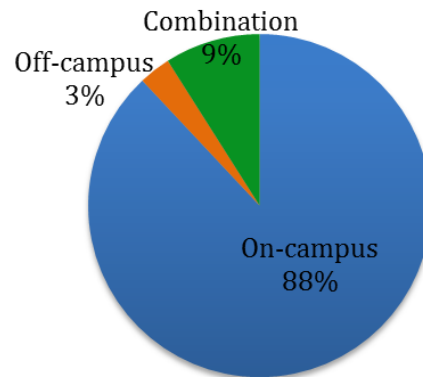
Able-bodied/Para-athlete Ratio **Level of Higher Education Enrolled**



Enrolment Status



Module of Enrolment



3.2 The Reasons Elite Student-Athletes Participate in the Programs

Elite Student-athletes were asked to provide insights on the reasons why they opted to engage in a university elite student-athlete program. The five main aspects that were identified are illustrated in Figure 1. Representative quotes offer insights on why participants saw value in participating with the program.

“To be able to access flexible study options (e.g., assessment extensions) while training and, to access assistance programs like counselling and gym.” *(services)*

“I wanted to put in as much effort as I could for the club whilst maintaining my study load. I also wanted the opportunity to officially represent my university in Taekwondo as well.” *(social motives)*

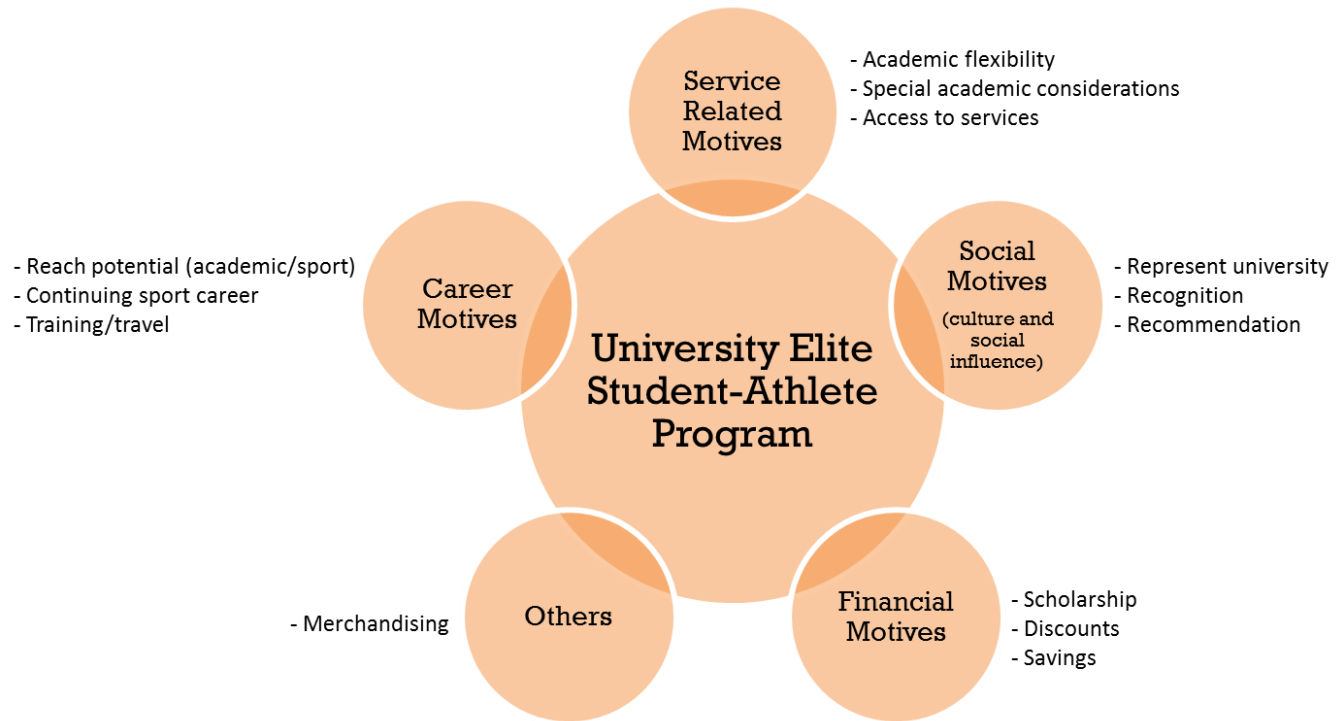


Figure 1: Reasons elite student-athletes participate in elite student-athlete programs

3.3 Factors Influencing Elite Student-Athletes' Decision to Participate in a Program

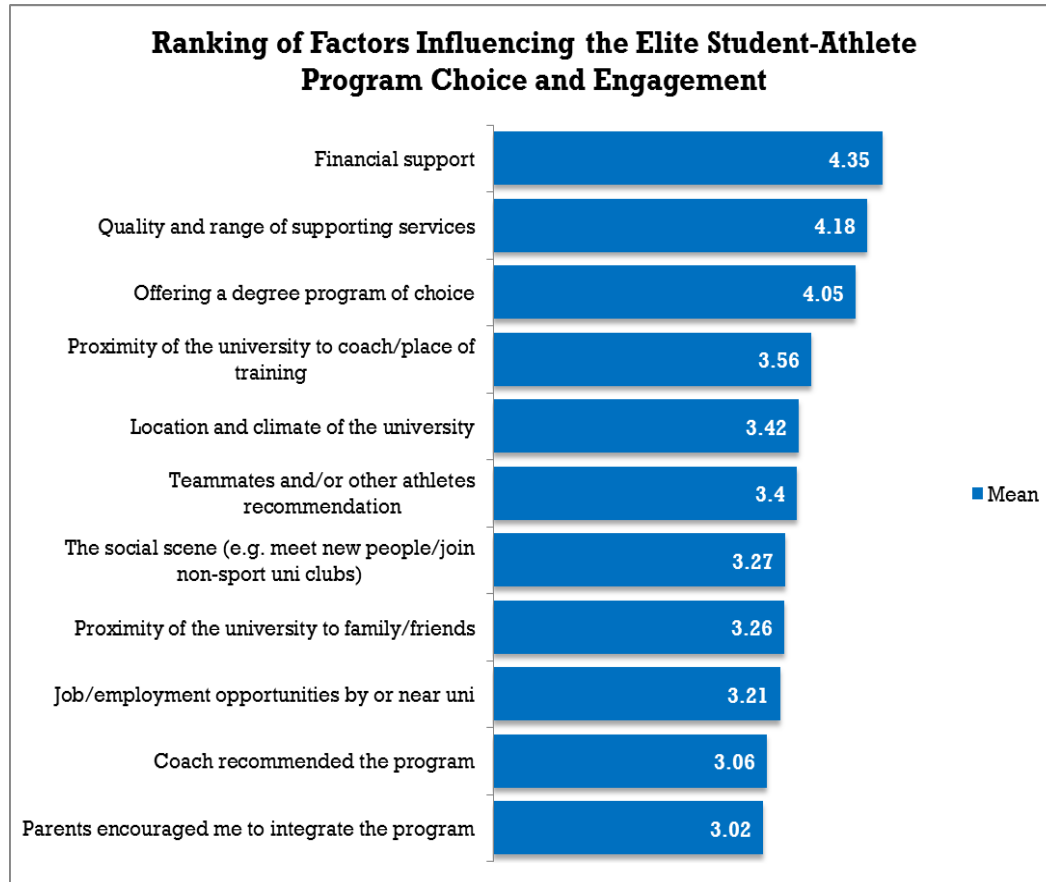


Figure 2: Ranking of factors influencing elite student-athlete program choice and participation

Figure 2 provides the aggregate data from the 27 participating universities on the top 10 factors which influence the decision to participate in elite student-athlete programs. 'Financial support' is the main driver, with the 'quality and range of support services offered' following. Other important considerations are 'degree program of choice' and the 'convenience' of being close to coaches and place of training.

It is likely that individual programs might have different or new influencing factors that act as decision making choices for elite student-athletes (e.g., convenient location in Canberra).

“I decided to [engage in the elite student-athlete program] based upon my requirement for financial aid and developmental guidance.”

3.4 Supporting Services Importance Rates

Academic support and in particular, ‘alternative assessment arrangements’ and ‘flexible course arrangements’, were rated as the most important services. This finding is consistent with the EAFU program guidelines that state those services as compulsory offerings from participant universities. Furthermore, across the 10 top important services, three of them have financial impact (items 3, 4 and 8) which can be a result of the critical factors that influence elite student-athlete engagement in the programs. ‘Professional experience opportunities’ and ‘career development advisors and/or workshops’ to help with life after sports were also in the top 10 most important services demonstrating their relevance to student-athletes.

It is important to note that the perception of the service importance varies in accordance to its offer and/or student-athlete awareness of the service availability (see Appendix I). This means that clear communication of the services and support available, in particular of those that are not mandated by the EAFU, can influence the elite student-athlete access and perception about the support received.

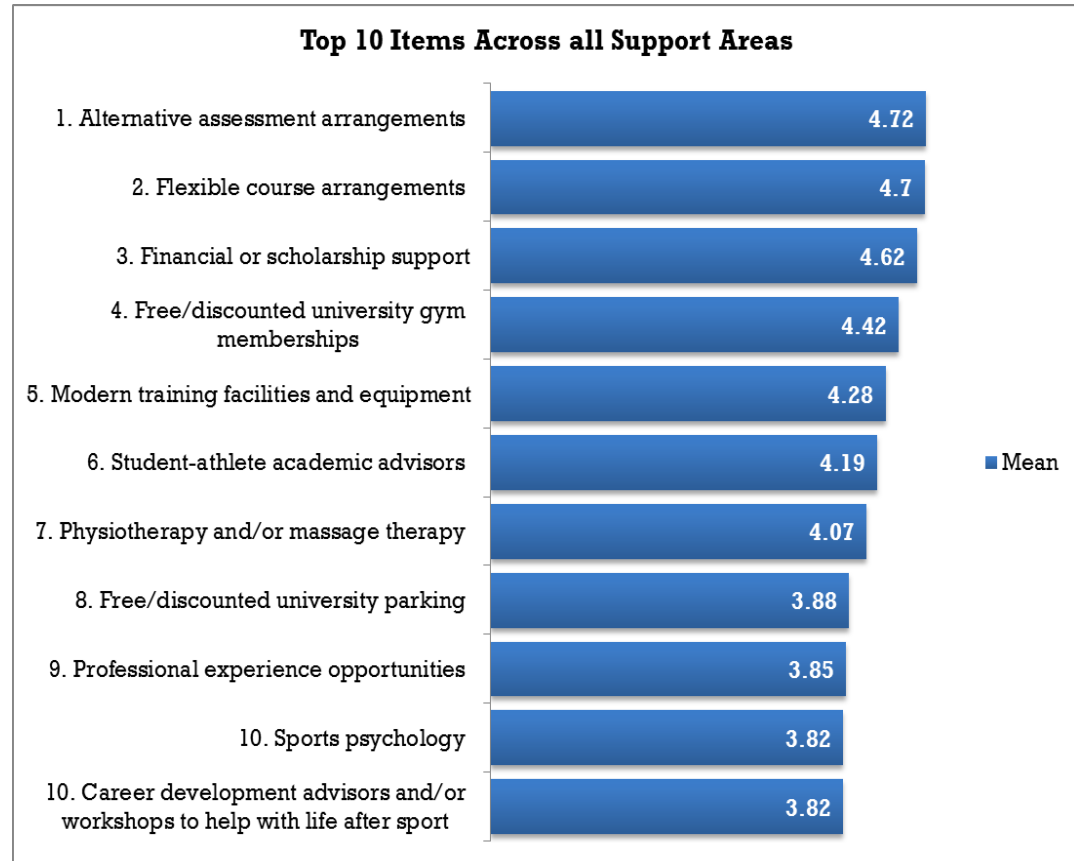
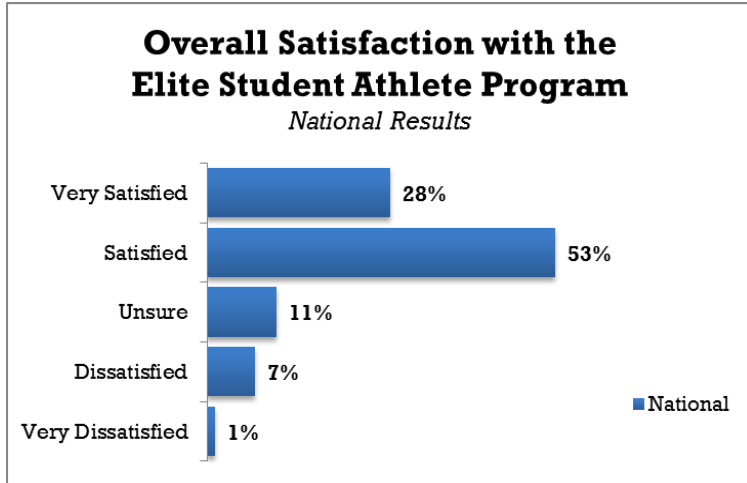


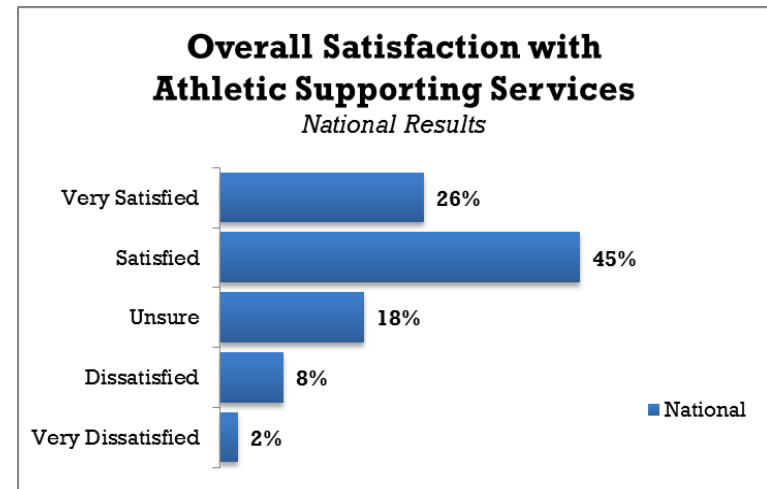
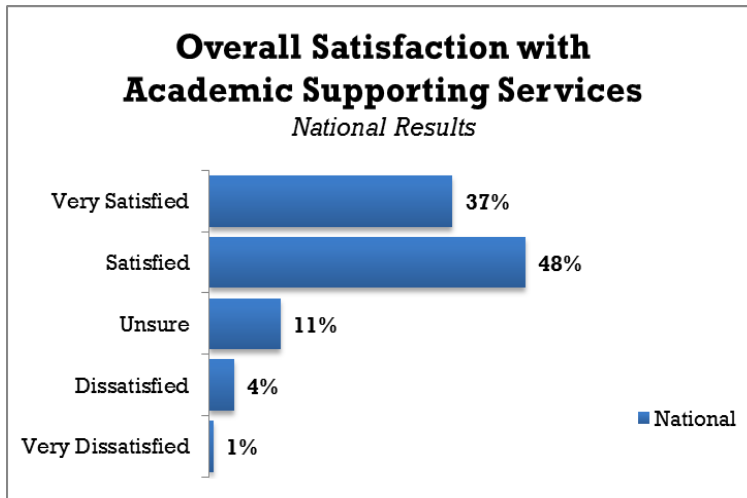
Figure 3: Supporting Services Importance Ranking

3.5 Elite Student-Athlete Satisfaction with Supporting Services



The data showed high overall satisfaction rates (very satisfied and satisfied) with university elite student-athlete programs (81%).

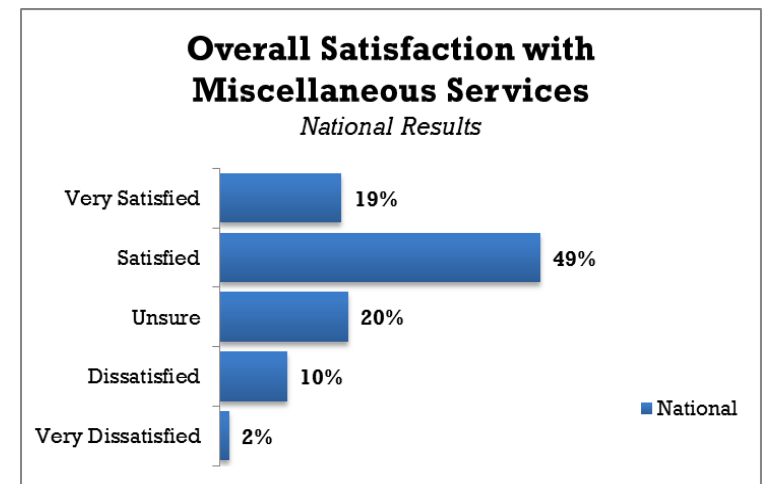
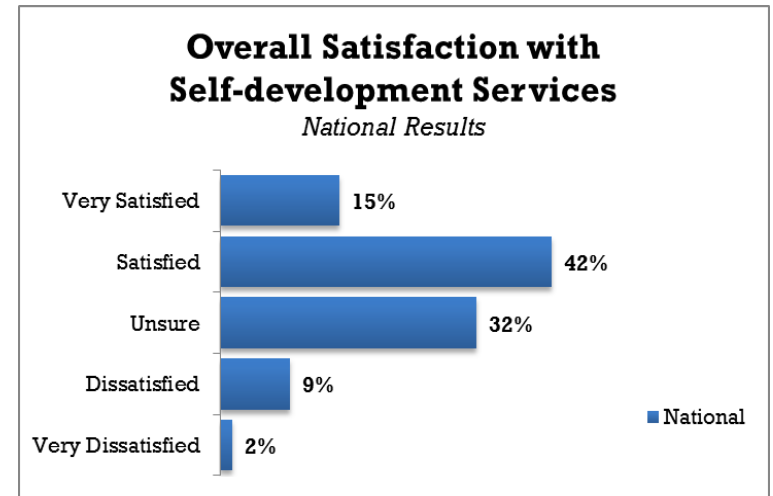
Across the different supporting services areas, the results show high overall satisfaction with the *Academic* (85%) and *Athletic* (71%) services.



In other supporting services areas the results show high overall satisfaction (i.e., very satisfied and satisfied) with Self-Development (57%); and Miscellaneous (68%) services. Self-Development Services received the highest unsure/dissatisfied/very dissatisfied rate with 43%. Considering the self-development prospects expected from a university environment as well as employability impact, this result should be better understood and addressed. Appendix I has further details.

Aspects influencing overall satisfaction rates:

- *Minimum needs satisfied*
- *Perception of belonging and social gathering*
- *Perception of the impact of the program in facilitating career management*
- *Program staff: willingness, pro-activity and help*
- *Perception of how well the program is managed/delivered and potential to improve*
- *Communication: services and activities awareness, contact for updates and assistance*
- *Concomitant support provided by the sport*



3.6 Differences across Elite Student-Athlete Cohorts

The findings suggest that different groups of elite student-athletes have different needs or requirements.

A. Gender Differences

Four services were significantly more important to females compared to males ($p < 0.05$):

- Approved alternative assessment arrangements due to sport travel commitment;
- Access to personal student-athlete tutoring;
- Access to designated student-athlete study areas; and
- Access to university funded nutrition advice.

Further gender differences emerged from the factors that influence the student-athlete decision to be part of an elite student-athlete program. The following factors showed to be more relevant to females compared to males ($p < 0.05$):

- Quality and range of the supporting services offered;
- Coach recommendation;
- Teammates and/or other athletes' recommendations;
- Parents encouragement;
- Proximity of the university to the coach and/or training facility; and
- Proximity of the university to family and friends.

Apart from the quality and range of the supporting services, all the other factors relate to stakeholders involved in their sporting and regular life such as a coach, teammates and parents. Therefore, there is an indication of the potential that those stakeholders might have during the decision-making process of female student-athletes to engage in an elite student-athlete program. Significant difference towards males was only presented on the aspect that males had a higher perception that being a member of a university's elite student-athlete program negatively impacted their sporting performance compared to females ($p = 0.002$). Appendix III presents further details on those differences.

B. Competitive Level Differences

Considering that different university programs are entitled to determine who qualifies as an elite student-athlete, the observation of differences across competitive levels is relevant due to the different training and travel demands. Data showed that there was a significantly more positive level of agreement of Olympic Games, Commonwealth Games and World Championship representatives with the statement '*I view myself as more of an athlete*' compared to other elite student-athletes whom have not competed at such levels ($p=0.000$). The differences were also statistically significant ($p<0.05$) for the below areas (see Appendix IV):

- *Cross-institutional study options with other universities and financial or scholarship support provided by the university* were more important for Olympic Games, Commonwealth Games and World Championship representatives;
- *Opportunities to regularly compete and free or discounted university gym memberships* were significantly less important to Olympic Games, Commonwealth Games and World Championship representatives;
- Olympic Games, Commonwealth Games and World Championship representatives were significantly more positive regarding the impact of a university elite student-athlete program on their academic performance; and
- Financial support was significantly more important to Olympic Games, Commonwealth Games and World Championship representatives as an influencing factor to participate in a university elite student-athlete program.

C. Enrolment Status Differences

In order to verify if full-time elite student-athletes perceive supporting services importance differently from part-time elite student-athletes, this study compared the average importance mean across all supporting services consulted between both groups (see Appendix V). The statistically significant results ($p<0.05$) showed that:

- Only one supporting service – *cross institutional study options with other universities* – is significantly more important to part-time compared to full-time elite student-athletes; and
- Supporting services significantly more important to full-time compared to part-time elite student-athletes are:
 - Access to designated student-athlete study areas;
 - Access to university funded nutrition advice;
 - Access to university funded modern training facilities;
 - Access to university funded physiotherapy and/or massage therapy;
 - Access to university funded strength and conditioning coach;
 - Access to university funded sport science support;

- Opportunities to regularly compete;
- Financial or scholarship support;
- Athlete lounge provided by university;
- Free or discounted gym membership; and
- On-campus or close to campus accommodation options provided by the university.

Those findings appoint that accessing the university infrastructure and athletic related resources are more important to full-time elite student-athletes. In contrast, the cross institutional flexibility is more important to part-time elite student-athletes.

D. Regional versus Metropolitan Universities

The study also investigated any statistically significant differences ($p < 0.05$) between elite student-athletes with metropolitan based universities compared to those with regionally based universities (see Appendix VI). The results demonstrated that:

- Elite student-athletes studying with metropolitan based universities agreed more than those with regionally based universities, on average, that being a member of an elite student-athlete program has positively impacted on their general physical health and well-being;
- *Offering a degree of choice* and *proximity of the university to family and friends* are significantly more influential factors to elite-student athletes at regional universities; and
- Elite student-athletes with regionally based universities also consider the following services more important:
 - Access to university funded nutrition advice;
 - Access to university funded modern training facilities;
 - Access to a university funded strength and conditioning coach;
 - Access to university funded sport science support;
 - General skills development workshops;
 - Media and social media workshops; and
 - Access to mentors provided by the university.

Again, these results highlight some interesting differences between elite student-athletes studying with metropolitan and regionally based universities. Interestingly, this was the only cohort comparison where self-development supporting services (*general skills development workshops* and *media and social media workshops*) presented statistically significant differences and indicates that regional based universities should consider offering more of these services. Collectively, these findings again show that individual universities should consider the specific demographics and requirements of their elite student-athletes when implementing supporting strategies.

3.7 Elite Student-Athlete Program Participation Impact

The vast majority (91%) of the participants *strongly agreed* or *agreed* that they would recommend to other student-athletes to participate in a university elite student-athlete program. In terms of general physical health and well-being and academic performance, 67% and 71% of the elite student-athletes, respectively, *strongly agreed* or *agreed* that the program positively impacted on those factors. However, 32% of the elite student-athletes were *unsure/disagreed/strongly disagreed* on the positive impact on their mental health and well-being and 29% were *unsure/disagreed/strongly disagreed* with the program positive impact on their academic performance. This cohort represents one third of the participants showing that further investigation should be conducted to understand why those elite student-athletes are unsure or disagree on the presented positive impacts of the program.

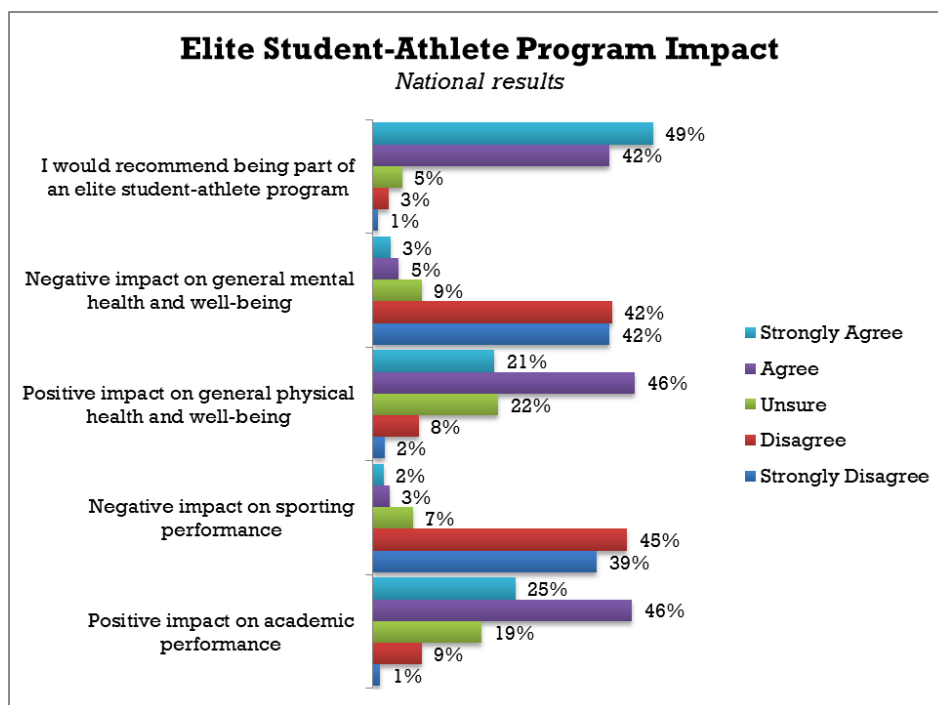


Figure 4: Areas of program impact

In addition to the quantitative data already presented, the participants were invited to describe how being part of a university elite student-athlete program affected their experience. The results demonstrated that elite student-athletes perceived that there were both positive and occasionally negative impacts. Negative impacts may be due to program limitations (e.g., student-athletes perceived there was inadequate access to required services). Interestingly, the positive impacts reported included that the program *promotes mental health and wellbeing* among the participants, *facilitates life-balance*, *enables the pursuit of a dual-career*, *facilitates academic performance impact* and *enables further focus on sport*. The comments below are from participants and exemplify aspects of the positive impact:

Being a university elite athlete has been critical in maintaining my mental health, well-being and support network. It encourages me to continue being competitive and trying to be the best I can. It also provides me with stress release and often makes starting the day better.

The Elite Athlete Program has provided me with many new ways to approach my sport and studies. I feel much more equipped in both of these areas and it gave me a slight sense of urgency (which is a good thing) when doing my assessments as I knew academia was of high importance in being part of the program. Sporting-wise, the program has given me tons of new information and ideas to improve my running and I've met great people in the two years I've been in the program.

By being a part of the Student-Elite Athlete program I have been able to continue my chosen sport with minimal university interruptions and been able to continue a consistent training regime which leads to minimal/no injuries throughout the season. This also helps alleviate stress with the decreased pressure resulting from the ease of working the university timetable around my training program.

The confidence and strength that I've developed through the program and through the resources available to me have enabled me to be more focused, more determined, to keep my goals in mind and to always be moving forward and striving to achieve them. This is equally true of both my sporting and academic goals. Building myself as an athlete has helped me to build myself up as a better, more focused student.

Those positive outcomes reflect the key purposes of elite student-athlete programs. In instances where there was no impact or negative experiences of being in an elite student-athlete program, there were insights on administrative aspects that could be optimised to enhance their experience (e.g., *bureaucratic demand* and *meet EAP expectations*).

Those participants illustrated some of the bureaucratic demand:

Unnecessary amount of proof to claim elite athlete status. This leads to time wasted getting forms and letters signed by sporting bodies. On top of this is the need for individual semester applications which need to detail elite level competition in that semester, it should be on a yearly basis.

It has made my life easier in many aspects for example with the ease of moving exams if I have a competition on. However, it has also made it more stressful at time with the large amount of paperwork required to gain elite athlete status every semester.

This female elite student-athlete expressed her concern regarding the application process and the procedure to access the academic services:

[The EAP] excluded applications despite equal if not better performance than male athletes in the same sport who were accepted into the program. [The program is] constantly changing methods to apply for extensions or alternate assessment.

Further, some elite student-athletes reported to “feel pressured” by EAP expectations:

It has allowed me to study at a work load that suits my training schedule and thus, achieve highly in those subjects. However, sometimes I feel pressured to perform well at national events (e.g., University Games) in order to meet the universities expectations.

The increased pressure to satisfy scholarship requirements and excel in both academic AND athletic life was/is a source of a lot of stress.

Additional investigation is recommended to better understand the nuances of how the positive, negative and null impacts are generated by the programs. Whilst outside the scope of this study, it would also be fruitful to understand *if* and *how* elite student-athlete program involvement impacts on elite student-athlete employability.

4. Conclusion

University elite student-athlete programs have been contributing to student-athlete dual-career management since inception. This study addressed the four key objectives and the main aspects discovered in each objective are as follows:

Objective 1: Understand why elite student-athletes participate in elite student-athlete programs

This study demonstrated the existence of five core motives – *services related, social, financial, career and other motives* for athletes to participate in the program. In addition, financial support, range and quality of services as well as stakeholder recommendations (e.g. coach or parents) emerged as factors that were most influential in elite student-athlete program choice.

Objective 2: Explore the range and importance of supporting services & Objective 3: Glean an understanding of elite student-athlete general satisfaction with support services

This report showed that Australian university elite student-athlete programs deliver services across all four areas investigated in this study: academic, athletic, self-development and miscellaneous. The majority of the elite student-athletes that participated in this research are satisfied with their elite student-athlete program. Academic supporting services had the highest overall satisfaction rating with *alternative assessment* and *flexible course arrangements* being the most important services for elite student-athletes.

Objective 4: Explore the impact of university elite student-athlete programs on elite student-athlete dual-career management

The programs demonstrated an ability to provide services and support that positively impacts dual-career management aspects, such as mental health and well-being and academic performance. However, the study found that there is an opportunity for universities to further explore the elite student-athlete networking created as a result of the program engagement as well as to promote self-development opportunities (e.g., foster mentoring programs with former athletes and encourage program participants to collaborate to deliver community activities).

In order to address gaps and opportunities, this report puts forward nine recommendations to UniSport Australia to assist and inform universities regarding their elite student-athlete programs. However, useful these recommendations may be, the impact of the programs on elite student-athlete employability remains unclear. This represents an area beyond the scope of this research but one that can provide great input to the future strategy of elite student-athlete programs.

5. Recommendations

Recommendation 1: To utilise the factors which influence elite student-athlete program choice as identified in this report for recruitment, marketing and communication purposes.

Recommendation 2: To examine individual program factors that influence elite student-athlete program choice to further encourage and promote participation numbers.

Recommendation 3: To implement communication and marketing strategies raising awareness of the range of available program services and opportunities to elite student-athletes.

Recommendation 4: To deliver and promote activities that optimise self-development and the employment prospects of elite student-athletes.

Recommendation 5: To encourage program providers to account for gender differences in program services and recruitment strategies.

Recommendation 6: To further communicate and promote university elite student-athlete program services to varied sport stakeholders (e.g., coaches, sports managers, former athletes, parents and university staff).

Recommendation 7: To offer support accommodating and reflecting athlete competitive levels.

Recommendation 8: To investigate the impact of tertiary study and associated program support on elite student-athlete employability.

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Appendices

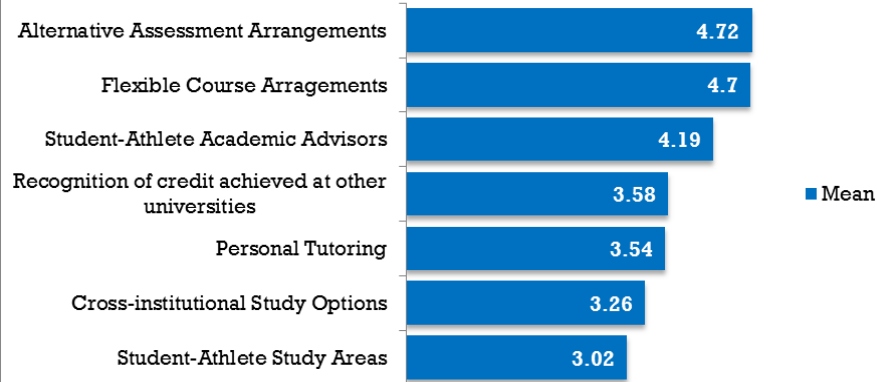
Appendix I - Comparing Importance for Support Services and Whether a Service is Offered/Not offered/Unknown

Support Service Area	Support Service	Average mean if service is offered	Average mean if service is NOT offered	Average mean if UNKNOWN if service is offered
Academic Support Services	Approved alternative assessment arrangements due to sport travel commitments	4.78 (n=691)	4.27* (n=27)	4.20** (n=49)
	Flexible course arrangements due to sport commitments	4.72 (n=711)	4.53 (n=17)	4.54 (n=37)
	Specialised student-athlete academic advisers who assist with university administrative and academic processes	4.41 (n=522)	4.08 (n=37)	3.63*** (n=181)
	Recognition of credit achieved at other universities	3.83 (n=287)	2.93* (n=14)	3.37** (n=374)
	Access to personal tutoring	3.83 (n=270)	3.46* (n=83)	3.33** (n=351)
	Cross institutional study options with other universities	3.71 (n=201)	3.03* (n=31)	3.05** (n=444)
Athletic Support Services	Access to designated student-athlete study areas	3.53 (n=148)	2.95* (n=254)	2.78** (n=297)
	Access to university funded modern training facilities and equipment	4.32 (n=625)	4.34 (n=93)	3.89**/*** (n=66)
	Access to university funded strength/conditioning coaching	4.11 (n=253)	3.86* (n=222)	3.44**/*** (n=275)
	Access to university funded physiotherapy and/or massage therapy	4.09 (n=193)	4.26 (n=275)	3.87*** (n=280)
	Access to university funded sports psychology	4.02 (n=188)	3.92 (n=211)	3.63**/*** (n=342)
	Access to university funded sport science support	3.96 (n=124)	3.70 (n=254)	3.33**/*** (n=365)
	Access to university funded nutrition advice	3.84 (n=227)	3.87 (n=208)	3.48**/*** (n=313)
Self-Development Support Services	Opportunities to regularly compete	3.52 (n=467)	3.39 (n=140)	3.10** (n=157)
	Professional experience opportunities	4.06 (n=316)	3.90 (n=119)	3.61**/*** (n=318)
	Career development advisors and/or workshops to help with life after sport	4.02 (n=327)	3.67* (n=134)	3.65** (n=288)
	General skills development workshops	3.88 (n=314)	3.74 (n=149)	3.57** (n=290)
	Study abroad programs designed for elite student-athletes	3.82 (n=131)	3.91 (n=171)	3.46**/*** (n=439)
	Community engagement/outreach opportunities	3.78 (n=286)	3.52* (n=129)	3.36** (n=336)
Miscellaneous Support Services	Media and social media workshops	3.75 (n=157)	3.08* (n=231)	3.05** (n=354)
	Financial or scholarship support for tuition fees, study materials, travel, or sport equipment provided by the university	4.67 (n=624)	4.52 (n=65)	4.26** (n=84)
	Free or discounted university parking	4.50 (n=101)	3.85* (n=506)	3.49**/*** (n=146)
	Free or discounted university gym memberships	4.42 (n=610)	4.57 (n=79)	4.13 **/*** (n=77)
	Athlete lounge provided by the university	3.94 (n=109)	3.40* (n=413)	2.99**/*** (n=225)
	Access to a mentor(s) provided by the university	3.85 (n=221)	3.52* (n=155)	3.32** (n=365)
	On campus or close to campus accommodation options provided by the university	3.42 (n=276)	3.46 (n=182)	3.04**/*** (n=286)

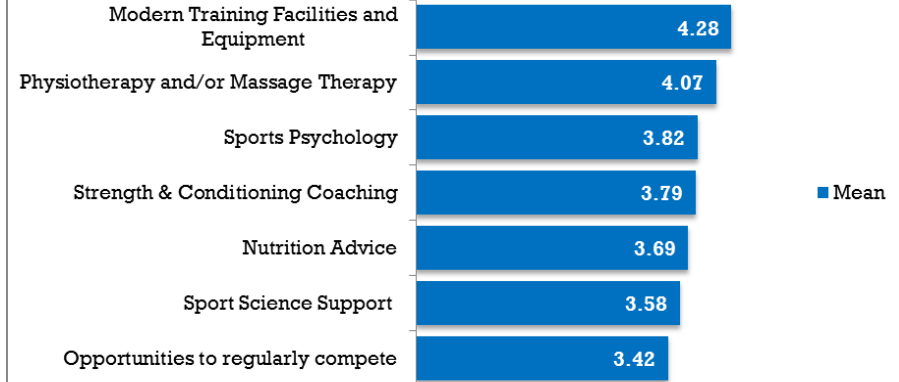
Note: *Significant difference (95% CI) between **offered and not offered**; **Significant difference (95% CI) between **offered and unknown**; ***Significant difference (95% CI) between **not offered and unknown**. Average means derived from a 5-point Likert scale (1 – not important; 5 - very important)

Appendix II - Specific Importance Rates of Supporting Services

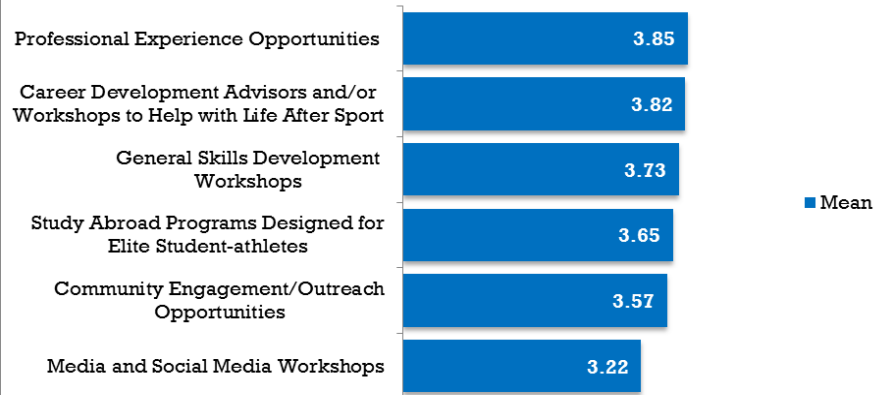
Academic Services Importance Ranking



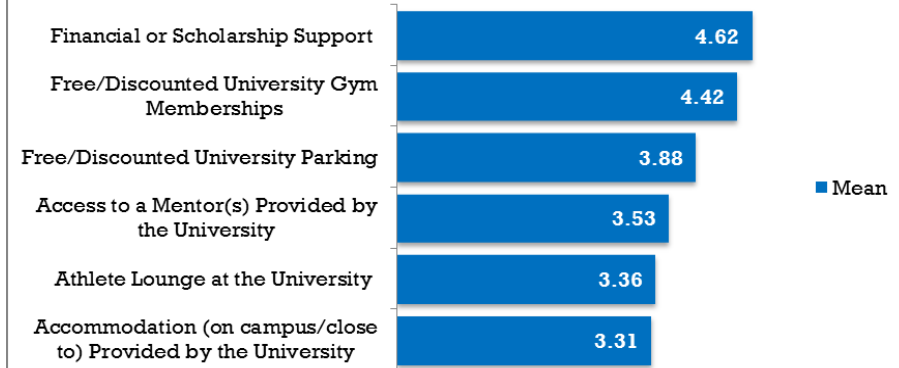
Athletic Services Importance Ranking



Self-Development Services Importance Ranking



Miscellaneous Services Importance Ranking



Appendix III - Significant Gender Related Differences ($p < 0.05$)

Support Service Area	Support service	Female average mean	Male average mean
Academic Support	Approved alternative assessment arrangements due to sport travel commitments	4.77 (n=454)	4.77 (n=454)
	Access to designated student-athlete study areas	3.09 (n=417)	2.93 (n=335)
	Access to personal tutoring	3.61 (n=418)	3.44 (n=340)
Athletic Support	Access to university funded nutrition advice	3.78 (n=445)	3.58 (n=342)
Factors that influence participation in an university elite student-athlete program	Quality and range of supporting services offered	4.24 (n=480)	4.10 (n=365)
	Coach recommended the university student-athlete program	3.15 (n=479)	2.93 (n=363)
	Teammates and/or other athletes recommended the university student-athlete program	3.49 (n=480)	3.28 (n=366)
	Parents encouraged me to participate in the university student-athlete program	3.13 (n=478)	2.88 (n=363)
	Proximity of the university to your coach and place of training	3.66 (n=479)	3.44 (n=365)
	Proximity of the university to your family and friends	3.36 (n=478)	3.14 (n=365)
	*Impact of Study and Sport	Being a member of my university's student-athlete program negatively impacted my sporting performance	1.65 (n=480)

Average means derived from a 5-point Likert scale (1 – not important; 5 - very important). *Indicates measurement on 5-point Likert scale (1 – Strongly agree; 5 – Strongly disagree)

Appendix IV – Significant Competitive Level Differences ($p < 0.05$)

Support Service Area	Support Service	Olympic Games, Commonwealth Games and World Championship representatives average mean	Other elite student-athletes average mean
Academic Support	Cross institutional study options with other universities	3.48 (n=145)	3.20 (n=585)
Athletic Support	Opportunities to regularly compete	3.25 (n=157)	3.47 (n=647)
Miscellaneous Support	Financial or scholarship support provided by the university	4.73 (n=160)	4.59 (n=645)
	Free or discounted university gym member ships	4.26 (n=159)	4.46 (n= 637)
Influencing factors towards participation in an university elite student-athlete program	Financial support offered	4.50 (n=165)	4.31 (n=681)
*Impact of Study and Sport	I view myself as more of an athlete rather than a student	2.59 (n=166)	2.96 (n=681)
	Being a member of my university’s student-athlete program has positively impacted my academic performance	2.01 (n=166)	2.19 (n=681)

Average means derived from a 5-point Likert scale (1 – not important; 5 - very important). *Indicates measurement on 5-point Likert scale (1 – Strongly agree; 5 – Strongly disagree)

Appendix V - Significant Enrolment Status Differences ($p < 0.05$)

Support Service Area	Support Service	Full-time average mean	Part-time average mean
Academic Support	Cross institutional study options with other universities	3.21 (n=601)	3.46 (n=128)
	Access to designated student-athlete study areas	3.07 (n=624)	2.77 (n=128)
Athletic Support	Access to university funded nutrition advice	3.74 (n=657)	3.43 (n=130)
	Access to university funded modern training facilities	4.34 (n=686)	3.99 (n=134)
	Access to university funded physio and/or massage therapy	4.11 (n=655)	3.87 (n=130)
	Access to university funded strength and conditioning coach	3.85 (n=661)	3.49 (n=129)
	Access to university funded sport science support	3.62 (n=652)	3.35 (n=130)
	Opportunities to regularly compete	3.50 (n=671)	3.05 (n=132)
Miscellaneous Support	Financial or scholarship support	4.64 (n=670)	4.51 (n=134)
	Athlete lounge provided by university	3.41 (n=646)	3.11 (n=132)
	Free or discounted gym memberships	4.49 (n=662)	4.08 (n=133)
	On-campus or close to campus accommodation options provided by the university	3.35 (n=645)	3.10 (n=131)
Influencing factors towards participation in an university elite student-athlete program	Coach recommended the university student-athlete program	3.11 (n=699)	2.82 (n=142)
	Teammates and/or other athletes recommended the university student-athlete program	3.46 (n=702)	3.09 (n=143)
*Impact of Study and Sport	I view myself as more of an athlete rather than a student	3.03 (n=702)	2.22 (n=143)

Note: Part-time: 1-2 courses per semester; Full-time: 3+ courses per semester. Average means derived from a 5-point Likert scale (1 – not important; 5 - very important).

*Indicates measurement on 5-point Likert scale 1 – (Strongly agree; 5 – Strongly disagree)

Appendix VI - Significant Differences ($p < 0.05$) between Regional versus Metro Universities

Support Service Area	Support Service	Regional universities average mean	Metro universities average mean
Academic Support	Access to designated student-athlete study areas	3.28 (n=90)	2.99 (n=663)
Athletic Support	Access to university funded nutrition advice	3.95 (n=91)	3.66 (n=696)
	Access to university funded modern training facilities	4.47 (n=94)	4.25 (n=727)
	Access to university funded strength and conditioning coach	4.13 (n=92)	3.75 (n=698)
	Access to university funded sport science support	3.86 (n=91)	3.55 (n=691)
Self-development Support	General skills development workshops (e.g. stress, time, financial management, leadership development)	3.93 (n=94)	3.70 (n=696)
	Media and social media workshops (e.g. media communication training, managing social media profile)	3.45 (n=92)	3.19 (n=686)
Miscellaneous Support	Athlete lounge provided by university	3.66 (n=91)	3.33 (n=687)
	Free or discounted gym memberships	4.63 (n=92)	4.40 (n=703)
	On-campus or close to campus accommodation options provided by the university	3.57 (n=88)	3.28 (n=688)
	Access to mentors provided by the university	3.75 (n=89)	3.50 (n=685)
Influencing factors towards participation in an university elite student-athlete program	Offering a degree program of my choice	4.31 (n=103)	4.01 (n=741)
	Proximity of the university to your family and friends	3.54 (n=103)	3.22 (n=740)
*Impact of Study and Sport	Being a member of my university's elite student-athlete program has positively impacted my general physical health and well-being	2.05 (n=103)	2.26 (n=743)

Average means derived from a 5-point Likert scale (1 – not important; 5 - very important). *Indicates measurement on 5-point Likert scale 1 – Strongly agree; 5 – Strongly disagree)