

Hybrid education for athletes

Mateja Gorenc PhD

International School for Social and Business Studies, Slovenia
mateja.gorenc@mfdps.si

Mojca Braz PhD

Faculty of Commercial and Business Sciences, Slovenia
braz.mm@gmail.com

Abstract

Before the Covid pandemic, long distance education over applications such as ZOOM, Teams, etc. was a privilege reserved only for the elite athletes, but after the forced shutdowns educational institutions made it standard for all athletes. The purpose of the survey is to help young athletes to adapt their education in a way that enables them to coordinate both their educational and sports careers as successfully as possible. In this study we researched whether the hybrid education is available to the athletes and how satisfied are they with this type of study. We came to the conclusion that educational institutions offer a satisfactory level of adaptability, but leave room for improvement.

Keywords: hybrid education, status of the athlete, student – athlete, adaptation of the study.

INTRODUCTION

Most athletes do not earn enough money during their sports career, to last them after their career has ended. That is why it is important for them to gain an academic education during their sports career, as to have a better chance of returning into the workforce and giving them financial stability, especially in case of an involuntary end to the career.

Hybrid education is a combination of physical and long distance lectures and is one of factors influencing the successful coordination between a sports and an academic career. Hybrid education enables absent athletes to participate in lectures by watching them streamed or by having them recorded and watching them after their sports activities.

Hybrid education enables absent athletes live transmission of the lectures or recording them to see them later, when he finds time after the sport activities. Part of the hybrid education is also access to pre-prepared study material such as recordings of lectures, e-classrooms and transcripts. All of these

adaptations allow an athlete better time management and allows them to focus on study, after they finished their sports activities. While athletes are generally good at time management, this allows them to optimise their time even further.

THEORETICAL STARTING POINTS

Several authors (Costa (2021), Geraniosova (2014), Sorkkila (2017), Althouse (2007), Guidotti (2015), Brečko (2006), Možina (2002), Aquilina (2010), Bettaway (2005), Pfister (2010), Lopez de Subijana (2020), Super (1986), Flanagan Stagiaire (2003), Conzelmann (2003), Kolar (2014), Jurak (2005), Corrado (2012), Goltnik Urnaut (2015), Fortes (2010), Fuchs (2016), Tekavc (2018), Kerštajn (2018), Braz (2023) and others, describe the factors of successful double careers of the athletes.

Goltnik Urnaut et al. (2015, p. 191) in the decision model for athletes with a dual career, found that for a successful coordination of a double career and reaching adequate education level, a well coordinated and individually adapted schedule (such as possibility of the adaptation of time-tables, exams, mandatory contents and distance education) has a big importance on the adaptation of the study of athletes.

Geraniosova and Rokainen (2014, p. 53) have through the research among Slovak athletes come to the conclusion that those who coordinated both careers could reach this only based on the arrangements with the professors and coordination of study programmes.

In his doctoral dissertation Keštajn (2018, p. 178) quoted, that the student-athletes are concerning the coordination of school and sport commitments more or less left to themselves and individual arrangements with educational institutions because there is no programme or coordinators that would help them with that. Based on a survey, Braz (2023, p. 195) came to the conclusion, that the adaption of the study programme and support at the coordination of both careers, enabled by educational institutions, are important factors for the performance of the athletes in education and that they have to be ensured that their education would not be left to the individual athlete/teacher relationship, but systematically coordinated. It would be desirable to introduce the hybrid education at least for the athletes with regulated status and athletic classes.

Braz (2023, pp. 113 – 116) studied the influence of the adaptations of the study programme on the performance of the coordination of double career. Based on the results of the online survey, filled out by 112 athletes, the findings were that the athletes, because of their obligations mostly cannot regularly participate in educational programmes, that's why they used different individual adjustments. As an adjustment with the strongest influence was found to be long distance (online) classes (as a form of hybrid education).

The athletes must be responsible, devoted and be adaptable to regimes, offered by the educational institutions, in order to avoid situations, where they would have to choose between education and sports (EU Guidelines, 2012, pp. 17 – 21).

With the intention of finding out, if the elite athletes after the Covid pandemic are still enabled a hybrid study programme, we performed a survey. We wanted to find out, if student athletes can after the pandemic still have classes live in the classroom and over the web, when they are absent due to preparations, trainings and competitions. We were also interested in their satisfaction with such method

of study. As method of research we used a quantitative method of research, descriptive analysis and discriminate analysis.

THE RESULT OF THE EMPIRICAL RESEARCH

The online survey was performed between 6. February and 6. March 2023, with 194 athletes participating and with 92 questionnaires (47%) completed fully. All of the participants are currently enrolled in an educational institution, mostly in Šiška high school and different faculties across Slovenia. The survey sample is N=92, represented by active athletes in the Republic of Slovenia, ages 40 or lower.

We surveyed athletes from different sports disciplines, like athletics, golf, handball, football, judo, basketball, dance, volleyball, horse riding, climbing, sailing, cycling, figure skating, artistic roller skating, archery, badminton, alpine skiing , etc. tables 1 to 4 represent the demographic data of the respondents.

Table 1: Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	30	33%	33%	33%
Female	62	67%	67%	100%
Total	92	100%	100%	

Source: Author's own source

Table 2: Age

Age	Frequency	Percent	Valid Percent	Cumulative Percent
up to 20 years	64	70%	70%	70%
21 to 40 years	28	30%	30%	100%
41 to 60 years	0	0%	0%	100%
over 61 years	0	0%	0%	100%
Total	92	100%	100%	

Source: Author's own source

Table 3: Slovenian Olympic Committee categorization

Slovenian Olympic Committee categorization	Frequency	Percent	Valid Percent	Cumulative Percent
Olympic Categorization Class	10	11%	11%	11%
World class	0	0%	0%	11%
International class	18	20%	20%	30%
Perspective class	28	30%	30%	61%
State class	20	22%	22%	83%
Youth class	12	13%	13%	96%
No categorization	4	4%	4%	100%
Total	92	100%	100%	

Source: Author's own source

Table 4: Current involvements in sports

Current involvements in sports	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	86	93%	93%	93%
No	6	7%	7%	100%
Total	92	100%	100%	

Source: Author's own source

The key characteristics of the data are expressed by the method of the descriptive statistics. The statements, describing variables, are presented in the tables 5 and 6. All statements were rated on a scale from 1 to 5, where 1 means "I completely disagree" and the 5 means "I totally agree".

Table 5: Particular adoptions of the education

To which extent do you agree that the particular adoptions of the Study/education influence the successful coordination of double career ?	N	Mean	Std. Dev.	Min	Max
Possibility of reduction of the points required for entry	92	3,5	1,24	1	5
Free entry in the part-time study / education	92	4	1,09	1	5
Enrolment in a higher year with lower number of credits than provided for promotion with the program of study / education	92	3,9	0,96	2	5
Individual study / education	92	4	0,97	2	5
Organised additional help for pupils/students	92	4,3	0,88	2	5
Help of the teachers – preparation of additional study/education materials	92	4,3	0,87	2	5
Smaller volume of the compulsory attendance at lectures	92	4,2	0,92	1	5
Smaller volume of the compulsory attendance at tutorials	92	4	1,1	1	5
Smaller volume of the compulsory attendance at other education contents (like field exercises, camps...)	92	4,1	0,98	1	5
Prolonged period of study / education (1 year, 2 years)	92	3,8	1,09	2	5
Individual setting of test dates or questioning outside regular deadlines	92	4,4	0,96	1	5
Distance exams/tests	92	3,9	1,16	1	5
Adjusting of timetable	92	4,3	1,08	1	5
Distance learning / education	92	4,1	1,01	1	5
E-classroom	92	4,3	0,92	1	5
E-materials	92	4,5	0,75	2	5
Pre-prepared teaching materials, transparent films, notes	92	4,5	0,84	1	5
Video recordings of the lectures	92	4,4	0,91	2	5

Source: Author's own source

In the table 5, under "other" the participants wrote: extra curriculum, possibility of scholarship for sporting achievements, help from the tutors, recording of the lectures when they are absent.

Table 6: Care for adaptation of the education of athletes

To which extent do you agree with the claims about the care for adaptation of education of the athletes during your study ?	N	Mean	Std. Dev.	Min	Max
The rules of adaptation of the education of athletes are precisely defined	92	3,8	0,93	1	5
Teachers and co-workers are well knowing and taking into account the rights of the athletes for adaptation of education	92	3,9	1,01	1	5
The number of different possibilities of adaptation of the study / education of the athletes is adequate	92	3,8	0,89	2	5
The support of the pupils/students is good	92	3,7	1,01	2	5
The programme of education is friendly to the athletes	92	3,4	1,09	1	5

Source: Author's own source

Hereunder we are showing the discriminant analysis of the links among the observed variables. We wondered whether statistical differences are present among the age groups. For the sake of the research, high school students are represented in the age group of up to 20 years and the college students from 21 up to 40 years.

Table 7: Particular adaptations to the athletes

Age	up to 20 years (N=64)		21 to 40 years (N=28)		Tests of Equality of Group Means (df1=1; df2=90)	
	Mean	Std. Dev.	Mean	Std. Dev.	Wilks' Lambda	F
PARTICULAR ADOPTIONS						
Possibility of reduction of the points required for entry	3,97	0,925	2,50	1,262	0,698	39,012
Free entry in the part-time study / education	4,41	0,660	2,93	1,184	0,606	58,624
Enrolment in a higher year with lower number of credits than provided for promotion with the program of study / education	3,84	0,946	3,93	0,979	0,998	0,153
Individual study / education	4,06	0,794	4,00	1,277	0,999	0,082
Organised additional help for pupils/students	4,38	0,745	4,00	1,089	0,961	3,679
Help of the teachers – preparation of additional study/education materials	4,47	0,712	3,93	1,052	0,916	8,278
Smaller volume of the compulsory attendance at lectures	4,09	0,886	4,50	0,923	0,958	3,994
Smaller volume of the compulsory attendance at tutorials	3,94	1,125	4,14	1,008	0,992	0,690
Smaller volume of the compulsory attendance at other education contents (like field exercises, camps...)	4,00	0,976	4,21	0,957	0,990	0,950
Prolonged period of study / education (1 year, 2 years)	3,66	0,996	4,07	1,245	0,969	2,897
Individual setting of test dates or questioning outside regular deadlines	4,50	0,873	4,21	1,101	0,981	1,773
Distance exams/tests	3,88	1,120	4,07	1,245	0,994	0,560
Adjusting of timetable	4,47	0,908	3,79	1,287	0,914	8,462
Distance learning / education	4,09	0,886	4,07	1,245	1,000	0,010

Age	up to 20 years (N=64)		21 to 40 years (N=28)		Tests of Equality of Group Means (df1=1; df2=90)	
	Mean	Std. Dev.	Mean	Std. Dev	Wilks' Lambda	F
PARTICULAR ADOPTIONS						
E-classroom	4,38	0,968	4,29	0,810	0,998	0,182
E-materials	4,50	0,713	4,43	0,836	0,998	0,176
Pre-prepared teaching materials, transparent films, notes	4,56	0,794	4,21	0,876	0,962	3,515
Video recordings of the lectures	4,56	0,664	4,07	1,245	0,937	6,073

Source: Author's own source

From the table 7 we can gather, that the high school students enjoy a greater level of adaptability, compared to college students.

Table 8: Care about the adaptation of the education to the athletes

Age	up to 20 years (N=64)		21 to 40 years (N=28)		Tests of Equality of Group Means (df1=1; df2=90)	
	Mean	Std. Dev.	Mean	Std. Dev	Wilks' Lambda	F
Care for adaptation of the education of athletes						
The rules of adaptation of the education of athletes are precisely defined	4,09	0,729	3,21	1,031	0,805	21,816
Teachers and co-workers are well knowing and taking into account the rights of the athletes for adaptation of education	4,13	0,900	3,43	1,069	0,897	10,387
The number of different possibilities of adaptation of the study / education of the athletes is adequate	4,22	0,548	2,79	0,686	0,442	113,73
The support of the pupils/students is good	4,00	0,909	2,93	0,813	0,758	28,808
The programme of education is friendly to the athletes	3,81	0,957	2,57	0,836	0,719	35,247

Source: Author's own source

From the table 8 we can see that middle schools provide a greater level of adaptability, compared to college. We can also see that both high school and college students have access to individual study, access to tutors, lower required presence at physical lectures. Both groups also have personalized timetables for taking exams.

Results from table 7 and 8 were compared to Braz (2023, pp. 113-116). Braz 2023 began research in 2017, when online study was rare

We have compared the results shown in the tables 7 and 8 with the results in Braz (2023, pp. 113-116). The beginning of the research in Braz 2023 dates back to 2017, when online education was enabled only to rare exceptions only. Online education was included as a factor in our study and was also included in our online survey. The segment of pupils and student-athletes, taking part in the survey, have begun their education in the time of lock-down, when practically all the education moved to the web.

Braz (2023, pp. 113-116) divided the athletes, taking part in the research into those who successfully managed their dual careers and those who did not. Long distance study was rated (Mean=4.00,

Std.Dev.=0,949) among those who considered their dual careers successful and (Mean=3,78, Std.Dev.=1.149) by those who did not consider their dual career successful. Comparing that to the results from table 7 where the high school students rated long distance study with (Mean.=4.09, St.Dev.=0,884) and college students with (Mean=4,07, Std.Dev.=1,245) we can come to the conclusion that long distance study has improved during Covid.

CONCLUSION

The systematic introduction of hybrid education into Slovenian education system would be a welcome progress in enabling better conditions for the athletes in getting a degree for easier transition into the workforce after their sports career ends. For the hybrid education the athletes should be highly motivated, self-initiated, self-disciplined, organised and they should have good working habits.

We have found out that after the epidemic the education is in larger extent moving to the web, we assume that due to the fact that web tools, which were not available before, having been developed and improved. The athletes have, according to the survey, accepted the hybrid education as a welcome factor in coordinating a double career, being used in larger extent than before and are generally satisfied with it.

REFERENCES

- Althouse, J. N. (2007). *Testing a model of first-semester student-athlete academic motivation and motivational balance between athletic and academics* (Doctoral dissertation). Pennsylvania: [J. N. Althouse].
- Aquilina, D. in Henry, I. (2010). Elite athletes and university education in Europe: a review of policy and practice in higher education in the European Union Member States. *International Journal of Sport Policy*, 2(1), 25-47.
- Bettaway Willis, K. J. (2005). *Female basketball student-athletes motivation: analyzing academic standing and ethnicity at Atlantic coast conference institutions* (Doctoral dissertation). Florida: [K. J. Bettaway Willis].
- Braz, M. (2023). *Dejavniki uspešnosti usklajevanja dvojne kariere športnikov v Sloveniji* (Doktorska disertacija). Celje: FKPV
- Brečko, D. (2006). *Načrtovanje kariere kot dialog med organizacijo in posameznikom*. Ljubljana: Planet GV.
- Conzelmann, A. in Nagel, S. (2003). Professional careers of the German Olympic athletes. *International Review for the Sociology of Sport*, 38(3), 259-280.
- Corrado, L., Tessitore, A., Capranica, L., Rauter, S. in Doupona Topič, M. (2012). Motivation for a dual career: Italian and Slovenian student-athletes. *Kinesiologia Slovenica*, 18(3), 47-56.
- Corrado, L., Tessitore, A., Capranica, L., Rauter, S. in Doupona Topič, M. (2012). Motivation for a dual career: Italian and Slovenian student-athletes. *Kinesiologia Slovenica*, 18(3), 47-56
- Costa, F. R. da, Miranda, I. S. de in Figueiredo, A. J. (2021). Sport and education: how to develop a proper dual career. *Cultura, Ciencia y Deporte*, 16(47), 49-58.
- Flanagan Stagiaire, J. in Winther, P. (2003). *Combining sports and education: support for athletes in the EU member states*. Luxembourg: European Parliament.
- Fortes, P. C., Rodrigues, G. in Tchanchane, A. (2010). *Investigation of academic and athletic motivation on academic performance among university students*. Philippines: IAC S IT Press.
- Fuchs, X. et al. (2016). European student-athletes' perceptions on dual career outcomes and services. *Kinesiologia Slovenica*, 22(2), 31-48.
- Geranosova, K. in Ronkainen, N. (2014). *The experience of dual career through Slovak athlete's eyes*. Denmark: Aarhus University.
- Goltnik Urnaut, A. et al. (2015). *Priprava na drugo kariero v času ukvarjanja z vrhunskim športom*. Celje: FKPV.

- Guidotti, F., Lupo, C., Cortis, C., Baldassarre, A. in Capranica, L. (2015). Dual Career of European student – athletes: a systematic literature review. *Kinesiologia Slovenica*, 21(3), 5-20.
- Jurak, G., Kovač, M. in Strel, J. (2005). Analiza statusa športnika v srednjih šolah. V G. Jurak (ur.). *Športno nadarjeni otroci in mladina v slovenskem šolskem sistemu* (str. 96-113). Ljubljana: Fakulteta za šport, Inštitut za kineziologijo; Koper: Univerza na Primorskem, Znanstveno raziskovalno središče, Inštitut za kineziološke raziskave, Založba Annales.
- Kerštajn, R. (2018). *Športna kariera in izobraževanje vrhunskih nordijskih športnikov* (Doktorska disertacija). Ljubljana: [R. Kerštajn].
- Kolar, E. in Jurak, G. (2014). *Strateški management športnih organizacij*. Koper: Univerza na Primorskem, Znanstveno-raziskovalno središče, Inštitut za kineziološke raziskave.
- Lopez de Subijana, C., Ramos, J., Garcia, C. in Chamorro, J. L. (2020). The employability process of Spanish retired elite athletes: gender and sport success comparison. *International Journal of Environmental Research and Public Health*, 17(15), 5460.
- Možina, S., Svetlik, I., Jamšek, F., Zupan, N. in Vodovnik, Z. (2002). *Management kadrovskih virov*. Ljubljana: Fakulteta za družbene vede.
- Pfister, G. (2010). Women in sport – gender relations and future perspectives. *Sport in Society*, 13(2), 234-248.
- Sorkkila, M., Ryba, T. V., Aunola, K., Selänne, H. in Salmela-Aro, K. (2017). Sport burnout inventory – dual career form for student-athletes: assessing validity and reliability in a Finnish sample of adolescent athletes. *Journal of Sport and Health Science*, 9(4), 358–366.
- Super, D. E. (1995). *Values: their nature, assesment and practical use*. San Francisco: Yossey – Bass.
- Super, D. E. in Nevill D. D. (1986). *The values scale: theory, application and research*. Palo Alto: Consulting Psychologists.
- Tekavec, J. in Cecić Erpič, S. (2018). Dual career competences and their percieved importance in slovenian student-athlets in relation to gender. *Kinesiologija Slovenica*, 24(2), 60-69.