

Impact of new professional profiles of the sports kinesiologist, preventive and adapted motor activities kinesiologist and of sports manager in the current university education

Gaetano Altavilla

University of Salento, Department of Biological and Environmental Sciences
Lecce, Italy

Purpose: This study aims to understand the impact that this reform has had on sport sciences masterly students in Italy, in terms of perceptions and opinions, and what kind of feedback it has had in their university education, in terms of coherence.

Methods: The sample represents 288 sport sciences masterly students divided into sports kinesiologist (N=162) mean age of 25.7 (\pm 5.7); kinesiologist of preventive and adapted physical activities (N=66) mean age of 27.3 (\pm 7.1); sports manager (N=60) mean age of 27.4 (\pm 9.3). A questionnaire submitted through Google Forms and sent to masterly students of the University of Salento and Salerno was used. The data (age, gender, university provenance and current study path) were presented as means and standard deviations, while the percentage frequency of responses was reported for each item, using the chi-squared test. The level of significance was set with $P < .05$.

Results: The knowledge of the sport reform and the impact of the sport reform among the 3 masterly classes gave a not statistically significant result ($P=.30$; $P=.63$). The perceptions of job opportunities and strengths offered by this reform, for each of the professional figures, gave a significant result ($P=.0001$; $P=.0001$). The coherence of one's university education with the respective professional profile was found to be significant ($P=.0001$; $P=.01$).

Conclusions: The knowledge of the sport reform is homogeneous in the 3 masterly classes analysed. Regarding perceptions on job opportunities, sports kinesiologist (LM68) and preventive and adapted physical activities kinesiologist (LM67) courses are affected by the spaces already occupied by sports federations and health figures; while sports manager (LM47) showed some confidence in the new opportunities that this profile offers. Finally, some reflections emerged regarding the need to have a university education more coherence with the professional profile.

Keywords: reform, physical education, professional profiles, perspectives.

Introduction

The legislative novelty of Decree No. 36 of 2021, of the Italian government, marked a turning point for sports science.¹ Three new professional profiles have been introduced: sports kinesiologist, the kinesiologist of preventive and adapted physical activities and the sports manager,² for which you see the masterly degree in exercise and sport sciences in Italy³ the only one entitled to carry out these professions. Of particular interest is the sports kinesiologist as defined by article 41, comma 4 of the decree, whose activity consists of: "the planning, coordination and technical direction of athletic preparation activities in the competitive sphere up to the highest levels of competition for sports associations and clubs, sports promotion bodies, institutions and specialized centres, personalized physical and technical preparation aimed at individual and team competitiveness". This will bring contractual benefits for this professional profile since labour contracts will have to be regulated with the regulations inherent in the national collective agreements for individual categories of workers.⁴ Before this legislation, the profession of kinesiologist did not exist and the related professional activities were also exercised

by those who did not possess the specific title required by the new legislation.⁵ The recognition of these three professional profiles will bring advantages both in terms of job opportunities and from a contractual point of view.

Today the term kinesiology is only a matter of academic and scientific consensus, but should be accepted as a global and universal term for the science and profession in question.⁶ The kinesiologist is a professional figure, employed in the field of human movement, with the aim of promoting personal well-being.⁷

In Italy physical activity was not a regulated professional field,⁸ therefore the importance of the training of the kinesiologist, able to operate in the field of human movement,^{9,10,11} aimed at the prevention, achievement and improvement of psychophysical well-being.^{12,13} Starting from the legislative change and the specificity of the role of the kinesiologist, it is considered useful to collect the perceptions and opinions of the students of the three masterly degree courses, sports kinesiologist (LM68), preventive and adapted physical activities kinesiologist (LM67) and sports manager (LM47); in two Italian universities, in order to verify, through a questionnaire, their levels of knowledge and the effects that the new professional profiles have produced on

these students.

The aim of this study was to investigate perceptions and opinions of sport sciences masterly students of LM67, LM68 & LM47 on the new profession profiles, and their coherence and congruence with its cultural and scientific profile.

Methods

Subjects

288 sports science masterly students participated in the study divided into: LM68 for a total of 162 students with an average age of 25.7 (\pm 5.7), of which 29.6% females and 70.4% males; LM67 for a total of 66 students with an average age of 27.3 (\pm 7.1), of which 50% females and 50% males; LM47 for a total of 60 students with an average age of 27.4 (\pm 9.3), of which 35% females and 65% males. Informed consent was obtained from all subjects involved in the study. All individuals involved in the study were guaranteed anonymity and were provided with complete and honest information about the content, purpose, and process of the research in an understandable way. No individual was forced to participate.

Procedures

A questionnaire of ten questions was used, submitted through Google Forms and sent to masterly students of the University of Salento (Lecce) and the University of Salerno to which a total of 288 students replied. The firstly four questions of the questionnaire concerned age, gender, university provenance and current study path, while the data analysis concerned knowledge, perceptions and opinions. Therefore, the firstly four questions were only useful for describing some characteristics of

the sample made by students.

The questionnaire had the objective of assessing knowledge and perceptions on the new legislation, on the impact it can have on possible job opportunities and on the consistency between their training and their respective professional profiles. Students were sent a list of multiple-choice questions, in which they had to indicate how much they agreed or disagreed with each item. The levels expressed for each question included a score from 1 (not at all), from 2 (little), from 3 (enough) to 4 (totally).

Statistical analysis

The data (age, gender, university provenance and current study path) were presented as means and standard deviations, while the percentage frequency of responses was graphically reported for each item. The non-parametric Chi-Square (χ^2) test was used to test whether the observed frequencies, in one or more categories, correspond at the expected frequencies. The significance level was set at $P < .05$ and data analysis was performed with IBM SPSS Statistics 23 software.

Results

According to values of Chi Square test obtained, in Table 1, in the context of the questions on knowledge of the sport reform and the impact of the sport reform among the three masterly classes, the results are not statistically significant. In reference to Table 2, the questions formulated on the perceptions of the job opportunities and strengths, the results are significant. Finally, based on the values of the Table 3, the questions on the consistency of one's university education with the respective professional profile were found to be significant.

Table 1. Knowledge and impact of sports reform on masterly degree classes

		Are you aware of the figure of the kinesiologist?				Total	Chi Square	P	Overall you assess the importance of this reform.				Total	Chi Square	P
		1*	2*	3*	4*				1*	2*	3*	4*			
What is your current study path?	LM67	0	9	39	114	162	4.87	.30	3	9	57	93	162	13.65	.63
	LM68	0	3	21	42	66			3	6	30	27	66		
	LM47	0	0	18	42	60			0	0	30	30	60		
Percentages		0%	4.1%	27.1%	68.8%	100%			2.1%	5.2%	40.6%	52.1%	100%		
Total		0	12	78	198	288			6	15	117	150	288		

* The levels expressed for each question included a score from 1 (not at all), from 2 (little), from 3 (enough) to 4 (totally).

Table 2. Perceptions about the strengths and the job opportunities provided by the specialization

		Do you think that specialization in one of the 3 roles is a strong point for your training?				Total	Chi Square	P	Do you believe that specialization in one of the 3 figures favors your job opportunities?				Total	Chi Square	P
		1	2	3	4				1	2	3	4			
		What is your current study path?	LM67	9	54				90	9	162				
	LM68	3	12	42	9	66			3	12	51	0	66		
	LM47	0	6	24	30	60	43.0	.0001	0	10	24	26	60	46.84	.0001
Percentages		4.2%	25.0%	54.1%	16.7%	100%			4.2%	30.6%	51.0%	14.2%	100%		
Total		12	72	156	48	288			12	88	147	41	288		

Table 3. Perceptions on the coherence of one's university education

		Do you think your university education is in line with the exercise of the profession of kinesiologist?				Total	Chi Square	P	How well do you think you are able to deal with the above activities?				Total	Chi Square	P
		1	2	3	4				1	2	3	4			
		What is your current study path?	LM67	6	45				81	30	162				
	LM68	12	42	12	0	66			6	36	18	6	66		
	LM47	3	18	26	13	60	61.56	.0001	3	18	33	6	60	16.26	.01
Percentages		7.3%	36.5%	41.3%	14.9%	100%			6.3%	36.5%	45.8%	11.5%	100%		
Total		21	105	119	43	288			18	105	132	33	288		

Discussion and conclusions

In the context of the questions on knowledge of the sport reform and the impact of the sport reform among the 3 masterly classes (Table 1), the result is insignificant ($P=.30$; $P=.63$). The frequencies observed for the two types of questions on the knowledge and impact of the reform reached a percentage frequency of answers, for levels 3 and 4, of well over 90% (level 3 = 27.1% and level 4 = 68.8%). This means that the three groups are homogeneously informed about this reform and have received positive feedback for this legislative innovation.

The questions formulated to detect the perceptions of job opportunities and strengths offered by this reform (Table 2), in one of the three professional figures, gave a significant result ($P=.0001$; $P=.0001$). The frequencies observed for the type of question on strengths reached a percentage frequency of answers, for levels 2 and 3, equal to 79.1% (level 2 = 25.0% and level 3 = 54.1%); similarly, the percentages response for job opportunities are high, for levels 2 and 3, i.e. equal to 81.6% (level 2 = 30.6% and level 3 = 51.0%). The difference for the LM67 and LM68 courses, compared to the LM47 course, is even more evident, probably due to the competition from sports federations and specialist health figures.

The questions on the consistency of one's university education with the respective professional profile (Table 3) were found to be significant ($P=.0001$; $P=.01$). The frequencies observed for the type of question on training coherence reached a percentage

frequency of responses, for levels 2 and 3 (in table 3), equal to 77.8% (level 2 = 36.5% and level 3 = 41.3%) and similarly, the response rates for job opportunities are high, for levels 2 and 3 (in table 3), equal to 82.3% (level 2 = 36.5% and level 3 = 45.8%). This indicates that the 3 groups highlighted a different and necessary training need more coherence with their professional profile.

Knowledge of the reform of sport is evidently homogeneous for the 3 masterly classes analysed. The perceptions of job opportunities, the LM67 and LM68 courses are greatly affected by the spaces already occupied by sports federations and health figures; while the LM47 has shown a certain confidence and a good interest in the different and new opportunities that this profile offers. The usefulness of this study is to provide some reflections on the need to have a university education more coherence with the respective professional profile. The connection with the literature is always desirable, but this study referring to a very recent legislation is almost non-existent.

Finally, the study should be extended to other universities, to verify a possible generalization of the data to the entire population, thus providing more precise data on the perceptions and opinions of masterly students and a clear indication for those who have responsibility within the university to design study plans in compliance with the coherence between specific learning objectives and qualifying training objectives in the overall context of the three new professional profiles.

Acknowledgements

I would like to express my gratitude to Professor Gaetano Raiola, coordinator of all researches in our group, who proposed to address this original line of research in response to legislative innovations in the field of exercise and sport sciences to develop completely this field in Italy.

Ethical Committee approval

The use of these data did not require approval from an accredited ethics committee, as they are not covered by data protection principles, i.e., they are non-identifiable, anonymous data collected through an anonymous questionnaire. In addition, based on Regulation (EU) 2016/679 of the European Parliament and of the Council on 27 April 2016 on the protection of individuals concerning the processing of personal data and on the free movement of such data (which entered into force on 25 May 2016 and has been compulsory since 25 May 2018), data protection principles do not need to be applied to anonymous information (i.e., information related to an identifiable natural person, nor to data of a subject that is not, or is no longer, identifiable). Consequently, the Regulation does not affect the processing of our information. Even for statistical or research purposes, its use does not require the approval of an accredited ethics committee.

Funding

This study received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Author-s contribution in according to ICMJE

Gaetano Altavilla made substantial contributions to the conception and design of the work; the acquisition, analysis and interpretation of data for the work; drafting and revising the work critically and to the final approval for the version to be published. He agrees to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

References

1. Gazzetta Ufficiale n. 67. Legislative Decree No. 36 of Feb 28; 2021. Retrieved Nov 12, 2021, from: www.gazzettaufficiale.it/eli/id/2021/03/18/21G00043/sg.
2. Raiola G. Survey on exercise and sport sciences in Italy. *J. Hum. Sport Exerc.* 2019;14(4):S1163-S1168, doi:10.14198/jhse.2019.14.Proc4.81
3. D'Isanto T. Physical and sport education between Italian academic system and European Research Council structure panel. *J. Hum. Sport Exerc.* 2019;14(1):S66-S76. doi:10.14198/jhse.2019.14.Proc1.08
4. D'Isanto T, D'Elia F, Altavilla G, Aliberti S, Esposito G, Di Domenico F, Raiola G. In Italy, compatibility between qualifying training objectives of degree courses in sport sciences and exercise and the kinesiologist profile. *Trends Sport Sci.* 2022;29(3):99-105. doi:10.23829/TSS.2022.29.3-3
5. Sanseviero I, Fattore S, Pignato S, D'Elia F. Comparison of the seventeen Italian master's degree courses in sports

- sciences. *J. Hum. Sport Exerc.* 2019;14(4):S670-S685. doi:10.14198/jhse.2019.14.Proc4.27
6. Čustonja Z, Milanović D, Sporiš G. Kinesiology in the names of higher education institutions in Europe and the United States of America. *Kinesiology*, 2009;41(2):136-146. UDC 796.012:001.4:378.4 (4) (73)
7. Raiola G, D'Isanto T, D'Elia F, Altavilla G. An Exploratory Study in Non-Professional Football on the Perception of Stakeholders about the NewWorking Professional Profile of Sports Kinesiologist. *Int. J. Environ. Res. Public Health*, 2022;19(23):15839. doi:10.3390/ijerph192315839
8. Raiola G, D'Elia F, Altavilla G. Physical activity and sports sciences between European Research Council and academic disciplines in Italy. *J. Hum. Sport Exerc.* 2018;13(2):S283-S295. doi:10.14198/jhse
9. Anguera MT, Camerino O, Castañer M, Sánchez-Algarra P, Onwuegbuzie AJ. The specificity of observational studies in physical activity and sports sciences: moving forward in mixed methods research and proposals for achieving quantitative and qualitative symmetry. *Front. Psychol.* 2017;19(8):2196. doi:10.3389/fpsyg.2017.02196
10. Raiola G. The Movement and Sport Science in Italy towards the European research council. *Phys. Cult. Sport, Stud. Res.* 2020;86(1):37-48. doi:10.2478/pcssr-2020-0011
11. Altavilla G, Ceruso R, Esposito G, Raiola G, D'Elia F. Physical education teaching in Italian primary school: theoretical lines and operational proposals. *Pedagogy Phys. Cult. Sports.* 2022;26(3):151-157. doi.org/10.15561/26649837.2022.03
12. D'Elia F, Mazzeo F, Raiola G. The core curriculum in the university training of the teacher of physical education in Italy. *J. Hum. Sport Exerc.* 2018;13(2):S413-S420. doi:10.14198/jhse.2018.13.Proc2.25
13. D'Elia F. The core curriculum of university training to teach physical education in Italy. *J. Phys. Educ. Sport.* 2019;19(5):1755-1758. doi:10.7752/jpes.2019.s5256

Corresponding information:

Received: 10.05.2023.

Accepted: 09.06.2023.

Correspondence to: Altavilla, Gaetano, PhD

University: University of Salento, Lecce (Italy)

E-mail: gaetano.altavilla@unisalento.it