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Attitudes of Academic Staff from Different Stages of Their Proficiency in Research and Teaching Activities in Sports Sciences: A Case Study of the University of Montenegro

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Abstract

The goal of this research was the identification of differences between academic staff in sports sciences based on their proficiency from early-career researchers to experts related to different academic activities. A survey of professors from the University of Montenegro from different stages of their proficiency was conducted. Data collection included two standardized tools: 1) a questionnaire (N=23 respondents) and 2) interviews (N=6 respondents) about different academic activities, such as writing, researching, teaching, and learning. The results obtained revealed a lack of formal writing training as a barrier in academic writing, as well as other activities, including workloads (e.g., teaching, administration (54.6%)) and lack of time generally (45.5%) for early-career researchers. In the context of teaching support, early-career researchers confirmed a higher position to develop teaching competencies compared with expert teachers. Generally, the results showed that centralized support for teachers at this institution exists more for research than teaching activities at all career stages, which was expected according to standards and conditions for career progress. The theoretical and practical implications of results are discussed.

Keywords: *writing, research, learning, teaching, sports sciences*

Introduction

Universities must provide high-quality service to students (Suryadi, 2007), which requires the readiness of academic staff to be informed with cutting-edge information, for example, Academic staff in the field of sports sciences must provide enough theoretical and practical knowledge to ensure that graduate students will be well-prepared for the sports market.

The development of academic staff activities as a focus of the academic community dates from the late 1960s (Anderson & Eaton, 1982; Taylor, 1999; Åkerlind, 2005; Burke & Rau, 2010; Popovic, Matic, Bjelica, & Maksimovic, 2020a; Popovic,

Matic, Bjelica, & Maksimovic, 2020b). A more in-depth insight into this topic shows that not all previous periods have been followed by the growth and development of academic activities. However, in recent decades, the intensive development of academic knowledge can be observed. This progress has been achieved through the development of modern technologies that have contributed to a tremendous transformation in the various activities of academic staff in higher education.

Nowadays, the benefits of developing teaching competencies are reflected in numerous teacher training courses, student feedback, the application of new or creative pedagogical/



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teaching methods, communication tools, the development of teaching skills through the realization of research, numerous scholarships, and other means. Also, numerous mobility programmes (through Erasmus and similar programmes) allow a significant number of teachers to facilitate international mobility and a better learning process. The development of research competences in contemporary teachers is achieved through numerous scholarships, grants, under the supervision of mentors who have been established as experts in specific fields. In the context of developing the writing competencies of the modern teacher, they include publications in high-impact journals, reviews in numerous journals, successful project proposals, multilingual publications, and excellent learning materials.

Likewise, continuing professional development is also facilitated by the creation of a favourable environment for more effective learning and research, with opportunities for attending many scientific events and the realization of interdisciplinary research.

The multiple opportunities that were spearheaded by new, innovative tools in teaching and research activities provided a significant shift and tremendous production in all scientific fields. An analysis of citations in 251 scientific categories according to G.S. Patience, C.A. Patience, Blais, and Bertrand (2017) reveals that over 11.9 million documents were indexed in the Web of Science Core Collection (WOS Core Collection, 2015) from 2010 to 2014. Considering that over 38,000 scientific papers have been published in the field of sports science, the enormous current contribution that researchers around the world undertake in the development of sports is evident.

The analysis of knowledge production from various scientific fields provides the identification of trends, deficiencies, and their effects (Patience et al., 2017); similarly, the analysis of teachers' developmental academic path contributes to the identification of factors that are crucial to academic progress. Furthermore, little scientific research that examines the critical factors in a teacher's career development path from the beginning of his career to an expert in his field exists. The approach to this research problem requires a reflection on some earlier research that evaluated the characteristics of academic development (Ramsden, 1992; Boyer, Altbach, & Whitelaw, 1994; Martin, Prosser, Trigwell, Ramsden, & Benjamin, 2000; Ayub Khan, 2017). In these studies, the authors highlighted the common characteristics of academic development: academic values, research and teaching, and the work environment. Current research on the role of the modern academic teacher emphasizes that academic development involves improving activities such as teaching, learning, research, and writing development. According to Åkerlind (2005), all these characteristics should be treated with a holistic approach, while Karagiannis (2009) emphasizes the increasing demand for balance in the development of different academic activities. It is clear that during academic development, the effectiveness and efficiency of teachers require the proper management of all these activities. In connection with this, the author points out that many teachers regard the obligations related to teaching and lecturing consider as an additional load and a waste of time and other resources that do not provide academic progress. The additional reason in that process based on the fact that academic staff engaged in teaching are undervalued then other staff who are engaged in research activities (Lucas, 2006). Accordingly, this research endeavours to find a response to the question of what the path of development of

current researchers in the field of sports sciences is. What do teachers at different stages of their careers consider to contribute to the development of academic activities, and how should they develop them in a balanced way?

Therefore, the main aim of this research was to identify the differences concerning writing, research, learning, and teaching activities according to the teacher's experience and professional progression at different stages of their proficiency.

Methods

Data collection

The selection of the Faculty for Sport and Physical Education at the University of Montenegro is based on the fact that this institution had effective results in the previous decade in the field of sports sciences. Therefore, the authors of the present paper have assumed these results are based on significant capacities from younger teachers' resources, and it seems this higher education institution (HEI) represented an ideal place for this type of research. These competencies were contributing to serious development for this institution in the previous decade in organizing reputable annual scientific conferences in the field of sports sciences, and three scientific journals (Sport Mont, Montenegrin Journal of Sports Science, and Medicine and Journal of Anthropology of Sport and Physical Education) which have reached a high-ranking position in sport sciences.

Study sample

The study sample included 23 subjects (18 male and five female teachers) that have filled the standardized questionnaire out and six subjects (five male and one female teacher) that have been interviewed. The interviews were conducted with teachers from different stages of their proficiency (two teachers as early-career researchers (pre-doctoral, 1–7 years post-doctorate and/or 1–7 years higher education experience), two teachers as teacher/consolidators (7–12 years higher education experience and/or 7–12 years post-doctorate) and two teachers as experts (more than 12 years education experience)). However, the sample of respondents from the analyses with questionnaire was not proportionally balanced among teachers regarding their experience and professional progression (early-career researcher (47.8%), consolidators (21.7%), and experts (30.5%)).

According to the writing, research, teaching and learning competencies, a short description of a sample of respondents described by themselves seemed to be: writing (61.1% consider themselves to be successful writers of academic manuscripts (30.4 had a neutral attitude and 8.5% considered themselves to have a lower level of this competency); researching (52.2% of the respondents describe themselves as good researchers; 30.4% neutral, and 17.4% as not good in research competencies); teaching (87.0% think they have good teaching competencies: 8.7% neutral and 4.3% low level); learning (95.7 considered themselves to be excellent in learning competencies and only 4.3% had a low level).

Research instruments

Data collection comprised two standardized tools: 1) the questionnaire and 2) interviews with teachers. The questionnaire included six sections of questions about researching, administrative, and teaching obligations: 1) participant information, 2) centralized supports the institution, 3) writing, 4) research support, 5) teaching support, and 6) professional learning support: initial and continuing professional devel-

opment. The interviews with teachers last approximately half an hour each. The interview included some questions about researching, administrative, and teaching obligations. This instrument consisted of giving their explanations about the most critical factor that has contributed to their success in the four mentioned areas, about their challenges and the way of managing that challenge, professional demeanour, and advice for early-career colleagues. Respondents included all available teachers from the Faculty for Sport and Physical Education at the University of Montenegro, from early-career researchers to expert teachers.

Descriptive statistics (frequencies) and qualitative meth-

ods of analysis were used for the estimation of teacher's attitudes about science and research activities according to different stages of their proficiency.

Results

Statistical indicators in Figure 1 show that there were some differences among teachers in the writing process and support from the early-career researcher of an expert teacher. The early-career researchers see lack of formal writing training (18.2%) as a significant barrier in academic writing, as well as other activities: workloads (e.g., teaching, administration; 54.6%) and lack of time generally (45.5%).

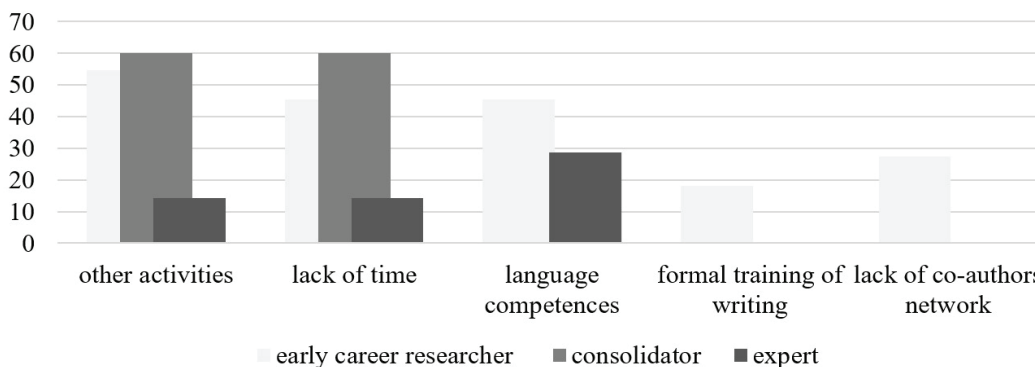


FIGURE 1. Barriers to academic writing by career stage of researchers (%)

The findings from the consolidator's results showed more obligations in the administration (60%) and lack of time generally (60%). In contrast, only 14.3% of experts considered these kinds of obligations to be barriers. The early-career researcher and consolidators have more obligations and overload in the context of administration. Probably, centralized support can be better organized, with more rational time management for all teachers as part of effective research support.

Furthermore, statistical analysis showed that centralized support for teachers at this institution exists more for research

than teaching activities at all career stages (Figure 2), which may be expected because the career progress development is conditioned by success in research work. The obtained results confirmed that the emphasis on centralized support at all career stages is much more about supporting research and writing than teaching and learning. These results are expected because teachers' progress in their academic careers is generally evaluated regarding the quality of their research and in achieving the different standards set by the university, senate, or faculty.

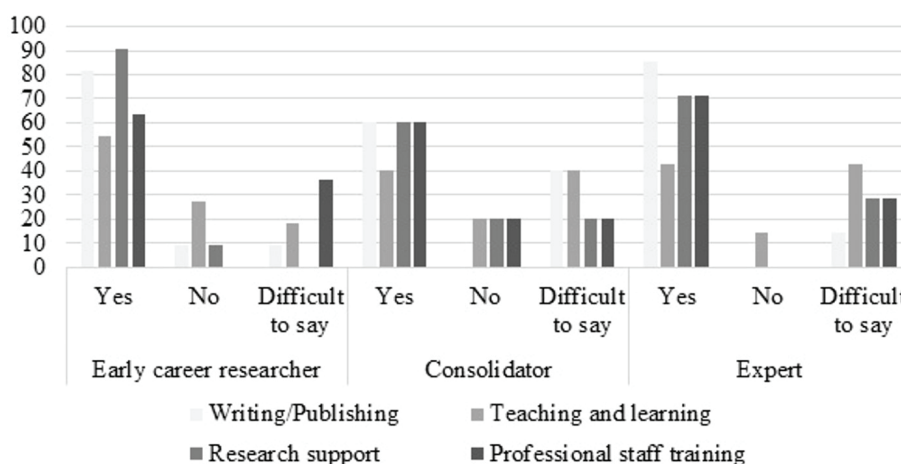


FIGURE 2. Centralized support in the institution for writing/publishing, teaching and learning, research and professional development/staff training

Popovic, Pekovic, and Matic (2019) mentioned the specificity of academic progress in social sciences in Montenegro, which is reflected in the requirement that every teacher in every selection from assistant to full professor must have at least one single-author article published in international journals. Also, this result is in line with similar research studies,

which emphasized the importance of research for contribution to increasing research performance indicators by Patel et al. (2011), and increasing income through research projects (Asif, & Searcy, 2014; Ayub Khan, 2017; Lukman, Krajnc, & Glavic, 2010).

In Figure 3, it can be observed that teachers at all career

stage levels emphasized the relevance of intrinsic motivation, institutional demands, desire to progress in the discipline, job security (above 80%), and lifelong learning (above 60%). Mobility and opportunity for international travel are close-

ly related with early-career researcher; 81.9% see this kind of opportunity as an essential step in further research career development (20% and more then consolidators and expert teachers).

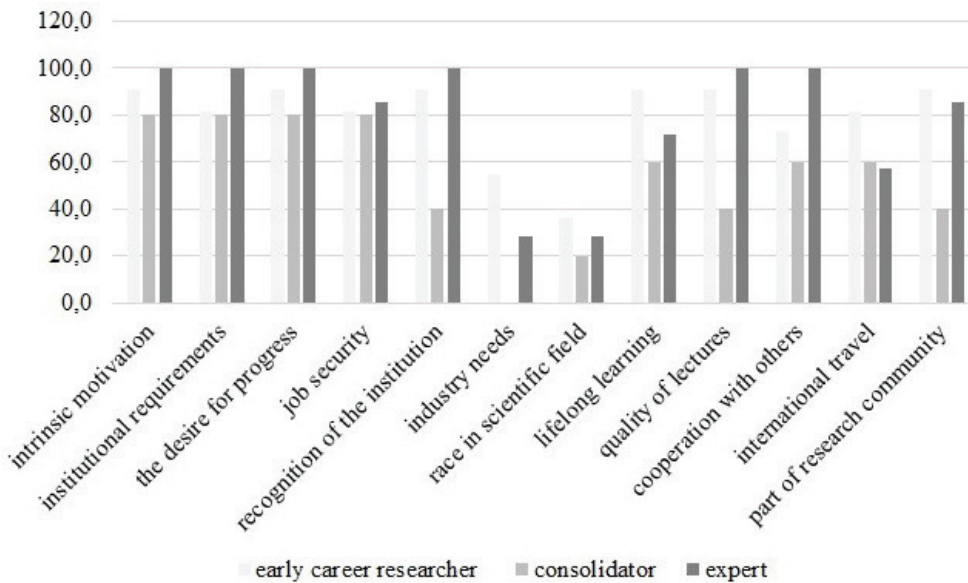


FIGURE 3. Factors that influenced motivation to be successful and effective as a researcher

The primary support for all researchers (Figure 4) comes from attending research-oriented events (conferences, seminars, etc.) according to 69.6% of respondents, flexibility in the

realization of obligations (about 60%), release time to conduct research (56.5%), and presenting the research results at international events (56.5%).

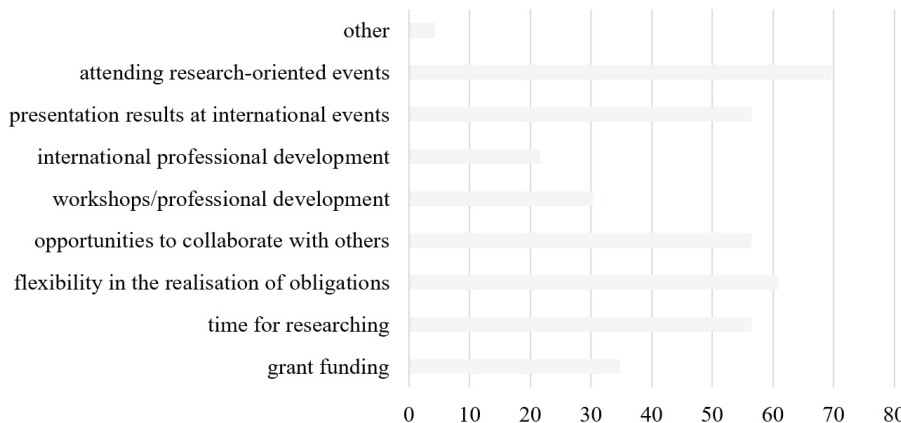


FIGURE 4. Factors of researcher's support

In teaching support among teachers at the different career stage levels, some differences are observed. In seven of the 11 variables in Figure 5, observed differences among teachers related to teaching support were calculated in the variables of research related to lectures, international teaching opportunities, team learning, awards and honours, attending workshops and seminars, mentoring and feedback from colleagues. Specifically, in all of these variables, early-career researchers confirmed a better position compared with expert teachers.

Discussion

During the earlier period, when consolidators and experts started their academic careers, we can ascertain that academic

job was more focused on teaching than research competencies. It was expected that teaching competencies could be developed without central support from the university. Therefore, over two decades ago, institutions in HEIs in Western Balkan countries, as well as the University of Montenegro as one of the youngest universities in this region, cared little about teaching support. That is a reason that revealed the significant differences in this aspect. Nowadays, it is evident that the organizational climate at the University of Montenegro, and specifically the Faculty for Sport and Physical Education, has recognized the importance of teaching support. Therefore, this research confirmed that strengthen the self-esteem of teachers covered by researching results which can determine the quality of their lectures.

Further, we used a qualitative analysis based on informa-

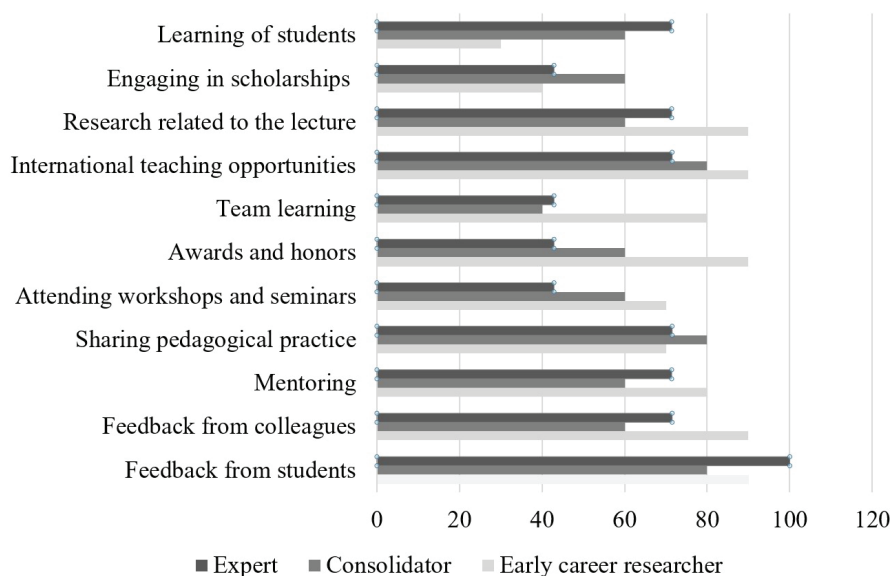


FIGURE 5. Important factors for teaching development

tion from interviews. First, we evaluated the most important factors in a teacher's success as a researcher, writer, teacher, and learner. Results obtained from interviews showed that the most critical factor is a desire for success and the work which teachers have invested in achieving the planned goal. Further analysis showed that the quality of presentations and of the lecturer of the subject Research Methodology, which contributes to the dissemination of student's interest or other audience, and "pulled the trigger" for further research interest for repetitions and creating some new research activities. At the same time, teachers indicate the basic requirements in methodology, such as being persistent that research goes exactly as the project is designed, and always processing accurate data. Such practices ensure that all that they learn/do during their research/writing enriches them with new knowledge, which they will most definitely need in further career development. Based on that, we can conclude that course of Research Methodology and the professor who teaches and motivates others in this area must be a very innovative, creative, charismatic person.

These facts can contribute to the better transfer of useful information in this field and affect the motivation of future young researchers to continue and improve their planning research design. Also, as one of the most important in all four areas, teachers emphasized the ability to accept new knowledge and disseminate it to others. Logically, the majority of teachers gave advice that is reflected in strengthening a clear desire for success and value and hard work that can be invested in achieving the set goal.

Furthermore, the differences between teachers who did and did not achieve success, effectiveness, and productivity across the four areas were identified. The significant differences in the successful teacher come from the creative atmosphere and ambience of support of other colleagues (especially mentors) in the research who were warmly welcomed and creates possibilities for them to go further. Next, it seems that most depended on their desire and progressive work. Also, they emphasized the importance of many seminars organized by the Ministry of Education. Many successful teachers point out their multidisciplinary interests during the whole process of education, as well as the importance of creativity and inge-

nity in contributing to success in publishing in high-impact scientific journals.

Some academic staff emphasized an excellent relationship with other colleagues as one of the most critical factors in the whole process, because only well-networked scientists at the national and international levels have a chance to be part of good projects, more interesting research, similar. Scientists from the same or different scientific disciplines are becoming increasingly networked with strong teamwork needs, and the realization of future projects depends on international cooperation and time management.

The main barriers in the process of academic growth were found in several factors. In the first place is a misunderstanding of the social environment about the importance of scientific research. Next, respondents talked about the lack of time for adequate preparation of many subjects and presentations for students. Specifically, they mentioned the very difficult situation for the teacher with two simultaneous activities during the teaching process: introducing themselves to a new area, while presenting lectures to students without sufficient time for reading literature and developing more in-depth insights in a given field. A lack of support by advisors and others and insufficient space for independent work and progress were observed.

Lastly, identification of the most significant and effective research support provided by institutions showed that there were several ways of helping: postdoctoral studies, covering the costs of travel and registration fees for participation in scientific meetings, opportunities for using cost-effective instruments, adequate advice, and accessible scientific databases of relevant journals and works. Furthermore, a comparison of teacher's opinions about initial and continuing professional development observed the only difference in the field of negotiating institutional systems and processes; teacher experts rated these skills as very important compared to the other two groups of respondents.

This kind of information can help many researchers align and balance teachers' potentials in the different directions imposed by teaching, research, writing, and similar – in short, whatever makes an ideal teacher. Therefore, the authors expect that the results obtained can help in developing good practices in similar Western Balkan environments.

In conclusion, it is logical that advice is reflected in everything mentioned in previous paragraphs. Early-career researchers must concentrate on working solely on strengthening a clear desire for success and value and hard work that will be invested in achieving the set goal. Everything else will come by itself, sooner or later, if they consistently dedicate themselves. Also, the respondents emphasized that it should always be remembered that an early-career researcher needs to build quality relationships with other colleagues, which is one of the

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Conflict of Interest

The authors declare the absence of conflict of interest.

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most critical factors in the whole process. Likewise, advice for early-career researchers about academic writing recommended by experienced colleagues is related to learning the methodology of writing, the selection of high-quality mentors and advisors, learning from the best colleagues or experts in their environment, and networking with other scientists from related disciplines and time management skills. All of these things must be done with ethical norms, with confidence in one's work.