

SHORT TERM SCIENTIFIC MISSION (STSM) SCIENTIFIC REPORT

This report is submitted for approval by the STSM applicant to the STSM coordinator

Action number: **CA15221**

STSM title: **ESTIMATION OF DIFFERENT RESEARCH EXPECTATIONS OF FIRST-YEAR STUDENTS FROM THE SPORT SCIENCE PROGRAMMES AND THEIR TEACHERS FROM VARIOUS STAGES OF THEIR PROFICIENCY**

STSM start and end date: **01/02/2019 to 17/02/2019**

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PURPOSE OF THE STSM:

The goal of this STSM that I have conducted during my stay at the host institution was twofold.

From the reason the different research expectations of students and their teachers were found to be considerable in the previous literature (students' expectations differ from their experiences, but not substantially and teachers likely have very different research expectations of first-year and senior students), the first goal was focused on identifying how first-year students' from the Sport Science programmes at the Faculty of Sport and Physical Education at the University of Novi Sad and teachers' expectations of student research differ. The relationship between their expectations has not been fully investigated considering all the relevant dimensions, while some specific characteristics might be found in the area of Sport Science, due to the unique teaching and researching process.

On the other hand, the second goal was focused on identifying how teachers' expectations differ based on stages of their proficiency, from novice, advanced beginner, competent, proficient, to expert, primary from the reason there are not too many studies focused on this issue and from the reason the stages of proficiency might influence the teachers' expectations, mostly because the teachers who prefer the old fashion teaching approach (probably older and "more experienced" teachers) are less focused on students' research expectations and their needs. Lastly, it was the plan to investigate how to bridge the estimated gaps in both areas and provide some instruction and support services.

DESCRIPTION OF WORK CARRIED OUT DURING THE STSMS

At the first place, it is important to justify why the proposal was undertaken at the Faculty of Sport and Physical Education at the University of Novi Sad. It is due to the reason this university unit has a very good rating Sport Science programmes (from 201 to 300 Sport Science Schools and Departments within Shanghai Ranking's Global Ranking) and wide range of teachers, from novice to very experienced teachers (recognized experts in the field), as well as numerous students that can promise the representative sample.

Data collection involved two standardized surveys: Student Expectations of the Research Process and Faculty Expectations of Student Research that were modified by my host and me to satisfy Sport Science students and teachers requirements. Both mentioned surveys were standardized in the previous investigations, while this study has reached the variations that might be recognized in the area of Sport Science. The first mentioned survey is student survey and it is administered just to first-year classes. It is designed to explore data on students' past research experiences and their expectations of adequate

research. This survey is selected for two reasons: [1] the first-year classes contain recent high school graduates, making it possible to learn more about student research expectations upon beginning university, as well as [2] it is necessary to identify, for teachers, a specific group of students to base their own responses on when completing the faculty survey. Hence, the questionnaire contains very specific questions about past research experiences and sources they had used. Additionally, the questions are related to general activities that could influence research behaviours, such as use of technology and time spent reading that is very important part of the whole process. On the other hand, the second survey is the faculty survey and it was constructed to complement and compare with data gathered from the student survey.

From the reason the main goals of this proposal were to identify how first-year students' from the Sport Science programmes at the Faculty of Sport and Physical Education at the University of Novi Sad and teachers' expectations of student research differ, and to identify how teachers' expectations differ based on stages of their proficiency, as well as to investigate how to bridge the possibly estimated gap and provide some instruction and support services, I stayed for two weeks at the Host institution, from 1 to 17 February 2019, and use this proposed period to set up the adequate protocol for research and do data collection, as well as to analyse the collected data. From the reason, it takes much more time to complete the whole investigation, my host and I will continue our collaboration in the future. However, I have done several tasks during my stay: [1] set up the specific protocol for the Sport Science study programmes (modified two standardized surveys: Student Expectations of the Research Process and Faculty Expectations of Student Research); [2] translated the questionnaires from English into Serbian language and created the online questionnaires that was distributed to first-year students and teachers; and [3] Conducted the survey among teachers (38 out of 43 teachers). Although I proposed to conduct the survey among the students during my stay at Host University, I had to postpone this activity because of the influenza epidemic and the semester started one week later. With the help of my Host, all activities were carried out in the shortest way and we have collected the data from the students (194 first-year students) and did data analysing and presenting the preliminary results, as well as prepare this scientific report.

DESCRIPTION OF THE MAIN RESULTS OBTAINED

It is important to highlight that the gender balance was not proportional among the students (31% of females vs. 69% of males) and this might be a distracting factor in this research. However, Sports Science programmes are much more popular among male students in Serbia and this is the fact we could not avoid it. On the other hand, it is interesting to highlight that 4.6% of students don't have a mobile phone at all, while 28.4% of students don't have a laptop and this is a huge percent of them who don't have a chance to use online resources in the research process. However, majority of the students feel very prepared (47.4%) or somewhat prepared (25.8%) to do university-level research and rated their academic research skills excellent (23.2%) and very good (51.5%) that are high percent from my point of view and I must be concluded they are quite self-confident. Nevertheless, the gulf between student and teacher research expectations was found to be considerable, mostly from the reason majority of the teacher believe students are not prepared at all (22.2%) or they are not very prepared (63.9%) to do university-level research and rated the first-year students' academic research skills average (47.2%), not very good (36.1%) or terrible (11.1%). When we asked the students: "Who do you think is responsible for you learning the skills necessary to succeed at carrying out university-level research?", over half of the students (53.1%) selected the teachers, while 38.1% of them recognized themselves to be the most responsible. On the other hand, the teachers expected that they are more responsible (69.4%), but significant number of teachers (38.1%) believe the students are the most responsible in this process. Further, it is also interesting to add that 43.3% of students indicated that they spend over 20 hours a week in reading books, magazines, journals and/or newspapers for school, work and/or pleasure (reading could be in print or online, but shouldn't include general web browsing, e-mail or gaming). On the other hand, just 18% of student spent more than 20 hours per week online, e.g., general web browsing, Facebook, e-mail, gaming, etc. and this is very interesting finding as these social group is much more focused on reading in traditional way comparing to online reading and in the time of modernization and industrialization, we could isolate the factor that influenced sports science students to read more in the traditional way and less read online. The gulf between student and teachers research expectations was also found in the areas as spending time in working on the research component when they are assigned to prepare a 10-page paper, as well as recognizing the percentage of the research material do students expect to find using Google platform. Namely, over half of the teachers believe the students will work the shortest period of time in working on the research component when they are assigned to prepare a 10-page paper, while the students don't believe so, they expect to work on it at least more than two hours comparing to teachers' expectations. Further, students give preference to the material they will find on Google platform in relation to the percentage expected by teachers. The gulf between student and teachers research expectations was also recognized in the areas as rating students' overall internet searching skills.

Over half teachers rated these students' skills as average, while most of students rated it as excellent (34%) and good (53.1%). Taking into account all of the foregoing, it is clear that the expectations of students and teachers vary and that descriptive results are not sufficient for more serious conclusions, so more advanced analysis is necessary.

On the other hand, the second goal was focused on identifying how teachers' expectations differ based on stages of their proficiency, from novice, advanced beginner, competent, proficient, to expert. When we talk about preparedness of first-year students to do university-level research, we did not recognize any various expectation among the different stages of teachers' proficiency, just small differences, and most of them agree the students are not very prepared or they are not prepared at all. They also agree on the following questions: "What percentage of first-year students do you think know what a research database is?", "What percentage of first-year students do you think know what citation and plagiarism are?", and "How would you rate first-year students' academic research skills?" and don't have too positive expectations. The gulf among the different stages of teachers' proficiency is recognized in the area of responsibility for first-year students learning the skills necessary to succeed at carrying out university-level research. It is interesting the most of experts gave priority to the students themselves, while others (novice, advanced beginner, competent, and proficient) give priority to the teachers. Further, most of questions did not indicate any differences, but it is very important to highlight that novice did not expect first-year students to go to their teachers if they need help with their assignments and recognized just colleagues and family to be contacted. On the other hand, all other stages members of the teachers' proficiency gave priority to professors, while the competent gave priority to the colleagues.

In conclusion, it is interesting to highlight that the gulf between student and teacher research expectations was found and need to be further analysed in the following stage of our research, while the gap between the different stages of teachers' proficiency is not considerable. So the further activities need to be focused on investigation how to bridge the estimated gaps in the areas that the different expectation were recognized and provide some instruction and support services.

FUTURE COLLABORATIONS (if applicable)

It is important to start with the fact that building advanced knowledge about such relationships as estimation of different research expectations of first-year students from the sport science programmes and their teachers from various stages of their proficiency, with a focus on Western Balkan's HEIs, is the main reason for this STSM and it is strongly related to this Action objectives. Hence, this STSM should specifically contribute to the scientific objectives of the COST Action, whilst at the same time allowing those partaking in the missions to learn new techniques, gain access to specific data, instruments and methods not available in my home institution. The main impact of the STSM attendance was personal impact at the first place, mostly due to the reason I had a chance to stay unusually longer and meet various people from the Host institution, as well as work with them closely. I was primarily focused on developing personal connections that I cannot completely do through emails, as well as skype and WEBEX meetings. From the professional perspective I have to underline I have worked with my Host and his research team and we did a great job, so we have plan to continue working on my STSM topic, as well as discuss some further research questions. From the reason I was so satisfied and thankful to my host colleague and his research team, I recommend them the training school organized by our COST Action and one of them was selected for the upcoming training school in Skopje. On the other hand, I have discussed some further activities with my Host and we have concluded that we are interested to present the results from the STSM research at some international conference and apply for the ITC conference grant. In addition, I encourage my Host to prepare his own STSM proposal and submit it through our COST Action. Generally speaking, this COST Action helped me a lot to strengthen the existing research connections, to travel and meet new people, as well as start working with them, to invite some of my connections and possibly host them through our COST Action, and many other satisfactions that I cannot explain at the moment. From the previously mention, I would like to thank you for the opportunity to have this report and promise you that I will continue to work in the line of the COST Action objectives and keep networking with the novice, advanced beginners, competents, proficient, and experts from the field.