SELF-PERCEPTION OF SKILLS SPECIFIC TO PROFESSIONAL DEVELOPMENT IN PHYSICAL EDUCATION AND SPORTS

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Abstract: The aim of our study was to identify the perception of the role of mentors and mentees in the initial vocational training process (mentoring process). Differences between the amounts of scores obtained in the questionnaire for self-assessment of the perception of specific competencies in physical education and sports (EFS) between the two samples of the preliminary study was 3.09 points, the group of mentors registered 115.17 points, and the group of mentees 118.26 points. The total cumulative value recorded by both samples is between 160-105 points according to the score of the questionnaire, which indicates that both samples have a very good perception of the level of development and manifestation of EFS specific competencies in carrying out initial teaching and training activities. The development and implementation of an effective mentoring process during the initial training period is impetuous and we believe that it will ensure the premises of a teaching career focused on continuous and effective professional development, and implicitly by expanding professional skills specific to physical education and sports.

Key words: mentoring, mentored, physical education, specialized skills, inter-transdisciplinary skills.

1. Introduction

The modern approach of general education must be correlated with the tendencies of updating and dynamizing the contents and on permanent professionalization of the teachers. The permanent updating and extension of teachers' competencies facilitates the modernization and improvement of the

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complex process of physical education which has as major objectives: social integration, health optimization, physical development and optimization of motor skills [6], [7], [9], [10]. The challenges of modernizing and adapting physical and sports education are complex and involve changes in the specific objectives, forms of organization and technologies and methods used and aim at both the training of teachers and the work of students [2], [4], [5]. The training of teachers specialized in physical education and sports with high professional qualification is a desideratum of the current education, and this objective can be achieved only by the innovative reform of the process of training and development of the teaching career, especially in the beginning. The mentoring process requires establishing a relationship directed between the mentor and the mentored person and must be based on a mutual appreciation of the involvement, role and responsibilities of each party.

2. Materials and Methods

2.1. Hypotheses of preliminary study

The specific hypothesis of this preliminary study was based on the assumption that by identifying the perception of mentors and mentors on the level of development of specific professional skills in physical education and sports they can be aware and optimized in the initial training process (mentoring process).

2.2. Research organization

This preliminary research was conducted between March and July 2016, and included two sessions: one for mentors and one for mentors. Mentored sample - 40 beginning and / or master students in the master's degree programs in school physical education and leisure activities at the Faculty of Physical Education and Mountain Sports of the Transilvania University of Brașov”. Sample of mentors - 24 mentors / tutors of specialized practice (pedagogical practice), coordinating university teachers for specialized internships and teachers with experience in coordinating students during the internships of specialized practice / pedagogical practice (first grade teachers, collaborators at the faculty) profile from Brașov). Specialists who have been mentoring and guiding the pedagogical / specialized practice in the last 3 years have been eligible for inclusion in the group of mentors.

2.3. Evaluation tools

In the study we used a standardized and validated questionnaire called - The self-assessment questionnaire for the perception of specific EFS competencies by mentors and mentors, included 40 items, divided into two subscales [8-10]. The questionnaire was developed in Google Form and distributed online to respondents. The questionnaire consists of 3 parts: one demographic, one on general skills and the last on specific skills. In our preliminary study we analyzed only the last part about self-perception skills specific to vocational training in physical education and sports. For the evaluation of each item of the questionnaire, the Likert scale with 4 levels of assessment was used, where mentors and mentors assessed their level of specific competencies, so the scores were: 1 point - completely incompetent, 2 points - less
competent, 3 points - competent, 4 points - very competent. Questionnaire score (personal contribution): between 160-105 points have a very good perception of the level of development and manifestation of specific EFS skills; between 105-50 points the perception is a good one that needs to identify the aspects that need revision or improvement; below 50 points the perception of the mentors and mentors regarding the specialized competencies is unsatisfactory and requires a major involvement and theoretical and practical activity in order to improve the specialized competencies and to optimize the level of professional competence.

2.4. Statistical analysis

In the preliminary research we used the bibliographic method: survey, statistical method and graphic method. The results were processed in SPSS 24, and the calculated statistical parameters were:

Cronbach’s Alpha (α), arithmetic mean (X), standard deviation (SD), difference of arithmetic means (ΔX), sum of points (Σ), difference of sums (ΔΣ), Student’s test (T), confidence coefficient with the two levels lower and upper (95% CI), the probability level selected for this preliminary research was p 0.05.

3. Results

For the questionnaire for the perception of specific physical and sports education competencies, the value of Cronbach’s Alpha (α) for the sample of mentors was 0.802, and for the sample of mentors of 0.834 which shows a very good internal consistency, the questionnaire being statistically validated and we decided to use it in our preliminary and final research.

Table 1

Descriptive statistics of the Questionnaire for self-assessment of the perception of specific competences EFS, subscale 1 - Specialized didactic competences

| Items                                                                 | Group | X     | SD   | t    | P     | 95% CI  |
|-----------------------------------------------------------------------|-------|-------|------|------|-------|---------|
|                                                                       |       |       |      |      |       | Lower   | Upper   |
| 1. Recognizing and mentoring students with athletic talent            | Mz    | 3,450 | .638 | 34,173 | .000  | 3,245   | 3,654   |
|                                                                        | M     | 3,416 | .653 | 25,599 | .000  | 3,140   | 3,692   |
| 2. Qualification to demonstrate skills that are part of the curriculum | Mz    | 3,225 | .831 | 24,525 | .000  | 2,959   | 3,491   |
|                                                                        | M     | 3,166 | .816 | 19,000 | .000  | 2,821   | 3,511   |
| 3. Respect for the principles of inclusion, individualization and differentiation | Mz    | 2,800 | .911 | 19,429 | .000  | 2,508   | 3,091   |
|                                                                        | M     | 2,875 | .850 | 16,566 | .000  | 2,516   | 3,234   |
| 4. Qualification for the pedagogical management of the class at EFS    | Mz    | 3,175 | .843 | 23,795 | .000  | 2,905   | 3,444   |
|                                                                        | M     | 3,416 | .816 | 19,000 | .000  | 2,821   | 3,511   |
| 5. Qualification for first aid in the event of injury                  | Mz    | 2,650 | .948 | 17,667 | .000  | 2,346   | 2,953   |
|                                                                        | M     | 3,041 | .750 | 19,852 | .000  | 2,724   | 3,358   |
| 6. Qualification to demonstrate skills that are not part of the program| Mz    | 2,600 | 1,007 | 16,319 | .000  | 2,277   | 2,922   |
|                                                                        | M     | 2,958 | .907 | 15,963 | .000  | 2,575   | 3,341   |
| 7. Qualification for different ways of assessing and grading knowledge in SAI | Mz    | 2,600 | .955 | 17,211 | .000  | 2,294   | 2,905   |
|                                                                        | M     | 3,000 | .884 | 16,613 | .000  | 2,626   | 3,373   |
| 8. Ability to use different teaching methods and forms of teaching EFS| Mz    | 3,125 | .852 | 23,171 | .000  | 2,852   | 3,397   |
|                                                                        | M     | 3,208 | .779 | 20,176 | .000  | 2,879   | 3,537   |
| Items                                                                 | Group | X        | SD    | t     | P     | 95% CI Lower | 95% CI Upper |
|----------------------------------------------------------------------|-------|----------|-------|-------|-------|--------------|--------------|
| 9. Qualification to encourage students to be active in leisure sports | Mz    | 2,625    | 1,102 | 15,063| .000  | 2,272        | 2,977        |
|                                                                      | M     | 3,083    | .880  | 17,154| .000  | 2,711        | 3,455        |
| 10. Organizational skills and knowledge for the implementation of school and extracurricular programs | Mz    | 3,075    | .888  | 21,893| .000  | 2,790        | 3,359        |
|                                                                      | M     | 3,208    | .832  | 18,869| .000  | 2,856        | 3,560        |
| 11. Qualification for the evaluation of one’s own pedagogical activity in education | Mz    | 3,175    | .843  | 23,795| .000  | 2,905        | 3,444        |
|                                                                      | M     | 3,333    | .761  | 21,448| .000  | 3,011        | 3,654        |
| 12. Qualification for setting objectives according to the curriculum | Mz    | 3,050    | .985  | 19,568| .000  | 2,734        | 3,365        |
|                                                                      | M     | 3,250    | .846  | 18,798| .000  | 2,892        | 3,607        |
| 13. Qualification to encourage a student’s personal progress         | Mz    | 3,325    | .729  | 28,813| .000  | 3,091        | 3,558        |
|                                                                      | M     | 3,333    | .761  | 21,448| .000  | 3,011        | 3,654        |
| 14. Qualification for planning a process according to the analysis of the status, the curriculum | Mz    | 3,100    | .871  | 22,505| .000  | 2,821        | 3,378        |
|                                                                      | M     | 3,250    | .794  | 20,053| .000  | 2,914        | 3,585        |
| 15. Qualification for the formation and transmission of feedback information | Mz    | 2,775    | .946  | 18,533| .000  | 2,472        | 3,077        |
|                                                                      | M     | 3,250    | .794  | 20,053| .000  | 2,914        | 3,585        |
| 16. Qualification for the efficient transmission of theoretical content in SAI lessons | Mz    | 2,625    | 1,074 | 15,392| .000  | 2,280        | 2,970        |
|                                                                      | M     | 3,208    | .832  | 18,869| .000  | 2,856        | 3,560        |
| 17. Qualification to encourage creativity in finding solutions to motor tasks | Mz    | 3,075    | .888  | 21,893| .000  | 2,790        | 3,359        |
|                                                                      | M     | 3,041    | .858  | 17,354| .000  | 2,679        | 3,404        |
| 18. Qualification for connecting EFS with other subjects              | Mz    | 3,075    | .888  | 21,893| .000  | 2,790        | 3,359        |
|                                                                      | M     | 3,083    | .829  | 18,206| .000  | 2,733        | 3,433        |
| 19. Qualification to encourage student learning in an instructive and creative way | Mz    | 2,975    | .973  | 19,324| .000  | 2,663        | 3,286        |
|                                                                      | M     | 3,208    | .832  | 18,869| .000  | 2,856        | 3,560        |
| 20. Qualification for diagnosis of physical condition                | Mz    | 3,375    | .704  | 30,284| .000  | 3,149        | 3,600        |
|                                                                      | M     | 3,291    | .690  | 23,362| .000  | 3,000        | 3,583        |

Mz- group mentees, M – group mentors

The best values given by the group of mentors (Table 1) were recorded at: item 1 - Recognition of students with sports talent and their guidance with 3.25 points, item 20 - Qualification for diagnosing physical condition with 3,375 points and item 13 - Qualification to encourage a student’s personal progress by 3.25 points. The lowest results recorded by the sample of mentors were in item 6 - Qualification to demonstrate skills that are not part of the program and in item 7 - Qualification for different ways of assessing and grading knowledge in EFS with 2.6 points. For the sample of mentors, at subscale 1, the highest score was registered in item 1 - Recognition of students with sports talent and their guidance and in item 4 - Qualification for the pedagogical management of the class at EFS, both with 3,416 points (Table 1). The good scores recorded by the sample of mentors in most of the items reflect a good concern for the further professional development and implicitly for the formation and extension of the specialized didactic competences in physical and sports education.
Table 2: Descriptive statistics of the Questionnaire for self-assessment of the perception of specific competences EFS, subscale 2- Inter-trans-disciplinary competences

| Items                                                                 | Group  | X      | SD    | T   | P    | 95% CI  |
|-----------------------------------------------------------------------|--------|--------|-------|-----|------|---------|
|                                                                       |        |        |       |     |      | Lower   |
|                                                                       |        |        |       |     |      | Upper   |
| 1. Understanding methodological ways in teaching skills that are not part of the program | Mz     | 3.125  | .852  | 23.171 | .000 | 2,852  | 3,397  |
|                                                                       | M      | 3.041  | .858  | 17.354 | .000 | 2,679  | 3,404  |
| 2. Understanding the historical aspects of EFS                        | Mz     | 2.600  | .955  | 17.211 | .000 | 2,294  | 2,905  |
|                                                                       | M      | 2.583  | .880  | 14.373 | .000 | 2,211  | 2,955  |
| 3. Understanding the physical and motor development of children and adolescents | Mz     | 3.075  | .858  | 22.641 | .000 | 2,800  | 3,349  |
|                                                                       | M      | 3.041  | .806  | 18.477 | .000 | 2,701  | 3,382  |
| 4. Understanding the methodical ways of teaching motor skills in the curriculum | Mz     | 3.175  | .812  | 24.701 | .000 | 2,915  | 3,435  |
|                                                                       | M      | 3.166  | .761  | 20.375 | .000 | 2,845  | 3,488  |
| 5. Understanding the EFS curriculum.                                   | Mz     | 2.750  | 1.006 | 17.282 | .000 | 2,428  | 3,071  |
|                                                                       | M      | 2.750  | .989  | 13.621 | .000 | 2,332  | 3,167  |
| 6. Understanding the general didactics of the EFS process              | Mz     | 3.050  | .875  | 22.031 | .000 | 2,770  | 3,330  |
|                                                                       | M      | 3.041  | .858  | 17.354 | .000 | 2,679  | 3,404  |
| 7. Understanding the functional anatomy aspects of EFS                 | Mz     | 2.675  | 1.022 | 16.546 | .000 | 2,348  | 3,002  |
|                                                                       | M      | 2.875  | .991  | 14.201 | .000 | 2,456  | 3,293  |
| 8. Understanding first aid health issues                               | Mz     | 2.500  | 1.012 | 15.612 | .000 | 2,176  | 2,823  |
|                                                                       | M      | 2.500  | .978  | 12.523 | .000 | 2,087  | 2,913  |
| 9. Understanding how to use different pedagogical strategies           | Mz     | 2.4750 | 1.109 | 14.113 | .000 | 2,120  | 2,829  |
|                                                                       | M      | 2.333  | 1.049 | 10.892 | .000 | 2,190  | 2,776  |
| 10. Understanding the importance of continuous professional development for the EFS teacher | Mz     | 3.200  | .911  | 22.204 | .000 | 2,908  | 3,491  |
|                                                                       | M      | 3.208  | .883  | 17.788 | .000 | 2,835  | 3,581  |
| 11. Understanding the physiological aspects of EFS                     | Mz     | 2.750  | 1.080 | 16.102 | .000 | 2,404  | 3,095  |
|                                                                       | M      | 2.541  | 1.178 | 10.563 | .000 | 2,043  | 3,039  |
| 12. Understanding the psychological aspects of EFS                     | Mz     | 2.575  | 1.106 | 14.714 | .000 | 2,221  | 2,929  |
|                                                                       | M      | 2.375  | 1.134 | 10.252 | .000 | 1,895  | 2,854  |
| 13. Understanding the theory of playing sports                         | Mz     | 2.725  | 1.109 | 15.539 | .000 | 2,370  | 3,079  |
|                                                                       | M      | 2.583  | 1.138 | 11.112 | .000 | 2,102  | 3,064  |
| 14. Understanding social circumstances in EFS lessons                  | Mz     | 3.350  | .802  | 26.410 | .000 | 3,093  | 3,606  |
|                                                                       | M      | 2.916  | 1.017 | 14.037 | .000 | 2,486  | 3,346  |
| 15. Understanding financial flow in EFS                                | Mz     | 2.850  | 1.001 | 18.002 | .000 | 2,529  | 3,170  |
|                                                                       | M      | 2.625  | .969  | 13.262 | .000 | 2,215  | 3,034  |
| 16. Understanding the biomechanical aspects of EFS                     | Mz     | 2.675  | 1.071 | 15.789 | .000 | 2,332  | 3,017  |
|                                                                       | M      | 2.416  | 1.212 | 9.761  | .000 | 1,904  | 2,928  |
| 17. Understanding the influence of the media on EFS                    | Mz     | 2.450  | 1.153 | 13.432 | .000 | 2,081  | 2,818  |
|                                                                       | M      | 2.208  | 1.062 | 10.183 | .000 | 1,759  | 2,656  |
| 18. Understanding the cultural aspects of EFS                          | Mz     | 2.350  | .948  | 15.668 | .000 | 2,046  | 2,653  |
|                                                                       | M      | 2.333  | 1.007 | 11.349 | .000 | 1,908  | 2,758  |
| 19. Understanding the philosophical aspects of EFS                     | Mz     | 2.125  | 1.113 | 12.067 | .000 | 1,768  | 2,481  |
|                                                                       | M      | 2.083  | 1.138 | 8.961  | .000 | 1,602  | 2,564  |
| 20. Understanding the social importance of EFS                         | Mz     | 2.825  | 1.106 | 16.143 | .000 | 2,471  | 3,179  |
|                                                                       | M      | 2.500  | 1.142 | 10.724 | .000 | 2,017  | 2,982  |

Mz - group mentees, M – group mentors
The most significant results of the mentors (Table 2) were recorded in items: 34 - Understanding social circumstances in EFS lessons with 3,125 points, item 30 - Understanding the importance of continuous professional development for the EFS teacher and item 21 - Understanding the methodical methods in teaching skills that are not part of the program with 3,125 points. Items that scored high were considered by mentors to define the professional competence profile of beginning teachers in the initial vocational training stage. The lowest results of the auditors were obtained in item 29 - Understanding the philosophical aspects of the SAI with 2,125, in item 38 - Understanding the cultural aspects of the EFS with 2.35 points.

In the research, the most significant results obtained by mentors at subscale 2 - Inter-trans-disciplinary competences in the self-assessment of the EFS-specific perception of competence questionnaire (Table 2) were recorded in item 30 - Understanding the importance of continuous professional development for the teacher of EFS with 3,208 points, item 24 - Understanding the methodical ways of teaching motor skills in the curriculum with 3,166 points. Item 39 - Understanding the philosophical aspects of EFS and item 37 - Understanding the influence of the media on EFS had the lowest score of 2,083 points and 2,208 points respectively.

Table 3
Centralization of the results in study 3 - Self-assessment questionnaire of perception of specific EFS competencies

| Subscala                                  | Groups       | X    | ΔX  | Σ   | ΔΣ  | α   |
|------------------------------------------|--------------|------|-----|-----|-----|-----|
| 1. Specialized teaching skills           | Mentored group | 5,98 | 0.34 | 59,87 | 3.41 | .764 |
|                                           | Mentoring group | 6,32 | 0.03 | 63,26 | 0.30 | .860 |
| 2. Inter-trans-disciplinary skills       | Mentored group | 5,53 | 0,03 | 55,30 | 0.30 | .804 |
|                                           | Mentoring group | 5,50 | 0      | 55,00 |    | .817 |

The analysis of the total scores for both competence subscales allows us to interpret the results from the perspective of the perceptual impact of the mentors and mentors on the professional competencies specific to physical education and sports. For subscale 1 of the survey, the total score achieved by the sample of mentors was 59.87 points lower by 3.41 points compared to the total score of the sample of mentors which was 63.26. In the case of sub-scale 2 on cross-disciplinary skills, the difference between the two samples was very small of only 3 points, which highlights the fact that both have similar perceptions of the importance of developing these skills in the initial training process (Table 3). The two subscales of the questionnaire for both samples had a good and very good internal consistency, Cronbach's Alpha values being between 0.764 and 0.860.
4. Discussion

The results of our preliminary study contribute to expanding the knowledge of the field of physical education and sports and confirm the trends identified in previous studies on the importance of the mentoring process. Mentoring programs have been introduced to improve the professional experiences of teachers at different stages of their careers, mainly in the early stages, in the initial stage and consists in providing continuous and specific assistance for the professional development of teachers [11]. The motivations for starting and continuing the teaching career are very important, being influenced by a series of institutional, financial, human and personal factors. According to studies, the decision to develop a teaching career depends on financial conditions, school infrastructure, school location, the harmony of the teaching staff, etc., but a determined role is played by the intrinsic motivations of each teacher [8], [12]. The didactic activity represents an activity of facilitating the interactions between all the factors involved in the school instructive-educational process. An important role in the teaching career is played by the quality and variety of professional experiences in the beginning period, which represent the foundations of a dynamic and efficient teaching career.

5. Conclusions

The hypothesis specific to the preliminary study was confirmed, namely the identification of the perception of mentors and mentors on the level of development of professional skills specific to physical education and sports can determine their awareness and optimization in the initial vocational training process (mentoring process). Regarding subscales 1 - Specialized teaching competencies, we consider that the differences in perception registered between the sample of mentors and the mentors are due to the level of experience and expertise in the teaching activity of physical education and school sports. The results at subscale 2 were approximately equal between the two research samples, reflecting a correct perception of inter- and trans-disciplinary
competencies. The role of these competencies is major and contributes to completing the profile of professional competence of teachers with specialization in physical education and sports.

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