

Hernández-Hernández & Reina, 2018). Therefore, the objective in this paper was to verify the perception that the students of the Teaching in Primary Education Degree of the Faculty of Education in Zaragoza (Spain) have on the relationship between the specific training in these contents and the acquisition of different professional competences.

2. Material and methods

A total of 208 students participated voluntarily in the study. 158 belong to Physical Education on Primary School, PEPS, (64.49% of the total enrolled in this subject developed on third-year), which provides an introduction to the contents of the activities in natural environment. The rest belonged to the optional subject on fourth-year, Physical Activities in Natural Environment, PANE, whose treatment is more specific and exhaustive (80.65% of the students enrolled).

An ad hoc questionnaire has been used. It was based on previous studies on the perceptions that university students have about their own training (Andrade-Abarca, Ramón-Jaramillo & Loaiza-Aguirre, 2018; Castejón, Santos & Palacios, 2015). In this sense, the first block asked about the degree to which it is believed that the activities in natural environment developed from each subject will contribute to the acquisition of the transversal competences of the Teaching Degree (Table 1). Whereas, in the second block, students were asked about personal and prosocial competences. The original likert scale from 0-7 points (Peire & Aguilar, 2018) was modified to 5 points to match the rest of the items.

Table 1. *Transversal competences on Primary Teaching Degree*

TC	Title
TC1	Integrate the competences of the different subjects, to guide the Final Degree Project and professional practice
TC2	Understand learning as a global fact, designing learning situations
TC3	Manage and self-regulate the progression of learning
TC4	Address the uniqueness of different professional contexts
TC5	Involve students in their own learning and work
TC6	Team work practicing different roles within the group
TC7	Participate in institutional management
TC8	Inform and involve society in the purposes of the institution
TC9	Use and apply Information and Communication Technologies (ICT), to learn, communicate and share knowledge in different contexts
TC10	Develop the ability to communicate, to teach in the own language and in another European languages
TC11	Facing the duties and ethical dilemmas of the profession
TC12	Organize the own continuous training and motivate the quality
TC13	The own practice research
TC14	Search, manage, process, analyze and communicate information effectively, critically and creatively

The questionnaire was applied and responded the first day of the 2018/19 course. The content of these sessions was the same for both cases: presentation of

contents, calendar of theoretical and practical sessions and evaluation system. For third course students, special emphasis was placed on responding exclusively in relation to activities in natural environment, since it only represents a fifth of the contents developed in the PEPS subject. The results were analyzed using the statistical program SPSS 21.0 for Windows.

3. Results and Discussions

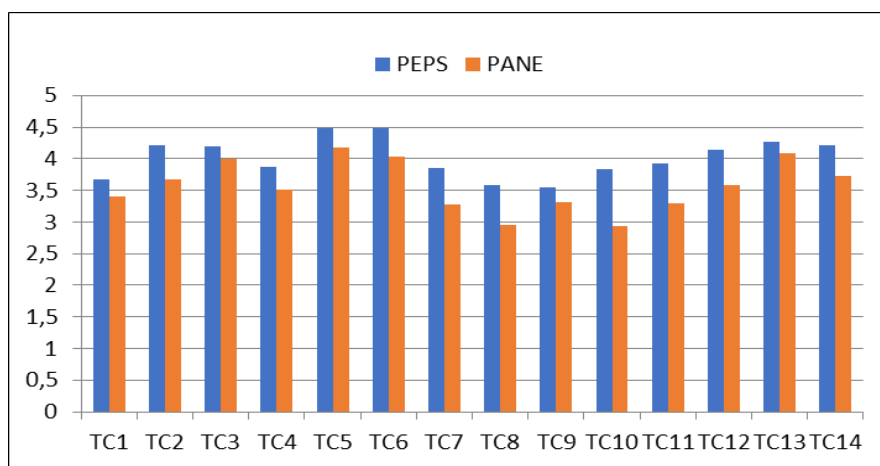
Table 2 shows the number of participants in this descriptive study. The inclusion criterion was to complete the questionnaire upon receiving the presentation session of the respective subject.

Table 2. *Participants*

Subject	Man	Woman	Total
PEPS	48	110	158
PANE	26	24	50
Total	74	134	208

PEPS: Physical Education on Primary School; PANE: Physical Activities in Natural Environment

According to figure 1, the average values reflected by the students for each Degree transversal competence is higher in the PEPS subject than in the PANE. Significant differences were found in half of the competencies analyzed depending on the subject: TC3 ($p = .000$), TC6 ($p = .001$), TC7 ($p = .000$), TC10 ($p = .000$), TC11 ($p = .001$), TC12 ($p = .000$) and TC 14 ($p = .002$).



PEPS: Physical Education on Primary School; PANE: Physical Activities in Natural Environment; TC: Transversal Competence

Figure 1. *Comparison of results on transversal competences*

After organizing the transversal competences according to the average values (table 3): The following three are expected to be most influenced by the work on

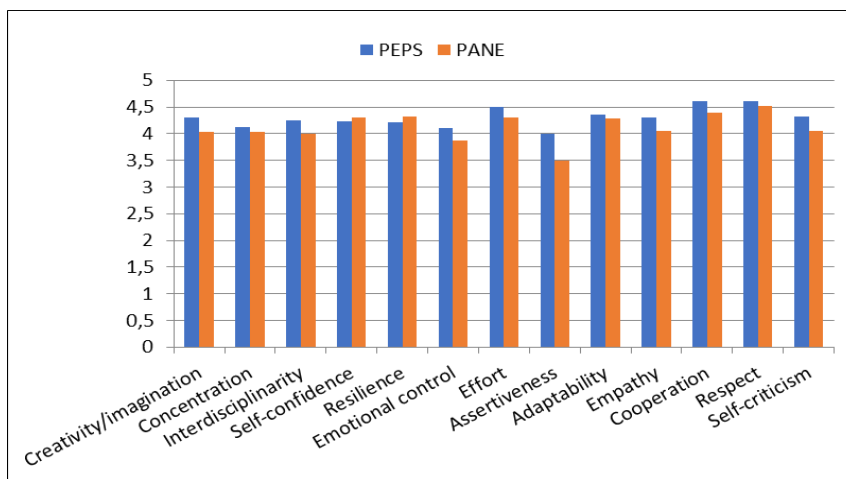
content of activities in natural environment in both subjects: TC5, Involve students in their own learning and work; TC6, Team work practicing different roles within the group; TC13, The own practice research. The perception differs for the rest of the transversal competences, although both groups point out TC8, Inform and involve society in the purposes of the institution, as one of the least valued.

Table 3. *Transversal competences rating*

Total	Value	PEPS	Value	PANE	Value
TC5	4.41±.74	TC5	4.49±.69	TC5	4.18±.85
TC6	4.38±.76	TC6	4.49±.69	TC13	4.08±.80
TC13	4.22±.76	TC13	4.27±.74	TC6	4.04±.86
TC3	4.15±.73	TC2	4.22±.71	TC3	4.00±.70
TC14	4.10±.84	TC14	4.22±.75	TC14	3.72±.97
TC2	4.09±.74	TC3	4.20±.73	TC2	3.68±.68
TC12	4.01±.81	TC12	4.15±.74	TC12	3.58±.86
TC4	3.79±.90	TC11	3.92±.90	TC4	3.52±.89
TC11	3.77±.94	TC4	3.88±.88	TC1	3.40±.76
TC7	3.72±.97	TC7	3.86±.86	TC9	3.32±.91
TC10	3.63±1.02	TC10	3.84±.94	TC11	3.30±.91
TC1	3.61±.82	TC1	3.67±.83	TC7	3.28±1.16
TC9	3.50±.94	TC8	3.58±.87	TC8	2.96±.93
TC8	3.43±.92	TC9	3.55±.95	TC10	2.94±.98

PEPS: Physical Education on Primary School; PANE: Physical Activities on Natural Environment; TC: Transversal competence

The average data obtained between the two subjects is more similar than previous cases (figure 2). In fact, only significant differences in competencies were found: creativity / imagination ($p = .047$), resilience ($p = .0473$), effort ($p = .039$) and assertiveness ($p = .008$).



PEPS: Physical Education on Primary School; PANE: Physical Activities in Natural Environment

Figure 2. *Comparison of results on personal and prosocial competences*

According to table 4, respect and cooperation are the competences with the highest scores. The total sum of the participants shows that the effort appears as a third position although in the case of the PANE subject the value obtained places it in fifth position. Emotional control and assertiveness are the least influenced competences by this kind of content development. The latter has 4 points less as average value in both subjects.

Table 4. *Personal and prosocial competences rating*

Total	Value	PEPS	Value	PANE	Value
Respect	4.59±.64	Cooperation	4.61±.58	Respect	4.52±.65
Cooperation	4.56±.60	Respect	4.61±.64	Cooperation	4.40±.64
Effort	4.45±.67	Effort	4.50±.67	Resilience	4.32±.68
Adaptability	4.34±.68	Adaptability	4.35±.66	Self-confidence	4.30±.81
Self-confidence	4.25±.79	Self-criticism	4.32±.69	Effort	4.30±.65
Resilience	4.25±.79	Creativity	4.30±.67	Adaptability	4.28±.76
Self-criticism	4.25±.71	Empathy	4.30±.78	Empathy	4.06±.74
Creativity	4.24±.68	Interdisciplinarity	4.25±.70	Self-criticism	4.06±.74
Empathy	4.24±.77	Self-confidence	4.24±.78	Creativity	4.04±.70
Interdisciplinarity	4.19±.70	Resilience	4.22±.82	Concentration	4.04±.73
Concentration	4.11±.70	Concentration	4.13±.69	Interdisciplinarity	4.00±.70
Emotional control	4.05±.83	Emotional control	4.10±.80	Emotional control	3.88±.90
Assertiveness	3.88±.93	Assertiveness	3.99±.92	Assertiveness	3.50±.89

PEPS: Physical Education on Primary School; PANE: Physical Activities on Natural Environment

No significant differences were found regarding sex in the PANE subject. There were significant differences in the PEPS subject in TC6, Team work practicing different roles within the group ($p = .26$). Furthermore, some differences were found in the transversal competences in the sum of the two subjects: TC6 ($p = .30$) and TC 13 ($p = .20$), as well as in the interdisciplinary personal competences ($p = .041$) and assertiveness ($p = .006$). Besides, women pointed out higher values in the sum of the two subjects.

Discussions

The evaluation experiences of the university students' own training consulted give a crucial role to the transversal competences beyond the academic results achieved (Peñarrubia, Lizalde, Murillo & Canales-Lacruz, 2019). However, subjects cannot contribute in the same way to the acquisition of all of them. In the case of activities in the natural environment, students have highlighted those competencies related to group work and the students' own involvement in their learning process. These results coincide with different studies that have associated many benefits to the practice of activities in the natural environment at different ages, among which the social type benefits stand out (Agostini, Minelli & Mandolesi, 2018; Eigenschenk et al., 2019).

Regarding the personal and prosocial competencies analyzed, the data can be extrapolated to other areas of work on activities in the natural environment. For example, Mediavilla & Gómez (2016) point out personal treatment as one of the

main strengths indicated by users of active tourism companies. With regard to our study, Peire & Aguilar (2018) point out that the design of this specific questionnaire for activities in the natural environment can serve as a basis for the inclusion of these contents in educational programs “with knowledge and security” (p. 84). According to our results the lowest values correspond to the fourth year group remarkably, which has already experienced a first approach to these contents in the PEPS subject. It is worth noting that one of the competencies indicated by both groups with a lower value is emotional control ($4.10 \pm .80$ in PEPS and $3.88 \pm .90$ in PANE). This data is especially noticeable since risk is one of the competencies and one of the differentiating features of physical-sports activities (Latorre, Cámara & Pantoja, 2015). This guideline must be taken into account by teachers, both theoretically and in practice, when addressing specific training so as to avoid the occurrence of accidents.

4. Conclusions

The contents related to the physical activities in natural environment generate in the students high expectations in relation to the acquisition of the transversal competences of the Teaching Degree. The best rated are the involvement of students in their own learning process, the promotion of teamwork and research on their own teaching practice. Similarly, this type of physical-sports practices are perceived as an opportunity for personal skills development, among which respect and cooperation stand out.

Only resilience and self-confidence present superior values in fourth course students. Therefore, a challenge is presented to teachers of the optional fourth subject which consists in changing this trend due to the complete training and experience that it offers.

Bearing in mind all these aspects, we suggest further research in two lines: firstly, to pass the questionnaires at the end of the course, to determine the effect that both subjects have had in relation to the initial perspectives. Secondly, a longitudinal study that assesses the possible change of perceptions among students who complete the fourth course in the 2020/21 academic year compared to the collected data of this work, which correspond to the start of the 2019/20 course.

This study allows to be replicated in all those contexts in which specific training on activities in natural environment is carried out due to the simplicity of the questionnaires used. Only the transversal competences analyzed should be replaced by those which correspond to the training context, whether at university or vocational level.

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