

Generic and Specific Competencies of the Supervisor in Pedagogical Context

Madalena Cunha*¹, Graça Aparício², António Madureira²,
Luís Menezes³, Nídia Menezes⁴, Márcio Nascimento⁵,
Carla Santos⁶

¹(ESSV, CI&DETS, Instituto Politécnico de Viseu, Portugal and Universidade do Minho, CIEC, Braga, Portugal)

²(ESSV, CI&DETS, Instituto Politécnico de Viseu, Portugal)

³(ESEV, CI&DETS, Instituto Politécnico de Viseu, Portugal)

⁴(ESTGL, CI&DETS, Instituto Politécnico de Viseu, Portugal)

⁵(ESTGV, CI&DETS, Instituto Politécnico de Viseu, Portugal)

⁶(ESAV, CI&DETS, Instituto Politécnico de Viseu, Portugal)

ABSTRACT: For the success of the learning of students of higher education it is necessary that the teacher plays the supervisory action that aims to ensure a learning adapted to the biopsychosocial context of the learners. Objective: To evaluate the perspective of the students on the competences of the mentor teacher.

The study descriptive with favorable opinion of the Ethics Committee was carried out on a sample by 306 students, from a Polytechnic Institute of Portugal (81.7% women), with a mean of 21.15 years. Data collection was carried out via the online application of Cunha et al.'s (2017) Generic and Specific Supervisor Competency Scale.

The results support the importance of the assignment of a mentor teacher in College (87.5%), with follow-up from 1st to 4th year (60.4%). They also suggest the preference of daily sessions (51.6%) in the training place (52.4%), lasting less than one hour (49.7%). The characteristics most valued by the students are generic competences and the most valued item was the demonstration of empathy, patience, understanding and readiness to dialogue.

The results suggest that one should consider the evaluation of the competences obtained by the teachers when evaluating their pedagogical performance in the scope of supervision. Even though higher education students value the existence of a mentor teacher with competences for the supervision of learning, their attribution assumes relevance in the strategic management of innovative pedagogical practices in the fight against failure and school abandonment.

KEYWORDS -Higher Education/ College, Students, Supervision, Professional Competence

I. INTRODUCTION

Education is in a process of a continuous change and is facing some challenges related to its organization, modernization, renewal and universality towards social transformations and needs and the production of scientific evidences. The improvement of education quality requires the analysis of the professor's role in higher education and knowledge production. The positive effect of pedagogic supervision in the academic achievement, the prevention of academic failure and school drop-out, has promoting a common understanding of an effective strategy to achieve well-being, the improvement of student's apprenticeship as well as the progress of academic didactic. Given this scenario, the development of pedagogic competencies becomes a priority to give professors and schools a training continuity in order to adopt a strategy of a constant reflection towards their professional and educational action, which should be translated into the improvement of teaching-learning process and into the decrease of inequalities in the student's academic routes.

A higher education student presents specific characteristics, self-personality, adapting differently in distinct environments which influences, thereby, his academic performance and his psychosocial development. Entering in higher education, a student is exposed to diverse changes compared to what he was accustomed to live. These changes can, on the one hand, contribute to their development process, independence and autonomy and, on the other hand, can constitute inadequate and/or disturbing sensations. In this way, the process of adaptation to higher education is complex and potentially can generate stress-inducing situations at various moments in academic life. In this process of student life transition, the mentor teacher can help to mitigate the impact of the demands of the new reality and ensure the normal development of academic life [1]

For the success of a student's learning it is necessary that the teacher plays different roles, especially the role of guiding, mentor and supervisor, and the supervisor also has the function of negotiating the strategies of supervision with the supervised, attending to this to his personality, knowledge and goals previously determined, in order to establish a relationship promoter of learning. Pedagogical supervision aims, among other, to ensure learning adapted to the biopsychosocial context of students of higher education.

Conceptually, pedagogical supervision can be understood as the theory and practice of monitoring and regulation of teaching/learning processes that are developed in the context of formal education, as a space for personal and social transformation, based on professional reflexivity and conducive to student autonomy [2]

In order to produce this effect, the qualities and pedagogical capacities of the guiding must be improved in the course of the formative course in several learning situations. In addition to a practice of mentoring, with several technical and behavioural components, the mentor needs a posture of self-reflection and a high capacity of observation, with the final goal of a new learning [3]

The review of the literature about ideal characteristics of a mentor teacher presented by Banha[4], emphasizes the following ideas: "To provide an adequate environment for an independent, impartial and confidential discussion of the problems presented by students(...); Mediate between the parties to the conflict and indicate clues to solve the problems; Appreciate the complaints and complaints directed by students and issue recommendations to the respective recipients with a view to revoking, reforming or converting acts harmful to students' rights and improving services; Help clarify policies and procedures (...) in particular in the field of pedagogical activity and school social action and (...) recommend the necessary changes; Issue an opinion on any matters within its sphere of action (...); Contribute to the elaboration and updating of students' disciplinary regulations and the student code of conduct ".

The mentor has several competencies, duties, among other characteristics, to fill the students' needs. The mentor should be confident about his knowledge and experience; he must seek to develop and reinforce his competences, carrying out relevant training in order to develop properly his knowledge and action in the operationalization of his pedagogical supervision skills. It should also be able to preserve a relationship with a supervisor with appropriate qualifications in order to assess periodically their skills as well as support their own development [5]

In order to this relationship to be fruitful pedagogically in educational gains, the mentor should have supervisory competencies to transform the didactics of the teaching-learning process into academic achievements, transferring them to the daily life of the teaching/work contexts [6]

Supervision is also related to safety and productive work relationships. This is an effective way to explore issues related to professional practice, allowing professionals not only to learn among each other, provide support and recognize how they see and they appreciate as workmates, but also control and anxiety about the functions they perform[7]

The supervisor also has the role of negotiating supervision strategies with the supervised, taking into account their personality, knowledge and goals previously determined to establish a relationship conducive to learning.

Following the theoretical framework, is presented the methodological options followed that are in the empirical component of the study, whose general objective is to evaluate the competences of the mentor teacher through the prism of higher education students.

II. METHODS

The study of descriptive nature and transversal focus aims to assessing the generic, specific competences and the meta-competences of the mentor teacher according to the student's perspective in order to assess their relationship with the sociodemographic and pedagogical context variables.

The study is part of the project "Supervision and Mentoring in Higher Education: Dynamics of Success (SuperES)" [1] with Ref.: PROJ/CI&DETS/CGD 0005) with favourable opinion (Nº3/2017) of the Ethics Committee of the School of Health of the Polytechnic Institute of, Portugal.

Participants

The non-probabilistic sample for convenience was constituted by 306 students of the polytechnic higher education of the IPV, constituted mainly by the female gender (81.7%). The minimum age was 18 and maximum of 42, with a mean of 21.15 years (± 3.54 SD). Males are on average older (mean = 22.28 years ± 4.21 SD) than females (mean = 20.90 ± 3.3 SD) with significant differences (U Mann-Whitney test $z = -3,058$, $p = 0.002$). Still in relation to the age, it is verified that in the totality of the sample, the students with age between 20-21 years stand out with 39, 2%. The following are the younger participants (33.0%). Participants with 22 or older, represent 27.8% of the total sample. The differences with respect to gender are significant differences (Chi-Square $X^2 = 8.070$, $p = 0.018$). Analysis of the residual values indicates that this difference is in the group of women around 19 years or less, and in the older men group.

Data collection instruments

The collection of information was carried out through a protocol of questionnaires available on-line on the page of the educational institution, composed by:

- Scale of "Sociodemographic Characterization and Pedagogical Context" of Cunha, [1] which includes sociodemographic issues (age, gender) and items related to the ideal and real regularity of the pedagogical sessions, place of the pedagogical sessions, time of the pedagogical sessions and the importance of attribution of a mentor teacher in Higher Education students.
- Generic and Specific Competency Scale of the Supervisor (GSSC) "of Cunha, Cruz, Menezes & Albuquerque [8] with the purpose of assessing the competences of the mentor teacher according to the student's perspective.

Generic and Specific Competencies Scale of the Supervisor (GSSC)

The Generic and Specific Competency Scale of the Supervisor (GSSC) of Cunha, Cruz, Menezes & Albuquerque [8] was developed for the student's population of higher education, with the objective of evaluating their opinion about the competences of the mentor teacher. It is of the Likert type, varying the answers to the items between 1 and 5, being denominated like 1 - "I strongly disagree"; 2 - "I disagree"; 3 - "I do not agree / disagree"; 4 - "I agree" and 5 - "I agree a lot". In the present study the original version was applied, which after the psychometric study of the author was constituted by 24 items created specifically for this purpose. It presents three subscales:

- "Generic competencies" consisting of 14 items (1,2,3,4,5,6,7,8,9,10,11,12,13,14);
- "Specific Competencies" presents 6 items (15, 16, 17, 18, 19, 20);
- "Meta-competencies" includes 4 items (21, 22, 23, 24).

Internal Consistency of the Supervisor's Generic and Specific Competencies Scale (CGES)

The statistics (averages and standard deviations) and the correlations obtained between each item and the overall value are presented in table 1. We estimate, by average indices, that they oscillate between 4, 53 (item 9) "Demonstrate empathy, patience, understanding and availability for dialogue "and 4.34 (item18)" Develop pedagogical supervision in specific contexts/models ". The correlation coefficients were above 0.486. Through Cronbach's alpha, the items are classified as good, ranging from $\alpha = 0.710$ in item 23 "Performing a job of captivating and being supervised" and $\alpha = 0.958$ in item 2 "Structure supervision sessions" with an alpha of Cronbach, for the overall value of 0.967 which translates very good internal consistency.

The final values of correlation, item-total and Cronbach's alpha are described in table 1.

The study of the internal consistency of the Generic and Specific Supervisor Competencies Scale (GSSC) revealed, as already mentioned, the existence of three (3) factors/subscales.

In the subscale "Generic competences", we analyse the average values, showing that the item that seems most favourable is the 9, "Demonstrate empathy, patience, understanding and availability to dialogue" and the least favourable item 2 "Structure supervision sessions". Cronbach's alpha coefficients obtained in the 11 items that oscillated between ($\alpha = 0.954$) in item 8 "Select the degree of intervention respecting the principle of increasing automatization and accountability" and ($\alpha = 0.958$) in item 2 "Structure supervision sessions ", indicate very good internal consistency, with a total alpha of 0.960. The highest correlation value is found in item 8 ($r = 0.853$) with a variability of 74.4% and the one with the lowest correlation is item 2 ($r = 0.752$) with 62.8% variability. Cronbach's alpha, for the global Generic Skills subscale, was 0.960.

In respect of the subscale "Specific competencies", in terms of averages the most favourable item is the 15 "Helping the supervised to acquire and develop specific professional competences (theoretical/practical interconnection)" and the lower favourable is item 18 "Helping the supervised to acquire and to develop specific professional competences (theoretical/practical interconnection), however the results indicate that they are well centred, given the average values and the respective standard deviations obtained. The Cronbach alpha coefficients of the 5 items of this dimension that oscillate between ($\alpha = 0.915$) in item 18 "Developing pedagogical supervision in specific contexts / models" and ($\alpha = 0.934$) in item 15 "Helping the supervised to acquire and develop specific professional competences (theoretical / practical interconnection)" show very good internal consistency with an alpha total of $\alpha = 0.937$. The highest correlation value is found in item 18 ($r = 0.874$) and the item that has the lowest correlation is item 15 ($r = 0.769$) with 74.1% and 59.3% of variability respectively. Cronbach's alpha for the Global Specific Competencies subscale was 0.937.

Regarding to the subscale "Meta-Competencies", the better average is based on items 22 and 23 "Have an open mind to learn; "Perform a job of captivating and being with the supervised "with 4.52 and the smaller one fell under item 24 with 4.24; Provide feedback without being critical ". Cronbach's alpha coefficients in this dimension vary between ($\alpha = 0.710$) in item 23 "Perform a job of captivating and being supervised" and ($\alpha = 0.870$) in item 24 "Providing feedback without being critical" with a coefficient of Cronbach's alpha of ($\alpha = 0.805$), which reveals that we are facing a good internal consistency. The highest correlational value obtained is located in item 23 ($r = 0.743$) with a variability of 66.1% and the lowest is item 24 ($r = 0.486$) with a variability of 32.7%. Cronbach's alpha for the global Meta-Competencies subscale was 0.805.

The confirmatory factorial analysis of the GSSC scale using the varimax orthogonal rotation method and for the retention of own values above allowed extracting three factors that together explain 73.71%.

Globally, GSSC Scale of 20 items of Cunha, Cruz, Menezes& Albuquerque[8] obtained a Cronbach alpha value of 0.967 and the final distribution of the items in the three subscales was the following:

- "Generic competencies" consisting of 11 items (1,2,3,5,7,8,9,10,11,12,13);

- "Specific competencies" presents 5 items (15, 16, 18, 19, 20);

- "Meta-competencies" includes 4 items (21, 22, 23, 24).

Table 1 –Internal Consistency of Final Items

Nº Item	Itens	Mean	SD	r/item total	r ²	α without item
Supervisor's Generic Competencies		Alfa Global			0.960	
1	Apply/promote educational principles that promote learning;	4.46	0.537	0.822	0.726	0.956
2	Structure supervision sessions;	4.35	0.565	0.752	0.628	0.958
3	Promote ethics in practice;	4.44	0.559	0.784	0.655	0.957
5	To help the trainee to manage emotions in contact with critical situations;	4.49	0.556	0.755	0.643	0.957
7	To detect situations of isolation or psychological suffering with negative potential for the personality or for learning;	4.48	0.550	0.794	0.672	0.956
8	Select the degree of intervention respecting the principle of increasing automatization and accountability;	4.39	0.562	0.853	0.744	0.954
9	Demonstrate empathy, patience, understanding and willingness to dialogue;	4.53	0.562	0.789	0.676	0.957
10	Support the development of a critical spirit as a means of promoting continuous improvement;	4.47	0.556	0.842	0.720	0.955
11	Adapt the supervision to the organizational context and of educational and administrative governance;	4.48	0.585	0.812	0.703	0.956
12	Use different methods to provide accurate and constructive feedback;	4.43	0.541	0.846	0.746	0.955
13	Be able to assess the level of competencies of the supervised;	4.42	0.563	0.835	0.728	0.955
Supervisor's Specific Competencies		Alfa Global			0.937	
15	Assist the supervised to acquire and develop specific professional competences (theoretical / practical interconnection);	4.44	0.559	0.769	0.593	0.934
16	Incorporate direct observation into supervision (eg. co-working);	4.36	0.592	0.815	0.674	0.926
18	Develop pedagogical supervision in specific contexts/models;	4.34	0.601	0.874	0.771	0.915
19	Ensure management supervision ;	4.35	0.588	0.853	0.749	0.919
20	Implement supervision of interventions;	4.35	0.588	0.840	0.725	0.920
Supervisor's Meta-competencies		Alfa Global			0.805	
21	Make the necessary adaptations in order to monetize the supervised's potential to learn;	4.42	0.539	0.681	0.544	0.735
22	Have an open mind to learn;	4.52	0.562	0.699	0.573	0.724
23	Perform a job in order to cativate and to be with the supervised;	4.52	0.532	0.743	0.661	0.710
24	Provide feedback without being critical;	4.24	0.826	0.486	0.327	0.870
Global 20 itens	Cronbach global alpha coefficient	0.967				
	Guttman Split Half	1th half – 0.955				
		2th half – 0.926				

III. RESULTS

The Characterization of the Pedagogical Context

The student's majority reported that the ideal regularity of mentoring sessions should occur on a daily basis (51.6%). In the female gender, 54.4% mentioned that should be carry out daily, while in the male gender, 48.2% prefer it to be weekly, these differences are statistically significant (Chi-square $X^2 = 9,209$, $p = 0.027$). Regarding the current frequency of the sessions, 52.2% of the students reported that they are occurring weekly, with 57.6% of the female gender and 55.4% of the male students reporting a preference for weekly attendance, and there weren't statistically significant differences ($X^2 = 2$, $p = 0.735$).

The internship site was the preferred one for the sessions by 52.0% of the total sample, such as for 52.4% of the female gender and 50% of the male, with no statistically significant differences (Chi-square $X^2 = 0.121$; $p = 0.941$). From the analysis of the values related to the duration of session, we infer that 49.7% of the total sample prefers the duration to be less than 1 hour, 48.4% of the female gender and 55.4% of the male with statistically significant differences significant Chi-Square ($X^2 = 11.338$, $p = 0.003$).

Regarding the importance of the attribution of the mentor teacher, 87.6% of the students answered affirmatively, there aren't statistically significant differences related to gender (female gender = 87.6%, male gender = 87.5%,

$\chi^2 = p = 0.984$). Of the total number of students who answered affirmatively, 60.4% said that it would be better to follow the first to the third and/or fourth years of graduation with an equivalent preference for gender (female gender = 62.6%, male gender = 51.0 %), thus without statistically significant differences (Chi-square $X^2 = 4.112$, $p = 0.128$) (see table 2). The adjusted residuals indicate that the differences are between those refer a daily (female) regularity and whom refer monthly (male) regularity.

Table2 - Characterization of the Pedagogical Context (ideal and current regularity, local and duration of sessions, importance of the mentor teacher) according to gender

Pegagogical Context	Gender	Female		Male		Total		Residuals		Chi-Square	
		n (250)	% (81.7)	n (56)	% (18.3)	n (306)	% (100.0)	Female	Male	X^2	p
Ideal regularity											
Daily		136	54.4	22	39.3	158	51.6	2.0	-2.0	9.209*	0.027
Weekly		101	40.4	27	48.2	128	41.8	-1.1	1.1	Fischer	
Bimonthly		11	4.4	4	7.1	15	4.9	-0.9	0.9	=0.025	
Monthly		2	0.8	3	5.4	5	1.6	N/A	N/A		
Current regularity of the sessions											
Daily		64	25.6	12	21.4	76	24.8	0.7	-0.7	2.005*	0.735
Weekly		144	57.6	31	55.4	175	52.2	0.3	-0.3	Fischer	
Bimonthly		33	13.2	9	16.1	42	13.7	-0.6	0.6	= 0.562	
Monthly		7	2.8	3	5.4	10	3.3	-1.0	1.0		
2-3 months		2	0.8	1	1.8	3	1.0	N/A	N/A		
Session's site											
Organic Unity		20	8.1	5	8.9	25	8.2	-0.2	0.2	0.121	0.941
Internship		130	52.4	28	50.0	158	52.0	0.3	-0.3		
Both		98	39.5	23	41.1	121	39.8	-0.2	0.2		
Session duration											
< 1 hour		121	48.4	31	55.4	152	49.7	-0.9	0.9	11.338	0.003
≥ 1 hour a < 2 hours		116	46.4	16	28.6	132	43.1	2.4	-2.4		
≥ 2 hours		13	5.2	9	16.1	22	7.2	-2.8	2.8		
Importance of teacher mentor assignment											
No		31	12.4	7	12.5	38	12.4	0.0	0.0	0.000	0.984
Yes		219	87.6	49	87.5	268	87.6	0.0	0.0		
If yes, it would be better:											
Aleatory		59	26.9	14	28.6	73	27.2	-0.2	0.2		0.128
In the 1 th year		23	10.5	10	20.4	33	12.3	-1.9	1.9	4.112	
Assistance (1 th to 3 th / 4 th year)		137	62.6	25	51.0	162	60.4	1.5	-1.5		

*Simulation of Monte Carlo for 10 thousand samples and confidence level of 9 5%.

Generic and Specific Supervisor Competencies (GSSC) - final version of 20 items versus gender and age

The statistical analysis of the scores for the overall value of the Generic and Specific Supervisor Competencies Scale (GSSC) shows that, for the total sample, they fluctuated between the minimum of 2.20 "disagree" and a maximum of 5 "I strongly agree", with an average of 4.44 (± 0.45 SD). In the generic competence subscale, the values ranged from a minimum of 2 to a maximum of 5, with an average of 4.44 (± 0.47 SD). The subscale specific competencies patented responses ranging from minimum 2 to maximum 5, with a mean of 4.36 (± 0.52 SD). For the meta-competencies subscale, the values ranged from a minimum of 2 to a maximum of 5, with an average of 4.42 (± 0.49 SD). (see Table 3).

Table 3 - Results of the Generic and Specific Competency Supervisor Statistics

Generic and Specific Supervisor Competencies (GSSC)	Min	Max	M	SD	CV (%)	Sk/error	K/error
Generic Competencies	2.00	5.00	4.44	0.47	10.58	-3.06	14.58
Specific Competencies	2.00	5.00	4.36	0.52	15.47	-2.39	0.97
Meta-Competencies	2.00	5.00	4.42	0.49	11.08	-3.61	1.81
Score/global note Global Competencies	2.20	5.00	4.41	0.45	10.20	-2.53	1.59

The analysis of the Generic and Specific Supervisor Competencies (GSSC) scores regarding gender was performed using the Mann-Whitney U Test (z). It was verified that in the global and in the factors/subscales the

mean orderings were smaller in the masculine gender, but without statistical differences which translate that between genders values are equivalent ($p > 0.05$) (see Table 4).

Table 4 - Mann-Whitney U Test Results for Generic and Specific Supervisor Competencies according to gender

Generic and Specific Supervisor Competencies (GSSC)	Gender	Malen=56		Femalen=250		UMW z	p
		Average Order OM		Average Order OM			
Generic Competencies		143.13		155.82		-0.989	0.323
Specific Competencies		143.71		155.92		-1.061	0.289
Meta-Competencies		133.95		157.88		-1.907	0.057
Score/Note Global Competencies		138.96		156.76		-1.375	0.169

One-Way ANOVA analysis was done to evaluate the variability of the scores of generic and specific supervisor competencies according to the age group of the students of higher education. It was found that students up to the age of 19 appear to prefer the generic competencies of the supervisor, while meta-competencies are preferred by students between the ages of 20 and 21 and over the age of 22. Young people aged 20 to 21 years present lower rates than the older ones on all subscales and globally.

The values expressed by F are explanatory demonstrating significant differences in relation to age groups, except for the meta-competences subscale ($p = 0.120$). Tukey's post hoc test was applied and this indicated that these differences are between the ages of less than 19 years and between 20 and 21 years in the subscales of generic and specific competencies and in the global scale of GSSC. For the subscale generic competencies there are still significant differences between the youngest students (≤ 19 years) and the older ones (> 22 years). For the remaining subscales, no statistically significant differences were observed (see Table 5).

Table 5 - Results of analysis of variance of the Generic and Specific Supervisor Competencies by age group

Age Groups	≤ 19 years (1) n=101		20-21 years(2) n=120		≥ 22 years(3) n=85		F One-Way ANOVA	p	Tukey Test (p)		
	Mean	SD	Mean	SD	Mean	SD			(1)-(2)	(1)-(3)	(2)-(3)
Generic and Specific Supervisor Competencies (GSSC)											
Generic Competencies	4.56	0.43	4.35	0.48	4.40	0.46	5.80	0.003	0.003	0.058	0.712
Specific Competencies	4.49	0.52	4.28	0.50	4.33	0.52	5.09	0.007	0.006	0.079	0.754
Meta-Competencies	4.50	0.46	4.36	0.51	4.42	0.51	2.13	0.120	0.099	0.506	0.698
Score/global Note - Global Competencies	4.53	0.42	4.34	0.45	4.39	0.45	5.52	0.004	0.004	0.075	0.681

Generic and Specific Supervisor Competencies (GSSC) versus Formative Context of Supervision Sessions

Although there were slightly higher values among the students who chose the specific competencies and competencies for occasional contact ("biweekly and monthly"), with the supervisor (OM = 166.28 / OM = 158.93), in the option of generic competencies, the highest values are found in the regularity of frequent contact ("daily or weekly") with the supervisor (OM = 154.04). The Mann-Whitney U test (z) showed that overall the values of the supervisor's generic and specific competencies are homogeneous in all subscales, however no statistically significant differences were observed ($p > 0.05$) (see Table 6).

Table 6 - Mann-Whitney U Test Results for Generic and Specific Supervisor Competencies (GSSC) in accordance with the ideal regularity for contact with the internship supervisor

Generic and Specific Supervisor Competencies (GSSC)	Ideal regularity of the sessions		UMW z	p
	Frequently n=286	Occasionally n=20		
Generic Competencies	Average Order OM			
Specific Competencies	Average Order OM			
Meta-competencies	Average Order OM			
Score/nota global - Global Competencies	153.35	155.60	-0.111	0.912

The study of the relationship between generic and specific competencies and the current frequency of the contact with the supervisor showed by the Mann-Whitney U test that students reporting that regularity of

sessions was "frequent" scored on average with higher values in all subscales, with statistically significant differences in generic competencies ($p = 0.018$) (see Table 7).

Table 7 - Results of the U Mann-Whitney Test for Generic and Specific Supervisor Competencies due to the regularity of the pedagogical sessions at the present time

Generic and Specific Supervisor Competencies (GSSC)	Regularidade atual	Frequentlyn=251	Occasionally n=55	UMW z	p
	Average Order OM	Average Order OM	Average Order OM		
Generic Competencies	158.98	128.50		-2.360	0.018
Specific Competencies	156.28	140.81		-1.234	0.217
Meta-competencies	154.34	149.65		-0.371	0.711
Score/nota global - Competências Globais	157.35	135.91		-1.645	0.100

One of the questions that we found was related to the generic and specific competencies of the supervisor (GSSC) in relation to the duration of each session. From the results obtained by applying the Kruskal-Wallis test (H), it was found that there were no statistically significant differences between the Supervisor Competencies and the duration of each session. However, it was observed that the students that indicated the sessions lasting more than or equal to 2 hours had a higher average ordering (see Table 8).

Table 8 - Results of the Kruskal-Wallis Test for Generic and Specific Supervisor Competencies by duration of each session

Generic and Specific Supervisor Competencies (GSSC)	Duration < 1horan=152	>= 1hora a < 2 horasn=132	>= 2 horasn=22	Kruskal-Wallis (KW) H	p
	Average Order OM	Average Order OM	Average Order OM		
Generic Competencies	144.12	160.66	175.32	4.068	0.131
Specific Competencies	149.77	156.04	164.02	0.761	0.684
Meta-competencies	147.80	158.32	163.98	1.447	0.485
Score/gobal note – Global Competencies	146.12	159.27	169.86	2.421	0.298

We attempted to investigate the Mann-Whitney Test (z) how extent the scores for Generic and Specific Competences are related to the assignment option of a mentor teacher. It was found that the mean ordering values were significantly higher in all subscales and in the Global, in the attribution variable "Yes", being more significant in the specific competences (OM = 158.57, $p = 0.005$) (see Table 9).

Table 9 - Mann-Whitney U Test Results for Generic and Specific Supervisor Competencies (GSSC) facing to the importance of assigning a mentor teacher to each student

Generic and Specific Supervisor Competencies (GSSC)	Mentor Teacher Attribution Non=38	Yesn=268	UMW z	p
	Average Order OM	Average Order OM		
Generic Competencies	125.09	157.53	-2.157	0.031
Specific Competencies	117.72	158.57	-2.798	0.005
Meta-competencies	122.34	157.92	-2.418	0.016
Score/global note – Global Competencies	117.45	158.61	-2.711	0.007

IV. DISCUSSION

From the discussion of the empirical results obtained with those already published, it is emphasized that the students of higher education value the different competences, generic, specific and the meta-competencies of the supervisor, however the students value more the generic competences of the supervisor. These results are in line with Alarcão& Tavares [9] guidelines when they refer that competencies must be a pillar that supervisory action must value and as preponderant requirements of the supervisor's performance: knowledge, interpersonal skills and techniques. Costa (2012) also emphasizes that the mentor should be endowed with professional and personal characteristics that help students to acquire new knowledge, skills, behaviours and attitudes.

The results analysed support the importance of the assignment of a mentor teacher in higher education to 87.5% of the students, with assistance from 1st to 3th/4th year (60.4%). They also suggest the preference of daily sessions (51.6%) at the place of internship (52%), lasting less than one hour (49.7%).

Our results are also in agreement with those of Costa[10], who refers that assistance by the supervisor to the supervised, who are familiar with the internship sites, can establish the relationship between classroom training and what will happen in the practice, it becomes decisive for the creation of a harmonious environment, which provokes significant learning and promoter to the student's autonomy process.

V. CONCLUSION

The present study aimed to evaluate the most relevant competencies of the mentor teacher in the perspective of the higher education student, in the polytechnic higher education of the IPV. After the review of the existing literature was inferred that it is a topic that still presents great research potential.

Taking into account the empirical results, it should be noted that the most important characteristics of the mentor teacher selected by the generic competencies (mean = 4.36 and SD = 0.47), a particularly relevant result among students aged up to 19 years who value competences supervisors, whereas the meta-competencies are preferred by the older students, and the difference scores are statistically significant.

After the study, the results suggest that one should consider the generic, specific competencies and the meta-competencies obtained by the teachers when evaluating their pedagogical performance in the supervision process.

Considering the necessary updating of knowledge about this problem, and with the intention of contributing to the valorisation of the teaching profession, it is necessary to continue with the development of research in this field by supporting local, national and international networks of educational/pedagogical research.

Participants answered about the mentor teacher's competencies and the monetary costs associated with the mentoring program were not addressed in the study and, because of this, it was not possible to analyze the impact that the expenditure factor could have on the participants' answers.

VI. Acknowledgements

FCT, Portugal, CI&DETS, Superior School of Health, Polytechnic Institute of Viseu, Portugal and Caixa Geral de Depósitos and CIEC, Minho University, Portugal.

The overall investigation was previously funded by the FCT – Fundação para a Ciência e a Tecnologia (Portuguese Foundation for Science and Technology) within the project “*Supervisão e Mentorado no Ensino Superior: Dinâmicas de Sucesso (SuperES)*”, com a Ref: PROJ/CI&DETS/CGD/0005).

We would like to express our gratitude towards all participants that made this study possible and to the Estudantes do 30º CLE da ESSV – IPV - Ana Marques, Ana Gomes, Daniela Nascimento, Joaquim Pereira, Joel Lopes, Marta Murtinheira, Raquel Rosa & Sérgio Gonçalves.

REFERENCES

- [1] Cunha, M. (Inv.Resp.) *Projeto Supervisão e Mentorado no Ensino Superior: Dinâmicas de Sucesso (SuperES)* (REF: PROJ/CI&DETS/CGD/0005). 2017. Retrieved from <http://www.ipv.pt/ci/projci/5.htm>
- [2] Vieira, F. & Moreira, M.A. Supervisão e avaliação do desempenho docente: Para uma abordagem de orientação transformadora. Ministério da Educação – Conselho Científico para a Avaliação de Professores. *Cadernos do CCAP*, 2011. 1. <http://www.ccap.min-edu.pt>
- [3] Gaspar, D., Jesus, S. N., & Cruz, J. P., Motivação Profissional e Apoio Fornecido no Estágio. *Acta Médica Portuguesa*, 24, 2011, pp. 137-146.
- [4] Banha, R., (EEEC), Ciência, E. d., and (DGEEC), D. G., *Promoção do Sucesso Escolar nas Instituições Públicas de Ensino Superior em Portugal: Medidas Observadas nos Respetivos Sítios*. (D. d. Ciência, Ed.), Lisboa, 2017).
- [5] Karkowska, M., Cieplik, C., Krukowska, K., Tsaroucha, V., Dimos, I., Papagiannopoulou, P., Leire Monterrubio, Iratxe Ruiz, Jaione Santos, Duse, C., Duse, D., Chisiu, C., Gruber, G., Andron, D., Crețu, D., Ventura, M., Mendonça, M. *MENTOR - Mentoring between teachers in secondary and high schools. / O método modelo de mentoria entre professores no ensino secundário e*

- superior* - 2014-1-PL01-KA200-003335. Polónia, Grécia, Portugal, Roménia, Espanha, Turquia. Lisboa: Instituto Universitário de Lisboa, Portugal. 2015. Retrieved from <http://edu-mentoring.eu>; http://edu-mentoring.eu/handbook/handbook_pt.pdf
- [6] Cunha, M., Duarte, J., Sandré, S., Sequeira, C., Castro-Molina, F.J., Mota, M., Pina, F., Coelho, C., Cunha, A., Figueiredo, A., Martins, A., Correia, B., Monteiro, D., Moreira, F., Silva, M., & Freitas, S., Bem-estar em estudantes do ensino superior. *Millenium*, 2 (2 ed espec), 2017, pp.21-38.
- [7] Cruz, S. S., *Do AD HOC a um Modelo de Supervisão Clínica em Enfermagem em Uso*. Tese de Doutoramento, Universidade Católica Portuguesa do Porto, Instituto de Ciências da Saúde, Porto. 2012.
- [8] Cunha, M., Cruz, S., Menezes, L. & Albuquerque, C. (2017). *Generic and Specific Competency Scale of the Supervisor*. In Cunha, M. (Coord.), Projeto supervisão e mentorado no ensino superior: Dinâmicas de sucesso SuperES. Retrieved from <http://www.ipv.pt/ci/projci/5.htm>
- [9] Alarcão, I. & Tavares, J., *Supervisão da prática pedagógica: uma perspectiva de desenvolvimento e aprendizagem*. (Coimbra: Almedina, 2007). 2ª Edição.
- [10] Costa, N. S. *Formação em Contexto Clínico: a Perspetiva do Estudante de Enfermagem*. Porto: Escola Superior de Enfermagem do Porto, 2012.