

## Original Paper

# Professional Integration and Requirements of the Teaching

## Profession in Physical Education

### (Case of Trainee Teachers in the Southern Sector in Tunisia)

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#### **Abstract**

*This research is part of the framework of professional didactics which puts the teacher's activity at the centre of his analysis. It is an exploratory, descriptive and comparative study that aims to investigate the professional integration (PI) of Tunisian physical education and sports (PE) teachers with the particularity of being recruited after five years of unemployment since obtaining their diplomas. The objective is to measure the effect of experience and level of intervention on the intensity of difficulties to verify the development of novices during the PI period. To meet the objectives of this study, we conducted a questionnaire survey of 135 PE ES in the southern Tunisian sector. To decant the differences in the experiences of PSE PEs, the study sample is divided into three groups according to the experience to verify the effect of the latter on the intensity of difficulties. Also, a comparison between three groups according to the sub-bodies of PE teachers was made to verify the effect of the level of intervention. The results of the descriptive analysis showed that beginning PE teachers face difficulties with different degrees. The results of this study show that the categories of difficulties most cited are pedagogical/didactic. In second place comes the category of organizational difficulties. The difficulties related to private life and the category of relationship difficulties are of low intensity. The most salient difficulties are classroom management (78%), business travel, learning assessment, learning planning and organizational constraints. The results also showed that Tunisian PE teachers encounter the same difficulties with different degrees during the PI period. Work experience during the PI period does not appear to affect the intensity of hardship. Also, the difficulties are not experienced in the same way by the teaching sub-bodies. In conclusion, in a context in which the recruitment of PE teachers is becoming more and more difficult, following a long period of unemployment and in the absence of PI and training programs for novices, the PI of PE is becoming difficult. To upgrade PE in Tunisia, recruitment must*

*take into consideration several personal and contextual factors. Also, training and support programs for the NP before and during the internship period become a requirement.*

**Keywords**

*Teaching profession, physical education and sports, professional integration, difficulties*

**1. Introduction**

In the teaching profession, to become a professional, the teacher goes through several stages in his or her career (Raduan & Na, 2020). At each phase of the career, the teacher's professionalism develops, leading him or her to take on new challenges (Deprit et al., 2019). According to Fessler and Rice (2009), several factors influence the evolution of the teacher in his or her profession. They are external factors of an organizational, environmental and personal nature. In the same context, experience is considered to be an essential factor in having professional skills specific to the teaching profession. The first professional teaching experiences are essential events in the construction of the future teacher (Ambroise et al., 2017). Harfitt (2015) has argued that experiences in the early years of the teaching profession influence job satisfaction, long-term commitment, and self-confidence. Precariousness, the search for identity and the feeling of incompetence, can lead to stress, overload, burnout and are, in part, responsible for the high rate of abandonment of the profession during the first years of the profession (De Stercke, 2014; Deprit et al., 2019). Unlike most professions, the field of education does not provide for lighter tasks for novices (Reverdy & Thibert, 2015). However, they perform the same duties as experienced teachers, or even the worst tasks, at a time when they still have a lot to assimilate (Giguère & Mukamurera, 2019). Given that beginning teachers are expected to perform the same tasks at the same level as senior teachers, it is not surprising that the first few years of teaching are quite difficult (Moore & Swan, 2008) and the challenge can be daunting for new actors (Mukamurera et al., 2019). To prepare teachers to become professionals, especially abroad, officials highlighted the importance of professional integration (PI), considered as the first step in the teaching career. In the literature, there is no consensus on the duration of PI (Martineau et al., 2009). This period goes beyond the temporal perspective which is the first years of the career to a multidimensional perspective (Mukamurera, 2011; Mukamurera et al., 2013). During the PI, novices experience professional, identity and socio-professional changes. These transformations are dependent on personal and contextual factors that will accelerate or slow down their professional development (Ambroise et al., 2017). Given the complexity of the task of teaching and the PI process, beginning teachers face several challenges. Some research provides information on the difficulties experienced by novices in general, such as classroom management, relations with parents, relations with the community and adaptation to the physical environment (Kozikoğlu & Senemoğlu, 2018). The difficulties and challenges that beginning teachers may face are varied and affect pedagogical/didactic, organizational or relational aspects (De Stercke et al., 2010). According to Mukamurera et al (2019), teachers' differentiated belonging to a particular level of education, a school discipline or a field of teaching has significant impacts on the teaching task and therefore the workload. In this same context, Gariglio (2021)

concluded that the experience of entry, exploration, and discovery of the profession cannot be considered an object of equal consideration for teachers of different subjects. Belonging to a particular discipline is an important element to consider for the analysis of the different trajectories followed by teachers during PI. Few studies have focused on the PI of PE teachers. Spallanzani et al. (2012), argue that there are differences in the experiences of PI experienced by PE teachers. Nevertheless, this difference does not escape the “shock of reality” since beginning PE teachers encounter difficulties at the beginning of their careers (Flory, 2016) (Westerlund & Eliasson, 2022). For other researchers, the difficulties encountered by the latter are similar to those encountered by beginning teachers of other subjects (Gariglio, 2021). The problem of young teachers dropping out of the profession is the reason for the majority of international studies. According to Rojo and Minier (2015), this issue is rooted in the major challenges that novices face as soon as they enter the practice. However, this issue is not included in the Tunisian context. Indeed, the civil service remains attractive, considered as a good job and a social right. Very few studies conducted in Tunisia have looked at the unique context of H&PE, but have instead studied all teachers. Some research on the difficulties faced by teachers aims to explain stress and burnout among Tunisian teachers, in a research conducted among Tunisian PE teachers to identify the factors responsible for the psychological health of teaching staff, showed that PE teachers encounter several difficulties due to differences in working conditions and vary according to age and seniority. Novices encounter more difficulties than their colleagues in a permanent position. However, these results do not provide information on the evolution of the intensity of difficulties in novices, knowing that experience is useful in dealing with problems and that some people need time to solve them (Yanuarli et al., 2019). Again, the results do not inform us about the difficulties experienced by the sub-bodies of beginning teachers. Welsh (2012) deplores the fact that little research focuses on the sociodemographic variables that can influence the types of needs of novices and attests that various variables such as the level of instruction should be examined. Within the limitations of their research, Van der Wal et al. (2019) support the idea that novices’ lived experiences may differ between primary and secondary schools and that it would be useful to involve samples of different levels of education in further research. Richards et al. (2019), argue that very few studies have followed recruits through multiple phases of socialization to understand how socialization and changes evolve over time. According to Westerlund and Eliasson (2022), to achieve long-term career success, more research is needed to understand how to support physical education teachers in a variety of settings early in their careers. In the same context and according to Marent et al. (2020), PI is characterized by specific challenges and by special support needs. According to Pastré (2007), in adult education engineering, in order to set up a training programme for teachers, knowledge of the difficulties is an essential step in determining their training needs. In Tunisia, beginner PE teachers are particular and experience specific realities that have been studied in little research. Assigned a few months after the start of the school year, or even two weeks before the end of the school year and following a fairly long period of unemployment, new PE teachers are jumping on the bandwagon in the absence of formal support measures and in a period characterized by the deterioration of working

conditions and the Tunisian education system, which echoes a suffering in professional experience (Hafsi, 2019). To our knowledge, in Tunisia, this crucial stage in the professional career of PE teachers has not been the subject of institutional or scientific evaluation since its establishment. It is therefore important to reflect more on the way in which beginning teachers experience the PI period in order to settle their needs in order to guide those in charge of PE in Tunisia on ways to reduce the burden of this arduous phase of the teaching career. To do this, the following question must be answered: What difficulties do new PE teachers in Tunisia face? The analysis of the teaching profession allows us to understand the work in order to transform it. It is now an accepted rule of the profession in the field of “ergonomics of the activity” which considers that work cannot be looked at only from the point of view of the prescription or from the point of view of its results. The object of our research question is the description and understanding of the difficulties experienced by PE teachers in the period of professional integration. In order to mark out the topic, special attention is needed to the preliminary definitions of all the components. Starting from the dictionary definitions and those given by the authors to best define the terms relating to the teaching profession, professional integration and difficulties.

The teaching profession: According to Deleuze and Guattari (1991): “a concept will be deprived of meaning as long as it is not connected to other concepts”. (p. 76) In this thesis, the concept of “profession” is linked to the concept of “teacher”, hence the need to define the two concepts.

Definition of the concept:

According to the dictionary, “profession” is an activity, state, or habitual function of a person that is generally the source of his or her means of subsistence. This activity, manual or intellectual, refers to a trade belonging to a group in a particular sector of activity. The notion of “profession” is synonymous with “profession”, “activity” and “work”. The teaching profession is expressed through several concepts such as “teaching”, “teaching” and “teaching”. In the Petit Robert, it is explained that:

- Teaching means transmitting to a student in such a way that he or she understands and assimilates (certain knowledge).
- Teaching is action, the art of teaching, of transmitting knowledge to a student.
- The teacher is the one whose function is to teach.
- Based on these definitions, we can define the teaching profession as a profession belonging to the teaching sector, the activity carried out by a teacher on a student with the aim of understanding and assimilating certain knowledge.

According to Fraj (2019), in the United States, a distinction is made between “professions” and “occupations”, which can be translated into French as a distinction between profession and trade. In the written word, “teaching profession” and “teaching work” are used as synonyms for “teaching profession”. In the dictionary, from the term “profession” or “travail” the lexical field is limited, on the other hand the term “profession” allows us to derive many other terms. These are concepts such as “professional” or “professional”, “professionalise”, “professionalisation” and “professionalism”. These terms are used

in this thesis because they are related to the subject of the research and therefore it is necessary to define them.

- Professional: Talking about a person who has a given trade, profession; who has the qualities, the skills required to exercise it.
- Professionalize: To give the characteristics of specialization, of technicality of a profession to a field, a discipline, a phenomenon.
- Professionalization: State, character of what is made professional, the fact of becoming a professional. Barbier (2006) defines professionalization as a finalized process of transformation of skills in relation to a process of transformation of activities. It is also the set of actions and measures aimed at excellence in the exercise of teaching in the classroom by increasing the quality of teacher training, increasing its duration and raising its standards.
- Professionalism: this is the professional nature of an activity.

### *1.1 Characteristics of the Teaching Profession*

In the literature, Kostulski et al. (2011) (cited by Mayeko & Brière-Guenoun, 2019), define the teaching profession as a multidimensional architecture articulating four instances in tension:

- Impersonal instances (prescriptive and conceptual dimension of work).
- Interpersonal bodies (collective dimension of the activity),
- Transpersonal bodies (social, historical and cultural dimension of the profession).
- Personal instances (a singular dimension that echoes the teacher's own style).

Thus, his activity is at the crossroads of multiple contextual, interpersonal, subjective, epistemic, institutional and cultural influences. Teaching is a specialized job that requires knowledge and skills from a variety of fields. Teachers must master new knowledge and skills concerning disciplinary, psychopedagogical and didactic content as well as the knowledge of the student, his family and socio-cultural environment, his interests and his difficulties. In order to ensure that their students get the most out of their learning, teachers must also develop their communication skills, their openness to differences, favor collaboration between colleagues, parents and educational partners, and develop a respectful approach to students (Aubin, 2017). Beginning teachers who participated in the study by Mukamurera et al. (2019) "speak of multitasking, multi-hatted, heavy, energy-consuming, breathless, and mentally, emotionally, and physically demanding work. They underline and show how the teaching work is extensible and covers many visible and invisible aspects". The multi-dimensionality of the teaching profession could make the teacher's activity more cumbersome.

### *1.2 Specificity of the PE Teaching Profession*

Teaching PE is different from teaching other subjects because physical education emphasizes motor skills rather than verbal and academic skills, so its teaching tools are different (Shoval et al., 2010). According to Alanbagi et al. (2016), one of the particularities of the discipline is that the student learns by doing. PE, through its own fields of learning, allows the student to build and develop motor, cognitive, methodological, social, perceptual, affective and safe skills through knowledge, abilities and attitudes.

The PE teacher is an essential player in enabling motor, cognitive and by setting up conditions relating to the various learning processes of the students while relying on the different theoretical approaches to learning and motor control.

### 1.3 Difficulties in Professional Integration

#### 1.3.1 The Notion of Difficulty

Nunez Moscoso (2013) defines the notion of difficulty as “any situation, element or object of the work process that is a source of trial for the actor, or even the process itself” (p. 129). According to Nunez-Moscoso and Murillo (2017): “difficulty in the context of work can be unforeseen, incident, obstacle, problem, face-threatening act, dilemma, ordeal, violence, or even complexity and suffering, voice problem, dysphonia, powerlessness, wear and tear, conflict, crisis, stress, discomfort, malaise, alienation, dropout or burnout. Difficulty can be experienced as a characteristic of the profession, a resource, a challenge or as uncomfortable, painful, or even unbearable”. According to De Stercke (2014), for the beginning teacher, difficulties can correspond to pedagogical, curricular, psychological, relational, administrative and organizational aspects.

#### 1.3.2 Categories of Difficulty

Beginning teachers face all kinds of difficulties. Among beginning primary school teachers in Lithuania, Barkauskaitė and Meškauskienė (2017) identified 13 problems of a pedagogical and relational nature. In Belgium, De Stercke et al., (2010) listed 12 difficulties experienced by secondary school teachers. From literature (Huberman & Marti, 1989; Bédard, 2000; Vonk J.H.C., 1995; Pfister, 2006; Karsenti & Collin, 2009; De stercke et al., 2010; Shoval et al., 2010; Grenier et al., 2013; Auclair Tourigny, 2017), these difficulties are contextual and personal in nature that they can be classified according to categories.

**Table 1. Summarizes These Categories of Difficulties**

Researchers	Category 1	Category 2	Category 3	Category 4	Category 5
<b>Huberman and Marti (1989)</b>	Personal	Pedagogical	Sentimental		
<b>Bédard (2000)</b>	Personal problems	Teaching	Colleagues	Resources	<b>Administering external standardized tests (outside testing)</b>

<b>Pfister (2006)</b>	Factors related to the person, characteristics	Factors related to the teaching task	Factors related to the social environment	
	Emotional and psychological.	Pedagogical and didactic	Relational	
<b>Karsenti and Collin (2009)</b>	The personal level		The environmental level	
<b>De Stercke et al. (2010)</b>				
<b>Vonk J.H.C (1995)</b>		The professional level		
<b>Shoval et al., (2010)</b>	<b>Classroom and heterogeneous group management</b>	<b>Support for students in difficulty</b>	<b>Stability of working conditions</b>	<b>The relationship with management</b>

#### *1.4 Difficulties in Integrating the Teaching Profession into the Professional Profession*

##### *1.4.1 Pedagogical and Didactic Difficulties*

In the literature, the teacher is one of the three poles of the two triangles of didactics and pedagogy. The teaching profession oscillates between didactics and pedagogy. The task of making the link between the logic of the content (Didactics) and the logic of the classroom (Pedagogy) is not easy and comes up against difficulties. According to De Stercke., et al (2010), pedagogical/didactic difficulties are most present among novices, in fact, 79.50% of novices said that they mainly requested pedagogical and didactic support. The most frequent difficulties are related to pedagogical intervention such as classroom management, time management, individualized interventions with students with learning difficulties and student motivation (Gingras & Mukamurera, 2008). Classroom management is one of the major tasks of the teaching profession, it is a central function. However, it is often highlighted as the major difficulty encountered by novices (Veenman, 1984; Spallanzani et al., 2012). Research by Desbiens et al. (2014) shows that the response of trainee teachers to disruptive student behavior often leads to a deterioration in the climate that is already unfavorable for learning.

New PE teachers have a very large share of difficulties related to the management of disruptive behaviors (Shoval et al., 2010) and the motivation of students (Hill & Brodin, 2004). According to Hand (2007), new PE teachers encounter a difficulty specific to their teaching subject, that of managing the group of students and ensuring their safety in a risky environment. De Stercke, et al. (2010), confirm the need to

propose measures to support professional integration differentiated according to the environment of practice of new teachers, in the field of classroom management and discipline.

Pedagogical and didactic difficulties also relate to subject planning and learning assessment. They are due to the limited knowledge of novices in practical pedagogy (Shoval et al., 2010; Grenier et al., 2013). Périer (2014), for his part, explains these difficulties by the fact that novice teachers are confronted with the “pedagogical double bind”. They must both preserve the interest and learning of high-performing students while helping those who have more difficulties progress. This double challenge leads them in some cases to a feeling of powerlessness and inefficiency. New PE teachers, too, express that they have encountered difficulties in terms of didactic transposition (Perez-roux, 2003) and the choice of content to be taught (Hill & Brodin, 2004). Regarding the evaluation competence, it translates into the teacher’s ability to carry out an evaluation in class and to exploit the results (Looney et al., 2018). This skill allows teachers to set up appropriate assessment systems to improve student learning and support the teaching-learning process (Moura et al., 2022). According to research by Morgan and Hansen (2007), the majority of PE teachers reported that they did not have a good command of the assessment competency. According to them, they either neglect it or they don’t have time to evaluate the prices. This task is considered arduous and worthless and to perform it properly, they need more training and practice. Unal and Unal (2019) compared the beliefs and evaluation practices of school teachers and allege that beginning teachers believe that evaluation is irrelevant and that it negatively affects learners, educators, and teaching. The authors also showed that the more experience teachers acquire, the more they attach importance to evaluation and they build their own evaluation tools against novice teachers who are less motivated for such practices. For Champagne et al. (2013), proper evaluation is a delicate mission that preoccupies teachers and becomes increasingly difficult when it comes to the final grading and certification of the student’s learning. This difficulty in setting up the evaluation system (the form of evaluation chosen, the measurement tools used, the evaluation grids, the marking). The difficulty of evaluation is one of the main weaknesses of novice teachers. De Stercke et al. (2010), state that more than half (50.80%) admit to having evaluation difficulties. This is also what 71.6% of the American participants in the Hill and Brodin (2004) study stated, they consider it “extremely difficult” to “moderately difficult” to assess students in their first year of education. Another difficulty encountered by novice teachers is the feeling of forgetting certain knowledge and knowledge (Wash-Out Effect), giving the impression of not being able to apply adequately and effectively the knowledge learned during initial training. Thus, despite initial training, through pedagogical courses, aimed in particular at helping to link practice to theory, novices nevertheless emphasize the difficulty of acting with their first classes.

## 2. Methodology

After a long period of disruption between initial training and recruitment, new PE teachers are jumping on the bandwagon in the absence of formal accompanying and support measures in a period characterized by the deterioration of working conditions and the Tunisian education system, which echoes a suffering

in professional life. This crucial stage of the professional career has not been the subject of institutional or scientific evaluation since its establishment. It is therefore important to think more about the way in which beginning teachers experience their professional integrations in order to settle their needs in order to guide those in charge of PE in Tunisia on ways to reduce the burden of this arduous phase of the teaching career. PE ES in Tunisia face pedagogical/didactic difficulties rather than relational and organizational difficulties. Experience during the PI phase may reduce the intensity of the challenges experienced by PSE PEs.

This study is referred to as exploratory-descriptive and comparative research. The aim of the research is to make an inventory of the difficulties encountered by ES in the teaching of PE. The purpose of this study is to (i) measure the intensity of the difficulties encountered by novices, (ii) measure the effect of experience during the PI period on the intensity of difficulties, and (iii) identify the effect of the level of education on the difficulties experienced by novices. The data collected are the results of a study conducted in 2013 on trainee teachers recruited between 2011 and 2013 as part of a master's degree in didactics and which has not been completed. To answer the initial questions and statistically verify the hypotheses of this cross-sectional study, a data collection technique quantifiable by a questionnaire is used, which makes it possible to give the survey more scope. This research was conducted using the following methodology:

### *2.1 Participants*

Considering that the quality of a research work is maintained not only by the relevance of the methodology and instrumentation, but also by the relevance of the sampling strategy that has been adopted (Cohen et al., 2007). Sampling is a process by which a group of people or a portion of the population is selected to represent an entire population (Fortin, 2010). The starting population of this research is made up of trainee PE teachers belonging to the three governorates of southern Tunisia: Gabes, Medenine and Tataouine and exercising their profession in schools, colleges and high schools. As there was no precise number of trainee teachers in each region, collaboration with the educational inspectors in the three regions was necessary to contact as many novice teachers as possible. The initial number of trainee teachers was 176. The result of this collaboration set the final number of participants in each region: Gabes (n° 67), Medenine (n° 35) and Tataouine (n° 33). The final sample is 135 subjects (h = 56; f = 79) with an average age of 28 years and 2 months  $\pm$  4.3 including 94 head teachers and 41 PE teachers. The sample is active in 121 schools: 53 primary schools, 42 middle schools and 26 high schools, and they have all gone through a period of unemployment with an average of 5 years and 3 months  $\pm$  2.3. The characteristics of the sample are summarized in Table 2:

**Table 2. Study Sample Characteristics**

Characteristics		Workforce and percentage		
		N	%	Total
<b>Gender</b>	Wife	79	58.52	<b>135</b>
	Man	56	41.48	<b>(100%)</b>
<b>Region</b>	Gabes	67	49.63	<b>135</b>
	Medenine	35	25.93	<b>(100%)</b>
	Tataouine	33	24.44	
<b>Seniority</b>	01 day -12 months	57	47.41	<b>135</b>
	13- 24 months	47	30.37	<b>(100%)</b>
	25- 36 months	31	22.22	
	Primary	64	42.22	<b>135</b>
<b>Sub-corps</b>	College	41	34.82	<b>(100%)</b>
	Secondary	30	22.96	
	School	53	43.80	<b>121</b>
<b>Establishments</b>	College	42	34.71	<b>(100%)</b>
	High school	26	21.49	
<b>Diploma</b>	MP	94	69.63	<b>135</b>
	M	41	30.37	<b>(100%)</b>

## 2.2 Inclusion and Exclusion Criteria

**Table 3. Inclusion and Exclusion Criteria**

Parameters	Inclusion criteria	Exclusion criteria
<b>Region</b>	Teachers from others Regions	<b>Teachers belonging to the Regions of work</b>
<b>Seniority</b>	01 day to 36 months	<b>Only 36 months left</b>
<b>Sub-corps</b>	PE teaching sub-corps.	<b>Sub-body of sports professions.</b>
<b>Establishments</b>	Public schools: Primary school.College.High school.	<b>Promotion Center.Vocational training centre. Associations for the disabled. Youth centre. Private school. Academic institution.</b>
<b>Diploma</b>	Senior PE teacher. Master's degree in PE	<b>Senior sports master. Master's degree in sports. Master's degree in Sport for All Sports instructor.</b>
<b>Experiment</b>	Teachers who do not have taught or trained during the period of unemployment.	<b>Teachers who have taught or trained during the period of unemployment.</b>
<b>Other</b>	<b>Agree to participate</b>	<b>Refusal to participate</b>

In order to investigate the effect of experience on the difficulties encountered by novices, the sample ( $n = 135$ ) in this study was divided into three groups according to seniority as follows:

- Group 1: The new teachers: these are teachers who are in the first year of internship and who have between one day and 12 months of exercises ( $n = 57$ )
- Group 2: The more or less new: those who have been 13 and 24 months of exercise ( $n = 47$ )
- Group 3: Those at the end of the internship period, which is between 25 and 36 months of financial years ( $n = 31$ ).

To characterize the intervention level variable, it was necessary to divide the sample from the point of view of belonging to a primary school, a middle school and a high school (see Table 4). The total sample ( $n = 135$ ) yielded three groups as follows:

- Group 1: Primary school teachers ( $n = 64$ ).
- Group 2: Middle school teachers ( $n = 41$ ).
- Group 3: Teachers working in high schools at ( $n = 30$ ).

### *2.3 Measurement Tools and Measured Variables*

In this research, the choice of questionnaire by De Stercke et al. (2010) was used as an investigative tool. The form of the questionnaire was validated by Pascal Detroz, head of SMART. The relevance of the items and themes addressed has been validated by Stéphane Martineau (De Stercke et al, 2010). The initial questionnaire consists of five parts, but only the first two parts are useful in this study.

The questionnaire is structured in two parts. A part called a presentation part and a part subject to the research theme.

The first part highlights the nature of the sample interviewed, namely, who are they? Some information specific to the Tunisian context has been added. The characteristics of the subject are related to gender, age, experience, year of graduation, date of recruitment, region of origin, nature of the institution and the region in which he or she works. The second part, on the other hand, addresses the questions asked of teachers in order to identify the difficulties they face. This part of the questionnaire consists of 12 items consisting of four-level Likert scales (strongly disagree, disagree, agree, strongly agree). Among 12 items, four items related to the relational component variable (item 1-7-8-9), four items with the organizational difficulties variable

(Items 2-3-10-11), three items with the variable didactic/pedagogical difficulties (item 4-5-6) and one item related to the variable difficulties related to private life (item 12).

An open-ended question was proposed to allow teachers to express themselves and cite the difficulties felt other than those cited in the 12 items.

#### *2.3.1 The Pre-test*

Before the survey of the sample was launched, the concern was to presume as much as possible that the items were well understood by the trainee teachers. In January 2013, 14 random teachers from the survey universe, but who are not part of the study sample and who have the same characteristics, are asked to answer the questionnaires at a meeting. The pre-test made it possible to identify the difficulties

encountered by teachers in understanding certain terms and the choice of the scale that corresponds to the answer. The pre-test sample did not answer the open-ended question proposed to allow them to express themselves and cite the difficulties they experienced. The latter question was eliminated and the final version of the questionnaire was limited to the 12 items.

### 2.3.2 Procedure

Since the sample belongs to three regions of the southern Tunisian sector, two modalities in the administration of the questionnaires are used. Teachers working in Gabes are invited to fill in the questionnaires during two meetings. The first is intended for sub-bodies working in primary schools and a second is intended for sub-bodies working in middle and high schools. The two meetings were in the same week, in a morning session that lasted one hour. During each meeting, a presentation of the questionnaires is carried out while insisting on the scientific aspect of the research established within the framework of the APSA's higher education in the didactic master's degree. The questionnaires, prepared in PowerPoint form and presented by projection. Participants are asked to fill in the first part of the questionnaire and then answer the items one by one. Once all the participants have responded to an item, we move on to the next item. The two meetings in Gabes resulted in a total of 87 questionnaires. To conduct the survey in the regions of Medenine and Tataouine, the educational inspectors working in these regions were contacted to collaborate. The approach of the administration of the questionnaires is presented to these inspectors who have ensured well. It took 2 months to obtain 89 questionnaires from the Tataouine and Medenine regions.

### 2.3.3 Data Analysis

After retrieving 176 questionnaires, the counting phase yielded 135 questionnaires. A total of 39 questionnaires do not meet the inclusion criteria, including 09 novices who have trained and taught in the private sector during the transition period, 11 teachers belong to the regions in which they practice the profession, 6 teachers in sports professions, 3 teachers who do not teach PE and 10 teachers who have exceeded a seniority of 36 months to obtain a total of 135 questionnaires. The final analysis of the questionnaires is carried out on an Excel spreadsheet.

### 2.3.4 Statistics

The statistical analysis of the data is carried out on a computer using the Statistica12 software (StatSoft, France). Data are presented as counts and percentages for qualitative variables and as means  $\pm$  standard deviations for quantitative variables.

The information collected requires a statistical calculation to evaluate the effects of the variables being studied in relation to the assumptions made above.

- Shapiro Wilk's test showed that distributions do not follow the normal distribution, hence the use of nonparametric statistical tests.

In order to validate the hypotheses of our study, several tests were used:

- Student's t-test for single sample to compare the mean scores of the items studied to a theoretical mean (2.5 = median of Likert scale responses).

- The comparison between the four components of the study was made by the Friedman test.
- The peer comparison was performed by the Wilcoxon test.
- The study of the effect of the independent variables, seniority and level of education, on the dependent variables difficulties was verified by the Kruskal-Wallis test.
- In the event of a significant effect, multiple comparisons were applied to compare the modalities by peers.
- All statistics are considered significant for a 5% probability level ( $p < 0.05$ ).

### 3. Results

Comparison of the mean scores of each component to a neutral theoretical mean by Student's statistical tool t for single sample (the difference is significant at  $p < 0.05$ ).

- The overall average score of the pedagogical/didactic component is  $2.69 \pm 0.61$ , significantly higher than the average theoretical value (2.5) at  $p < 0.001$ .
- The overall average score of the relational component is  $1.65 \pm 0.50$ , it is lower than the average theoretical value (2.5). The difference is significant at  $p < 0.001$ .
- The overall average score of the administrative, organizational, and material component is  $2.60 \pm 0.57$ . It is higher than the theoretical average (2.5). The difference is significant at  $p < 0.05$ .
- The overall average score for the privacy variable is  $2.23 \pm 1.03$ . It is lower than the average theoretical value (2.5). The difference is significant at  $p < 0.05$ .

**Table 4. Mean Item Response Scores**

Difficulties in entering the labour market	Strongly				Valeur de	
	disagree	Disagree	All right	Totally agree	Mean $\pm$ SD	P
<b>Pedagogical/didactic</b>					<b><math>2.69 \pm 0.61^*</math></b>	<b>0,000</b>
<b>1-Evaluation of learning</b>	9 (6.66%)	39 (28.89 %)	78 (57.78%)	09 (6.66%)	$2.64 \pm 0.70^*$	0.018
<b>2-Classroom and classroom management discipline</b>	12 (8.9 %)	21 (15.55 %)	71 (52.60 %)	31 (22.96 %)	$2.89 \pm 0.85^*$	0.000
<b>3-Planning of Learning</b>	15 (11.11%)	42 (31.11%)	68 (50.37%)	10 (07.41%)	$2.54 \pm 0.79$	0,549
<b>Organizational</b>					<b><math>2.60 \pm 0,57^*</math></b>	<b>0,048</b>
<b>4-Material resources</b>	26 (19.26%)	42 (31.11%)	36 (26.67%)	31 (22.96%)	$2,53 \pm 1.04$	0,71
<b>5-Keeping administrative documents</b>	16 (11.85%)	65 (48.15%)	52 (38.52%)	02 (01.48%)	$2,29 \pm 0,69^*$	0.000

<b>6-Organizational constraints</b>	14 (10.37%)	45 (33.33%)	60 (44.44%)	16 (11.85%)	2,58 ± 0,83	0,27
<b>7-Business travel</b>	12 (08.89%)	23 (17.03%)	55 (40.75%)	45 (33.33%)	2,98 ± 0,93*	0.000
<b>Relational</b>					<b>1.65 ± 0.50*</b>	<b>0.000</b>
<b>8-Collaboration-sharing of resources between colleagues</b>	58 (42,96%)	47 (34,81%)	23 (17.04%)	07 (05.19%)	1,84 ± 0,89*	0.000
<b>9-Relationship with parents</b>	87 (64.44%)	35 (25.93%)	08 (05.93%)	05 (03.70%)	1,49 ± 0,77*	0.000
<b>10-Relationship with management</b>	68 (50.37%)	45 (33.33%)	17 (12.60%)	05 (03.70%)	1,70 ± 0,83*	0.000
<b>11-Relationship with colleagues</b>	79 (58.52%)	37 (27.40%)	15 (11.11%)	04 (02.96%)	1,58 ± 0,80*	0.000
<b>12-Privacy</b>	43 (31.85%)	33 (24.45%)	43 (31.85%)	16 (11.85%)	<b>2.23 ± 1.03*</b>	<b>0.003</b>

\* significant difference from the theoretical mean (2.5) at  $p < 0.05$

The average values of the scores relating to the categories of difficulties obtained among the trainee teachers during the PI period are presented giving an overall average score of the Pedagogical/Didactic category of  $2.69 \pm 0.6$ . It is the highest score compared to the other categories. The Friedman test yielded a  $\chi^2 = 115.978$  ( $N = 135$ ,  $ddl = 3$ ) with a significant difference between the difficulty categories at  $p < 0.001$ . The peer comparison carried out by the Wilcoxon test yielded:

- A significant difference of  $p < 0.001$  between the overall average score of the Privacy category ( $2.23 \pm 1.03$ ) and the overall average score of the Pedagogical/Didactic category ( $2.69 \pm 0.61$ ).
- A significant difference at  $p < 0.001$  between the overall average score of the relational difficulties category ( $1.65 \pm 0.50$ ) and the overall average score of the Pedagogical/Didactic category.
- A non-significant difference at  $p > 0.05$  between the overall average score of the organizational difficulties category ( $2.60 \pm 0.57$ ) and the overall average score of the Pedagogical/Didactic category.

Thus, our hypothesis is not confirmed since novices face pedagogical/didactic difficulties and also organizational difficulties.

- The addition of the “Agree” and “Strongly agree” levels of the Likert scales gave the ranking of difficulties: Table 5:

The results of the experiment effect are presented in the table below.

**Table 5. Effect of Experience on Difficulties**

Difficulties in entering the labour market	1 day in	13 days in	25 days	H (2.135)	P
	12 months	21 months	36 months		
	Score Medium ± SD	Score Medium ± SD	Score Medium ± SD		
<b>Pedagogical/didactic</b>	3,07 ± 0,43	2,56 ± 0,51a	2,19 ± 0,59a	<b>47.556</b>	<b>0.001</b>
<b>1-Evaluation of learning</b>	2,91 ± 0,63	2,51 ± 0,68a	2,35 ± 0,71a	16.779	0.001
<b>2-Classroom and discipline management</b>	3,45 ± 0,57	2,72 ± 0,65a	2,13 ± 0,88a	52.204	0.000
<b>3-Learning planning</b>	2,86 ± 0,76	2,44 ± 0,74a	2,09 ± 0,65a	22.245	0.000
<b>Organizational</b>	2,68 ± 0,51	2,57 ± 0,61	2,48 ± 0,60	<b>3.470</b>	<b>0.176</b>
<b>4-Material resources</b>	2,73 ± 1,06	2,38 ± 1,07	2,39 ± 0,95	3.775	0.151
<b>5-Keeping administrative documents</b>	2,47 ± 0,65	2,19 ± 0,64	2,13 ± 0,76	7.077	0.029
<b>6-Organizational constraints of exercise</b>	2,52 ± 0,82	2,53 ± 0,88	2,74 ± 0,77	1.218	0.543
<b>7-Business travel</b>	2,98 ± 0,89	3,19 ± 0,90	2,67 ± 0,98	6.115	0.057
<b>Relational</b>	1,57 ± 0,39	1,52 ± 0,42	2,00 ± 0,60a	<b>15.075</b>	<b>0.000</b>
<b>8-Collaboration-sharing of resources between colleagues</b>	1,79 ± 0,82	1,70 ± 0,85	2,16 ± 1,00	4.882	0.089
<b>9-Relationship with parents</b>	1,87 ± 0,96	1,15 ± 0,36a	1,29 ± 0,46a	23.563	0.000
<b>10-Relationship with management</b>	1,33 ± 0,47	1,66 ± 0,81	2,42 ± 0,92ab	30.593	0.000
<b>11-Relationship with colleagues</b>	1,28 ± 0,49	1,57 ± 0,71	2,16 ± 1,06a	18.459	0.000
<b>12-Privacy</b>	2,19 ± 1,10	2,06 ± 0,96	2,58 ± 0,96	<b>5.172</b>	<b>0.075</b>

(a: significant difference from experience modality (1 day to 12 months); b: significant difference from experience modality (13 to 24 months).

The study of the effect of the independent variable experience on the dependent variables difficulty categories showed differences between the three groups. Differences recorded in the category of pedagogical/didactic difficulties,  $H(2.135) = 47.556$ . The difference is significant at  $p < 0.000$ . Multiple peer comparisons were applied between the difficulty modalities that showed significant differences. The group with experience between 1 day and 12 months had the highest average score in this difficulty category ( $3.07 \pm 0.4$ ). This group also scored highest in assessment ( $2.91 \pm 0.63$ ), classroom and discipline management ( $3.45 \pm 0.57$ ) and learning planning ( $2.86 \pm 0.76$ ). The comparison of the three

groups on these three variables was significant at  $p < 0.001$ . No significant difference was recorded between the group with 13 to 24 months of experience and the group with 25 to 36 months of experience. The comparison between the three groups yielded  $H(2,135) = 3.470$ ;  $p > 0.05$ . Non-significant differences in the category of organizational difficulties do not show a significant effect between the three groups, but descriptive statistics still indicate lower averages among novices during the third stage of the PI period in terms of business travel ( $2.67 \pm 0.98$ ) and administrative record keeping ( $2.13 \pm 0.76$ ). However, this group has the highest score in terms of organizational exercise constraints ( $2.74 \pm 0.77$ ). Differences recorded in the category of relational difficulties  $H(2,135) = 15.075$ . The difference is significant at  $p < 0.001$ . Descriptive statistics indicate that the highest average score is that among novices during the third stage of the PI period. It is  $2.00 \pm 0.60$ . Multiple peer comparisons gave a significant difference at  $p < 0.001$  between this group and the other two groups. No significant differences were observed between the 1-day to 12-month group and the 13-to-24 month group. Multiple peer comparisons also showed:

- A non-significant difference at  $p > 0.05$  in the level of collaboration-sharing of resources between colleagues.
- A significant difference between the 1-day group at 12 months and the other two groups in terms of the difficulty with the relationship with the parents at  $p < 0.001$ .
- A significant difference at  $p < 0.001$  between the 25 to 36 month group and the other two groups in terms of difficulty with management and at  $p < 0.001$ .
- A significant difference at  $p < 0.001$  between the 1-day group at 12 months and the 25-36 month group in terms of the difficulty in dealing with colleagues. The 25 to 36-month group had the highest scores in collaboration-sharing of resources among colleagues ( $2.16 \pm 1.00$ ), the relationship with management ( $2.42 \pm 0.92$ ) and the relationship with colleagues ( $2.16 \pm 1.06$ ).

The comparison between the three groups did not yield significant differences in the category of private life difficulties,  $H(2,135) = 5.172$ ;  $p > 0.05$ .

Although statistical analysis does not show a significant effect, descriptive statistics indicate that the highest average is that among novices is during the third stage of the PI period ( $2.58 \pm 0.96$ ).

The main results of the present study carried out on a sample of 135 trainee PE teachers working in the southern Tunisian sector and having the particularity of being recruited after several years of unemployment since obtaining their diplomas, showed that the difficulties most encountered by novices are pedagogical/didactic ( $2.69 \pm 0.61$ ) and organizational ( $2.60 \pm 0.57$ ). The intensity of difficulties related to private life ( $2.23 \pm 1.03$ ) and relational difficulties ( $1.65 \pm 0.50$ ) is low. Novices mainly face difficulties in classroom management (75.56%), business travel (74.08%), evaluation (64.44%), planning (57.78%), organizational constraints of practice (56.29%) and material resources (49.63%). Comparison between the three groups based on experience during the PI period showed significant differences in the category of pedagogical/didactic difficulties between novices with experience from 1 day to 12 months ( $3.07 \pm 0.43$ ) and novices with experience between 25 and 36 months ( $2.19 \pm 0.59a$ ). In the category of

relationship difficulties, novices encountered more difficulties during the third stage of PI ( $2.00 \pm 0.60$ ). There was no difference between the three groups in the categories of privacy difficulties and organizational difficulties. The results showed that the level of intervention has a significant effect on the pedagogical/didactic and organizational categories of difficulties. The comparison between the three groups showed that the sub-body of primary school teachers was the most affected from a pedagogical/didactic point of view ( $2.96 \pm 0.41$ ), in second place those working in middle school ( $2.73 \pm 0.54$ ) and in third place their colleagues working in secondary school ( $2.07 \pm 0.62$ ). Novices who teach in primary schools encounter more organizational difficulties ( $2.95 \pm 0.48$ ) than sub-teaching staff in middle schools ( $2.41 \pm 0.43$ ) and high schools ( $2.11 \pm 0.43$ ). The peer comparison showed no difference between these last two teaching sub-bodies. The statistics also showed that the novices working in middle school encounter more difficulties related to classroom management ( $3.22 \pm 0.65$ ) than the other two groups.

#### 4. Discussion

The objective of this study is to understand the difficulties experienced by beginner PE teachers in Tunisia. Knowledge of the difficulties experienced by novices and the evolution of their intensities during the PI period is a priority at the national level to change the real situation of novices, which requires reform in teacher training by developing PI programs and setting up support systems so that they can become effective professionals. For early career teachers to develop, they need to start their careers in stable and predictable roles in schools with supportive administrative arrangements, effective induction and mentoring programs, and a professional school culture. Support measures can contribute to the improvement of various professional skills, increased job satisfaction of new teachers, staff retention, and by extension, student success (Carpentier et al., 2020). Improving the entry into the profession and the working conditions of the novice is essential in order to promote his or her well-being while reducing psychological problems such as stress and burnout, which are at the root of absenteeism from work (Martineau et al., 2008), in order to reduce absenteeism from work for mental health reasons and to increase the professional perseverance of teachers and the educational success of students. The results of this study showed that experience has little effect on most difficulties. The major effect is observed at the level of the pedagogical/didactic category, but which stagnates during the second year of the internship. The intensity of certain difficulties has increased over time, such as that of the relational category. Our results corroborate those of De Stercke et al. (2010) who consider that professional difficulties do not seem to decrease with the increase in the seniority of beginners. On the other hand, Yanuarli et al. (2019), concluded that there is a positive correlation between the period of work and the professionalism of PE teachers. PE and ES mainly face pedagogical/didactic difficulties during the first year of the internship. The difficulties encountered are in the management of the classroom, evaluation and planning. According to Barkauskaitė and Meškauskienė (2017), the lack of knowledge and practical skills was one of the obstacles to the success of the pedagogical activity. Some researchers have explained

these difficulties by the abandonment of some of the practical knowledge developed during initial training (Mukamurera et al., 2013). In Tunisia, the absence of serious and solid continuing education reinforces the feeling of inadequacy in the face of professional problems. Continuing education could give the novice solutions to face the shock of reality. In the case of this study, the period of unemployment could be the cause of the abandonment of theoretical and practical knowledge. The novice is no longer “pedagogically armed” to master and organize the class and he is no longer “didactic armed” to plan and evaluate learning. In addition, it increases self-doubt as a teacher and affects the experience of novices (Marent et al., 2020) and leads to questioning of knowledge, beliefs about oneself and built relationships with others (Ambroise et al., 2017). The constraints of the novice’s work become personal, related to motivation and feelings of efficacy and leads to stress and burnout. However, according to De Stercke et al. (2010), novices have a strong sense of efficacy which is decisive for the individual’s motivation, commitment to work, and perseverance in the face of difficulties. According to Michel (2013), teachers who had been working for one to two years were more engaged than those who had been working for three to five years. At the beginning the novice is more committed, he fropes around, applies recipes and looks for solutions to solve pedagogical and didactic challenges. He learns by trial and error and when needed he relies on his colleagues to help him. Already, the subjects who participated in this study do not encounter difficulties in terms of collaboration and sharing resources with colleagues. According to De stercke et al. (2010), it is from the fifth year onwards that there is a significant decrease in difficulties related to the representation of the task, classroom management, self-knowledge and the culture of the profession. The results showed that novices encounter more relational difficulties during the third phase of PI, especially with management. This could be explained by the fact that novices are starting to forge their professional identities and measure themselves against their colleagues. Novices experience professional, identity and socio-professional changes (Ambroise, 2017). The results showed a significant effect of the intervention level. The intensity of difficulties most observed was among novices practicing in elementary school. Our results corroborate with the study by Barkauskaitė and Meškauskienė (2017) who showed that the difficulties faced by primary and middle school teachers were similar but different in their intensity. The differences in planning could be explained by the difficulty of internal didactic transposition. Indeed, the knowledge to be taught in PE in the Tunisian education system is spread over three periods. During the first three years of basic education, the content is focused on the spontaneity of motor behaviour, then in the second period of primary education, the content is aimed at refining motor behaviour in order to achieve regulated physical activity in middle and secondary schools. The programmes in middle school and especially in secondary school are therefore quite similar to the APSAs, hence novices find fewer difficulties compared to their peers in primary schools. The latter are obliged to make more effort at the level of internal didactic transposition. The amount of time spent on PE material can increase the difficulty of planning and cause other difficulties. The weekly number of hours is one hour per week at the primary level, it is three hours at the middle school and two hours at the secondary level. Learning cycles can reach 12 hours each in middle school, between eight and ten hours

in high school. However, primary school teachers only have eight to 10 hours per term. Most teachers working in primary schools program content in cycles like their colleagues in middle and high schools, whereas it is necessary to program by theme. In this case, the hourly volume of a learning cycle at primary level is four hours. This time constraint presents novices with challenges and is forced to make an internal didactic transposition without the need for assessment. This could explain their difficulties in assessing learning. Again due to a lack of hours, only one PE teacher is assigned to teach alone in a school. This leads to isolation and lack of communication with other colleagues, which explains why in terms of relationships, PE teachers working in primary schools do not encounter relational difficulties with their peers. However, primary school teachers are the most concerned by contact with parents. Given the age of the students, parents accompany their children to school, which offers opportunities for contact and could cause communication difficulties between the novice and the parents. In middle and high school, there is little contact with parents. Indeed, the latter are only interested in subjects with high coefficients such as mathematics, science and languages, while the PE subject has a low coefficient. They are marginalized by parents, teachers of other subjects and by principals (Eirín-Nemiña et al., 2022; Lux & McCullick, 2011).

PE ES in middle school encounter more difficulties in terms of classroom management. In the Tunisian context, it is due to the characteristics of students and the proliferation of violence in schools, particularly in secondary schools. The scourge of violence in education is in full swing in Tunisia. According to the Tunisian Social Observatory, several cases of violence targeting teachers, students and the educational framework have been reported. Cases of reported violence in schools increased tenfold in 2021 compared to 2020. The analytical study conducted by the Tunisian Organization for Social Cohesion in 2018 shows that acts of violence in schools take place in middle schools (85%). One of the major causes of the difficulties experienced by novices is assignment (Fantilli, 2009). A few novices were recruited two weeks before the end of the school year. Given the great lack of teaching staff in the southern Tunisian sector. All subjects in this study are assigned far from home. This explains the high intensity of the difficulties related to business travel. For family reasons, some women commute daily that require 3 hours of travel. This is what explains in some ways the difficulties related to privacy (Mukamurera et al., 2013; De Stercke, 2014). Individual dispositions and contextual factors influence the career path of PE teachers (Iannucci & MacPhail, 2019). To minimize the intensity of the difficulties, the novice must rely on himself. Modern developmental theory considers the individual as the organizing unit of his or her development (Watt & Richardson, 2008). From a Bachelardian perspective, when we learn, we always start by making mistakes and we must get out of the way of the “primary experience”, which is also the first epistemological obstacle (Pastré, 2007). The game of experimentation and mistakes forges the know-how of the trade and the trials experienced during the integration phase become formative (Rojo, S. & Minier, 2015). The beginner teacher becomes the main actor in his professional integration and the main resource on which he can rely to overcome the difficulties he must face. It is capable of transforming tensions into a positive experience, or even into learning (Van der Wal et al., 2019). Also, the socio-

cultural context has an effect on development. The theory of social constructivism (Vygotsky) claims that developmental change cannot be separated from society and culture. Novice learning is an activity that consists of building or rebuilding one's cognitive resources in order to transform one's own activity to make it better adapted to contexts and situations. The results represent a rich and varied set of data that makes it possible to identify many possible solutions to improve different aspects of the PI of PE teachers in Tunisia. In the short term, we offer in-service training specific to teachers starting in the first year of practice, focusing on learning planning and assessment as well as classroom management. Professional development should be viewed as a continuum and not limited to the first year, but rather enrich continuing education in the second and third years. Regarding initial training, training institutes should consider pedagogical internships in primary schools, since in recent years, recruitment competitions have been opened to recruit primary school teachers. Also, the growing number of primary schools in the private sector offers more employment opportunities for future teachers. Officials of the Ministry of Youth and Sports are invited to review the recruitment dates. Once recruited, novices must be trained prior to designation. We also suggest that those in charge reflect on the possibility of assigning novices to their regions of residence since there are enough vacancies, especially in elementary schools, or by opting for mentoring during the first year of teaching. Teachers will then be appointed in other regions on a rotational basis. At the regional level, the appointment must be carried out in a fair manner. . The national ranking of competitors established by the Ministry is a criterion to be respected. The appointment will be made in order of merit and not by regionalism. As far as possible medium- and long-term actions are concerned, we recommend the establishment of a formal national system of support for career entry. A national reference framework would be defined at the level of the Ministry of Youth and Sports, but its content would remain open to taking into account the characteristics of teachers and the local context. The implementation of assistance and support programmes for novices is part of a continuous training programme which requires a budget for teacher training and the creation of regional centres for the in-service training of PE teachers. The measures to help and support new PE teachers will concern all stakeholders in the education system such as administrative staff, school directors, educational inspectors, teachers, etc. because "If it takes a village to raise a child, then perhaps it also takes a village to support a new teacher" (Eggen, 2002).

## 5. Conclusion

This exploratory-descriptive study aimed to investigate the professional integration (PI) of trainee PE teachers in Tunisia, who have the particularity of being recruited after several years of unemployment since obtaining their diplomas. The objective of this research was to explore the difficulties experienced by novices in obtaining a source of information necessary for the design of content and training methods. The aim was to measure the effect of experience and the level of intervention on the intensity of difficulties in order to check whether the period of professional integration of PE teachers is sufficient to reduce them and whether there are differences in the experience of the sub-bodies of PE teachers. The

results of this survey seem to us to be particularly interesting to take into consideration in the constitution of a possible formal system for the induction of PE teachers in Tunisia. However, it should be borne in mind that the difficulties presented only partially cover the difficulties encountered by beginners and are based only on their points of view. Hence the confrontation of their opinions with those of other school actors such as principals and educational inspectors, so that it will be possible to establish a more reliable map of their difficulties.

### 5.1 The Limits of the Research

This study was conducted among a sample of teachers in the southern Tunisian sector and not among the entire population of novices in Tunisia. The results obtained concerning the difficulties experienced by novices only partially cover the problems encountered by beginners. Indeed, the questionnaire that was used did not detail the difficulties that are part of the components. According to Gaudreau (2017), classroom management contains five components: resource management, setting clear expectations, developing positive relationships, expectations and commitment to the learning object, and managing unruly behaviours. The quantitative approach used to identify common traits, or differences between groups, for the descriptive and explanatory purpose of the professional difficulties of beginning teachers seems to be insufficient. A qualitative approach that focuses on the subjectivity of the individual and the individuality of the situation makes it possible to deal with a limited number of observations and with great finesse seems to be useful for a better understanding of the process of professional integration and could provide interesting avenues for the construction of more detailed indicators detailing the difficulties.

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