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TRADITIO ET EXCELLENTIA

Babes-Bolyai University, Cluj-Napoca  
**Faculty of Psychology and Sciences of Education**  
**Doctoral School “Education, Reflection, Development”**

**TEZĂ DE DOCTORAT**  
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**CLUJ-NAPOCA**  
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**Intercultural Analysis of the Role of Special Education  
Practicum in the Professional Development of Israeli  
Pre-Service Teachers**

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## **Introduction**

### **Background**

The formation of professional identity (PI) in pre-service teachers (PSTs) was addressed in numerous studies dating back to the mid 2000's. Schepens, Aelterman & Vlerick (2009) examined the formation of PI in two aspects: (1) the demographic and personality traits contributing to the propensity for becoming a teacher; (2) the contribution of experience and education to becoming a teacher.

Tickle (1999) defines professional teaching identity (PTI) as a teacher's feeling of belonging to the profession and identifying with it. The PTI concept includes two components that are interconnected: (1) The teachers' prior experience and personal attributes as contributing to their self-perception as teachers, in their professional life; (2) The perception of teachers by their surrounding environment (Manor-Binyamini, 2001).

### **Problem Statement**

Israel is considered a heterogeneous, multi-ethnic and multi-cultural society (Al-Haj, 2012). Israel was established as the Nation-State of the Jewish people (Boimel, Ze'evi, & Totry, 2009; Haider, 2005). The state of Israel acknowledges the Arab-Israelis as a religious, cultural and lingual minority, but not as a national minority. As a result, Arabs receive the status of an ethnic minority without receiving national rights. Nevertheless, Arabs function successfully as a cultural minority (Ali & Daas, 2018).

The Arab society views education as one of the central challenges in its formation, development, progress and maintaining its legacy and unique character. As a result, its involvement in educational matters increases (Shaviv, Binstein, Stone & Fudem, 2013). Over the last decade increase in the education level of Arab youth has occurred, however, there is still a significant gap between their achievements and the achievements of Jewish youth (Haj-Yahya & Asaf, 2017; Haj-Yahya, Saif, Kasir & Fargeon, 2021; Ali & Daas, 2018).

Despite the intention of promoting the integration of Arab students into the academy, the reality is still miles away from the goal, as some of the barriers preventing such integration are based on the level of academic readiness, gaps in the knowledge of the Hebrew language that dominates academic classes and social-financial background differences (Krill & Amariya, 2019). The understanding of the current situation has led to the development of unique programs designed for the integration of Arab students in higher education institutions in Israel (Ullman-Drum, 2021).

## **Gap in Knowledge**

Many studies have examined the contribution of the practicum program to PSTs and compared between different available programs. There are only few studies examining students from the Arab society among the special education students in Israel (Anderson & Stillman, 2013; Arbiv-Elyashiv & Lederer, 2011; Maskit & Dorfberger, 2018; McElwee, Regan, Baker & Weiss, 2018), but there is no specific study addressing the target variables proposed in this PhD research, which will be investigated in two PSTs cultures : teachers' professional identity development, teachers' role perception and the sense of self-efficacy.

The current research aims to examine professional identity development, role perception and the sense of self-efficacy of PSTs who have undergone a practicum during their special education training at a teaching college in Northern Israel. The particularity of the current study is that the PSTs participating in the study come from the two main cultures and ethnicities in the Israeli society: Jewish and Arab. Both groups attend a pedagogical course that accompanies the college's practicum program. The course is taught in Hebrew and the practicum is conducted in Jewish and Arab schools, based on the ethnic-lingual affiliation and residential proximity of each participant.

## **Research Goals**

The doctoral research is organized in three studies:

**Study 1: Quantitative study** – To perform a comparison between Arab and Jewish PSTs in their professional identity development, their perceptions of the role of a special education teacher and their self-efficacy in teaching (SET), at the beginning and at the end of the academic year (with and without participating in special education practicum program).

**Study 2: Qualitative study** - To examine the short-term and long-term impact of a special education practicum program on the PSTs' Professional identity development.

**Study 3: Qualitative study** - To examine the PSTs' perceptions regarding the difficulties they faced, their support systems and the help they received during the training, and the contribution of these aspects to their professional identity development.

## **CHAPTER 1. THEORETICAL BACKGROUND**

### **1.1 Understanding cultural diversity**

Culture generally refers to the acceptable customs, patterns of behaviors, values and norms of a certain group of individuals. Since the concept of culture varies across different groups and societies, it is an ever-evolving concept that has developed with the help of social sciences. Culture cannot survive on its own merits, but rather depends on members of a certain society to exist (Stanislaus & Ueffing, 2018).

### **1.2 Professional Development in Teaching**

Professional development is an ongoing development of the teacher's professional knowledge and skills (Bolam, 2002). The teachers have to continuously expand their professional knowledge, deepen their insights regarding teaching and learning processes, and develop new teaching methods and skills (Darling-Hammond, 2005). Professional identity in teaching (PIT) is part of a person's individual identity (Kozminsky, 2008). Tickle (1999) defines PIT as a teacher's feeling of belonging to the profession and identifying with it. PIT impacts the teacher's behavior, work method, ways of thinking, beliefs, and statements (Altman & Katz, 2001), as well as obligation, satisfaction from work (Kelchtermans, 2009), sense of burnout and failure to stay in the education system (Fisherman, 2016).

The findings of the **professional development in teaching** studies indicate: the most important factors are the quantity and quality of the interactions of the PSTs with the mentoring teachers and the students (McElwee, et al., 2018). The PSTs are highly satisfied from their professional development and from their key trainers, mentoring teachers, and the pedagogical counselors (Maskit, et al., 2018).

The findings of the **professional identity** studies indicate: the intervention programs contribute to the PSTs' professional identity and the emphasis placed on this identity during the training and their actual work enhanced it (Fisherman and Weiss, 2008). The PSTs are goal-oriented towards their job as teachers and perceive their practice as a part of their studies and not as a part of their professional identity development as teachers (Živković, 2018).

### **1.3 The Perception of the Teaching Role**

Poper and Ronen (1992) define role perception as the conscious part of the mind of the individual performing the role. According to Manor-Binyamini (2001), role perception includes two components: seeing the role as a part of reality and seeing the role as an ideal that needs to be achieved. The findings of the studies indicate: PSTs' perceptions of their role as

teachers depend on their ability to develop their skillset and implement what they learned to real-life situations (Choya, Wonga, Chuan-Gohb, & Lowe, 2014). The primary perception of the PSTs of their role, changes during the various stages of their training process - from **emotional** role to **professional** one (Caspi, Hod-Shemer & Or, 2019).

#### **1.4 Self-Efficacy in Teaching**

According to Bandura (1997), self-efficacy is a person's belief in one's ability and willingness to experiment with various tasks. Teachers' self-efficacy can affect their behavior and the way that they cope with a task, the effort they will put in, their feeling in relation to it, and their thoughts regarding their success in the task.

The findings of the studies indicate: Self-Efficacy in Teaching (SET) is affected by various factors and is primarily evolved during the training years. Such programs are meant to provide experiences that may promote the development of self-efficacy among PSTs (Mahajna, 2014). There is a correlation between the teacher's sense-of self-efficacy and the student's well-being. It is recommended that PST's sense of self-efficacy be promoted using professional and practical experiences, that are integrated during the theoretical courses of their training process (Levy-Keren, 2018; Ronen, & Weissblit, 2021).

#### **1.5 Jewish and Arab Societies in Israel**

Israel is considered a heterogeneous, multi-ethnic and multi-cultural society (Aden, Ashkenazi, & Alperson, 2001). The different groups that comprise the society differ from each other in terms of their national, religious, ethnic, class, and political affiliation (Al-Haj, 2012). A majority of the citizens in Israel (~74%) are Jewish. There are also minorities, the largest of which is the Arab minority (~21.1%) (Central Bureau of Statistics, 2022).

Most of the Arab citizens live in homogeneous localities on the periphery, which are ranked as low in terms of socio-economic status (Hadad Haj-Yahya, 2016). Its population is very diverse in its needs, socio-economic levels, cultural norms, religiousness, tradition levels and levels of higher education (Hadad Haj-Yahya, 2016). Part of the Arab society resides in Arab cities or in mixed Arab-Jewish cities. Another part of the population lives in rural Arab villages (Shaviv, Binstein, Stone & Fudem, 2013).

Higher education is at the top of the priorities of the Arab minority in the Israeli society (Ali & Daas, 2018). It can promote the Arabs' social mobility (Haj-Yahya, & Arar, 2009); including their mobility in the Israeli politics and economics (Mustafa & Arar, 2009); and improve their status (Ali & Daas, 2018). Over the years, there has been an increase in the



attendance rate of Arab citizens in higher education institutions (Hadad Haj-Yahya, 2016), it even doubled the size over the last decade (Council for Higher Education in Israel, 2020). It's noteworthy that the increase is in the number of Arab females and not males (Haj-Yahya et al., 2021).

### **1.6 Teacher Training Programs and Models in Israel**

Teacher training in Israel takes place in two types of institutions: (1) academic teacher training colleges; (2) universities. Based on the assumption that learning occurs only from experience (Maskit, & Mevarech, 2013), the special education study programs in Israeli education colleges emphasize the integration of theoretical learning into practicum experiences in special education framework (Shalev & Gilat, 2017).

There are two main models that coexist for teacher training programs in Israel. The first is the **concurrent** model, also known as the integrative model. It is designed for those who turn to teaching as their first career. It is a relatively young population with limited life experience, mostly high school graduates with no prior academic studies. The duration of studies in this model is normally four years and the studies integrate disciplinary and pedagogical studies. The model provides for relatively little training in fields of knowledge but includes significant practical experience. The second is the **consecutive** model, designed for graduates who have completed the disciplinary stage during early academic studies towards a bachelor's degree and sometimes a master's degree. The students attending this model are often more mature with richer life experiences, employment experience and are at times even parents. Their choice of the teaching profession is a later and often more educated choice. The duration of studies in this model is between one to two years, with no internship. This training is focused on the pedagogical field with little practical experience (Zuzovsky & Donitsa-Schmidt, 2017).

### **1.7 The Practicum Program in Special Education Training in Israel**

Teacher training programs in Israel and across the world place a great emphasis on a broad practical training of PSTs, aimed to best prepare them to a classroom of students with various needs, to improve their teaching skills and their ability to link between theoretical and practical knowledge in order to develop their professional self-efficacy (Gardiner, 2011).

During the PSTs' practicum, they are accompanied by a pedagogical instructor<sup>1</sup> on behalf of the college and a training teacher.<sup>2</sup> Both pedagogical instructor and training teacher have the mission to aid PSTs in understanding the demands of the teaching world, the students and their needs. The practicum is accompanied by a pedagogical course<sup>3</sup> at the college (Bracha & Hoffenbartal, 2021).

The practicum program has placed an emphasis on the evaluation methods of its students. There is significance in experience innovative evaluation methods (Nachshon & Rom, 2018). The goal of the basis evaluation is to cultivate significant learning. Using the evaluation process, the learner may be encouraged to place significant efforts into learning, encourage motivation and increase commitment to the evaluation processes (Metzer & Rom, 2014). The evaluation methods of PSTs in their practicum experiences include a **reflective digest (portfolio)**, **observation lessons** and the **evaluation of the training teacher** (Nachshon & Rom, 2018).

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<sup>1</sup> The pedagogical instructor is a member of the academic team of the college who fulfills a key role in the training process of PSTs.

<sup>2</sup> The training teacher is a teacher with at least 4 years of teaching experience at the school where the pre-service teacher's practicum takes place. The Teacher provides structured training to the PSTs, focusing on the subjects taught and other problems arising from the teaching aspect at the school.

<sup>3</sup> The pedagogical course presents the students with familiar and innovative models and educational theories.

## CHAPTER 2: RESEARCH DESIGN and METHODOLOGY

### 2.1 An Overview of the Research Design according to the studies

Study	Aim	Participants	Research Questions	Tools	Analysis
<b>Study 1</b> <b>Quantitative study</b>	To perform a comparison between Arab and Jewish PSTs' professional identity development, their perceptions of the role of a SE teacher and their self-efficacy in teaching <b>before and after participating in the practicum.</b>	168 special education PSTs: <b>103 Jewish and 65 Arab PSTs.</b>	<ol style="list-style-type: none"> <li>(1) Are there differences in the target variables among the PSTs experimental and control group, at the beginning of the academic year (1<sup>st</sup> semester) according to the cultural sector and year of study?</li> <li>(2) Are there differences in the target variables among the PSTs in the experimental group between the two time points (beginning of academic year-1<sup>st</sup> semester, end of academic year-2<sup>nd</sup> semester), and the two cultural sectors?</li> <li>(3) Do the PSTs' demographic characteristics contribute significantly to the explained variance (EPV) of the target variables at each time point?</li> </ol>	<p>Survey: <b>Questionnaires</b> <i>Professional identity Scale for special education teachers</i> (Hao, Niu, Li, Yue &amp; Liu 2014).</p> <p><b>Teacher Professional Identity Scale</b> (Weiss &amp; Fisherman, 2011).</p> <p><b>Teacher's Self Efficacy Scale</b> (Tschannen-Moran &amp; Hoy, 2001).</p>	Quantitative statistical analysis
<b>Study 2</b> <b>Qualitative study</b>	To examine the short-term and long-term impact of a special education practicum program on the PSTs' Professional identity development.	30 special education PSTs: <b>15 Jewish and 15 Arab PSTs</b>	Are there differences between the short-term and long-term periods, in the perceived impact of a special education practicum program on Arab and Jewish PSTs' professional identity development?	Critical reflections of the PSTs.	Thematic analysis by themes and categories.
<b>Study 3</b> <b>Qualitative study</b>	To examine the PSTs' perceptions regarding the difficulties they faced, their support systems and the help they received during the training, and the contribution of these aspects to their professional identity development.	30 special education PSTs: <b>15 Jewish and 15 Arab PSTs</b>	What are the perceptions of the PSTs regarding their difficulties, support systems and help they received during the practicum, as well as its contribution to their professional identity development?	Method- In-depth, semi-structured interviews. Tool - Interview guide.	Thematic analysis by themes and categories.

## **2.2 Research Methods and Tools**

The studies involved the usage of three tools, as follow:

**2.2.1 Research Tools for Study 1:** Valid and reliable questionnaires that examine the target variables. The method is a survey, and the tools are questionnaires.

**2.2.2 Research Tools for Study 2:** Critical reflections designed and composed in a written form by the PSTs participating in the studies.

**2.2.3 Research Tools for Study 3:** A semi-structured, in-depth interview, that was developed for this study by the researcher and was conducted at the end of the practicum program. The method is interview and the tool is an interview guide.

## **2.3 Research Participants**

**2.3.1 Participants in Study 1 -** The participants in Study 1 were 68 PSTs (7 males and 161 females) aged between 20 and 53 years, from both Jewish and Arab sectors in Israel. All of the PSTs studied for their B.Ed. in special education at a college for education in northern Israel. The participants were divided into two groups of college studies: PSTs who participated in the practicum training program in the special education course (second year in college), and PSTs who have not yet undergone the practicum program (first year in college).

**2.3.2 Participants in Study 2 -** The participants in study 2 were 15 Arab PSTs (2 males and 13 females) and 15 Jewish PSTs (15 females) PSTs who have undergone the practicum training program, in the special education course during the 2021-2022 academic year. These participants were second year students and have been training in the special education practicum for just one year.

**2.3.3 Participants in Study 3 -** The participants in study 3 were 15 Arab PSTs (2 males and 13 females) and 15 Jewish PSTs (15 females) who have undergone the practicum training program in the special education course during the 2021-2022 academic year, which was the end of their second year of studies.

## **2.4 Ethical Considerations**

The research was conducted in a college of education in the northern region of Israel. In order to conduct this study according to the required procedures, the proposal was approved by the Research Ethics Board in the college where the study was conducted. Additionally, the researcher gained permission from each of the participating PSTs, to collect data, to analyse their questionnaires and their critical reflections, and to conduct in-depth semi-structured interviews.

## CHAPTER 3. ORIGINAL RESEARCH CONTRIBUTIONS

### 3.1 STUDY 1 - Comparisons between Arab and Jewish PSTs' professional identity development, perceptions of the role of Special Education teacher and Self-Efficacy in teaching (Quantitative Study).

#### 3.1.1 Findings of study 1

(1) *Differences in the PSTs' PI development, the role of SE teachers, and their self-efficacy in teaching by sector and year of study at the beginning of the academic year (1<sup>st</sup> semester)*

- Significant differences were found between Jewish and Arab PSTs in the subscale "profession efficacy" regarding the PSTs' professional identity development questionnaire, the total scale of the PSTs' perceptions of the role of SE teachers' questionnaire as well as the total scale as well as the three subscales of the self-efficacy in teaching questionnaire. In all these measures, the Arab PSTs scored higher than the Jewish PSTs.
- Significant differences were found between the first-year PSTs and the second-year PSTs in the subscale "career choice confidence" regarding the PSTs' PI development questionnaire, the total scale as well as the three subscales of the self-efficacy in teaching questionnaire. In all these measures, the second-year PSTs scored higher than the first-year PSTs.

(2) *Improvements in the PSTs' perceptions regarding their PI development, the role of special education teachers and their SET due to the practicum program*

- Significant main effects of the cultural sector were found for the total score as well as for the subscales "career choice confidence" and "profession efficacy" in the PSTs' PI development questionnaire, indicating that the Arab PSTs scored higher than the Jewish PSTs. In addition, significant main effect of year of study was found for the subscale "profession efficacy" in the PSTs' professional identity development questionnaire indicating that the second-year PSTs scored higher than the first-year PSTs. Additional paired samples t-test indicated that both Jewish and Arab second year PSTs scored higher on the "profession efficacy" subscale at the end of the second academic year compared to the beginning of this year. Contrary to this result, first year Jewish PSTs

scored lower on the total score as well as on the subscales "career choice confidence" and "profession efficacy" at the end of the first academic year compared to the beginning of the same year. It should be noted that no main effects, nor interaction was found for the PSTs' perceptions of the role of special education teachers.

- The main effects of cultural sector and year of study were significant on the total scale as well as on the three subscales of the self-efficacy in teaching questionnaire, indicating that the Arab PSTs scored higher than the Jewish PSTs and that the second-year PSTs scored higher than the first-year PSTs. Additional paired samples t-test indicated that both Jewish and Arab second year PSTs scored higher on the total scale and on each subscale of the self-efficacy in teaching questionnaire at the end of the second academic year compared to the beginning of the same year.

*(3) The contribution of the PSTs' background characteristics to the explained variance of their PI development, their professional self-identity in special education and their SET*

- The year of study contributed significantly to the EPV of the PSTs' PI development, their professional self-identity in special education and their SET, respectively. Furthermore, the PSTs' year of study contributed significantly to the EPV of the subscale "career choice confidence" and "professional efficacy" as well as for the three subscales of the SET questionnaire. The positive  $\beta$  coefficients indicated that the improvement rate in these measures was significantly higher among second year PSTs compared to first year PSTs. The PSTs' sector and the study model contributed significantly to the EPV of the total scale of the professional identity development questionnaire as well as to the subscale of career choice confidence.
- The positive  $\beta$  coefficients regarding the PSTs' sector indicated that the improvement rate in these measures was significantly higher among Arab PSTs compared to Jewish PSTs. The negative  $\beta$  coefficients regarding the study model indicated that the improvement rate in these measures was significantly higher among PSTs who learned using the concurrent model. PSTs' prior experience with special education contributed significantly to the improvement rate of their professional efficacy. Moreover, the prior courses in special education taken by PSTs' contributed significantly to the improvement rate of their sense of mission. Finally, the PSTs' gender and age contributed significantly to the EPV of their perceptions of the role of special education teachers. Female PSTs improved their perceptions of the role of special education more

than male PSTs. The negative  $\beta$  coefficients regarding the PSTs' age indicated that younger PSTs tended to improve their perceptions of the role of special education at a higher rate.

### 3.1.2 Discussion and Conclusions

The discussion of the findings of study 1 will be conducted with regard to the study's three research questions.

**With regard to the first research question**, significant differences were found between Jewish and Arab PSTs in the subscale "profession efficacy" in the PSTs' professional identity development questionnaire, the total scale of the PSTs' perceptions of the role of special education teachers' questionnaire and in the total scale as well as the three subscales of the self-efficacy in teaching questionnaire. In all these measures, the Arab PSTs scored higher than the Jewish PSTs. A possible explanation to the differences found between Arab and Jewish PSTs may be related to social desirability. It is plausible that the Arab PSTs felt a need to rate their professional development and personal self-efficacy in teaching high, in order to present themselves in a more positive light. This explanation needs further exploration.

**With regard to the second research question**, according to hypotheses (2a), the findings of the study indicate that both Jewish and Arab second year PSTs scored higher on the "profession efficacy" subscale of the professional development measure at the end of the second academic year compared to the beginning of that same year. No improvement was identified in the two other measures of career self-confidence and sense of mission.

Regarding the PSTs' self-efficacy in teaching, in accordance with hypothesis 2c, both Jewish and Arab second year PSTs scored higher on the total scale and on each subscale of the self-efficacy in teaching questionnaire at the end of the second academic year compared to the beginning of that same year. These results indicate that the practicum program, which the PSTs underwent only during their second year of study led to significant improvements in both sectors mainly with regard to the PSTs' self-efficacy in teaching (2c) and professional efficacy (2a).

These findings, attesting to the contribution of the practicum to the improvement of a sense of self-efficacy in teaching, are in accordance with prior studies that found that teacher training programs, meant to provide practical and professional experiences during the course of training PSTs, contribute to the development of their self-efficacy (Mahajna, 2014; Levy-Keren, 2018; Ronen & Weissblit, 2021).

**With regard to the third research questions**, concerning the contribution of the background variables, it was found that the year of study contributed significantly to the EPV of the PSTs' professional identity development, the role of special education teachers, and their self-efficacy, respectively. Furthermore, the PSTs' year of study contributed significantly to the EPV of the subscale "career choice confidence" and "professional efficacy" as well as of the three subscales of the self-efficacy in teaching questionnaire. A plausible explanation for this may be that during their second year, the PSTs take more special education courses and undergo their practicum experience, all of them leading to the formalization of their perceptions regarding the role of a special education teacher. Notably, the improvement rate in these measures was significantly higher among second year PSTs compared to first year PSTs.

The PSTs' sector and the study model contributed significantly to the EPV of the total scale of the professional identity development questionnaire as well as to the subscale of career choice confidence. The improvement rate in these measures was significantly higher among Arab PSTs compared to Jewish PSTs. A plausible explanation for the higher improvement rate among Arab PSTs compared to Jewish PSTs, may be that the Arab PSTs who chose to attend a Jewish college in which the studies are in Hebrew, which is a foreign language for them, are very motivated to succeed and advance. Additionally, the college further invests in their guidance using an Arab speaking pedagogical instructor, to contribute to their achievements and professional development. Nevertheless, there is a need for further study in other academic teacher training institutions, to deepen the explanation for this gap.

The improvement rate in these measures was significantly higher among PSTs who learned using the concurrent model compared to the consecutive model. The consecutive model is designed for those who pursue a career change to special education and its duration is only two years. The concurrent model includes many more courses in the field of knowledge and has a greater contribution to improvement in the measures examined in this study.

An additional finding of this study indicated that prior experience with special education contributed significantly to the improvement rate of the PSTs' professional efficacy and whether or not they had previously taken a course in special education contributed significantly to the improvement rate of their sense of mission.



### 3.2 STUDY 2 - The short-term and long-term impact of a Special Education Practicum Program on the PSTs' Professional Identity Development (Qualitative Study).

#### 3.2.1 Findings of Study 2

The findings of the reflections are presented in accordance with the topics that arose during the reflection of 30 PSTs regarding their practicum experience.

Table 1 presents the comparison between the PSTs' reflections at the end of the 1<sup>st</sup> semester (after half of the practicum) and at the end of the 2<sup>nd</sup> semester (after a yearlong practicum).

**Table 1.** Comparison of the findings – between reflections of the 1<sup>st</sup> Semester and reflections of the 2<sup>nd</sup> Semester

<b>Risen/Not Risen</b>	<b>Mutual Aspects</b>	<b>Different aspects: 1<sup>st</sup> Semester</b> <b>Different aspects: 2<sup>nd</sup> Semester</b>
<b>Aspect</b>	<b>End of 1<sup>st</sup> Semester</b>	<b>End of 2<sup>nd</sup> Semester</b>
<b>Learning and personal insights</b>		
<b>Concerns and early-on challenges</b>	<ul style="list-style-type: none"> <li>• Concern of the students' characteristics: age and type of disability.</li> <li>• First experience in special education.</li> <li>• Lack of knowledge in the learned materials and teaching methods in special education.</li> <li>• Concern regarding the relationship with the training teacher and the students.</li> </ul>	<p>These concerns did not appear in the reflections of the 2<sup>nd</sup> Semester.</p>
<b>Personal development</b>	<ul style="list-style-type: none"> <li>• A sense of satisfaction and belonging to special education.</li> <li>• A sense of self-efficacy.</li> <li>• Inclusion, flexibility and patience towards the classroom students.</li> </ul>	<ul style="list-style-type: none"> <li>• Love and connection with the students and the profession.</li> <li>• A sense of fulfillment and self-efficacy.</li> </ul>
<b>Professional development in special education</b>	<ul style="list-style-type: none"> <li>• Development of a personal and educational approach for special education students.</li> <li>• Preparation of learning materials adapted to the students.</li> <li>• Ability to receive feedback and learn from mistakes.</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarity with the world of special education students.</li> <li>• Adopting tools and strategies in special education.</li> <li>• Planning and teaching adapted, successful and experiential lessons.</li> <li>• Adaptive teaching according to the students' variance.</li> </ul>
<b>Learning from role partners</b>	<ul style="list-style-type: none"> <li>• Inclusion and support by the pedagogical team in the classroom and the pedagogical instructor.</li> </ul>	<ul style="list-style-type: none"> <li>• Inclusion and support by the pedagogical team in the</li> </ul>

	<ul style="list-style-type: none"> <li>Feedback from the training teacher and the pedagogical instructor.</li> </ul>	<ul style="list-style-type: none"> <li>classroom and the pedagogical instructor.</li> <li>Demeanor of the training teaching with the classroom students.</li> <li>Partnership with fellow PSTs during the practicum.</li> </ul>
<b>Creation of a beneficial class climate</b>		
<b>Creation of a Beneficial Class Climate</b>	<ul style="list-style-type: none"> <li>Adapting teaching methods to students.</li> <li>Profound acquaintance with the students.</li> <li>Examination of the staff's work methods</li> <li>Turning to role partners for help.</li> </ul>	<ul style="list-style-type: none"> <li>Adapting teaching methods to students.</li> <li>Adapting the learned materials by levels.</li> <li>Forming a safe relationship with the students.</li> <li>Setting clear rules and boundaries.</li> <li>Applying theories learned in college.</li> </ul>
<b>Perception of the teacher's role</b>		
<b>Personal skills</b>	<ul style="list-style-type: none"> <li>Inclusion, patience and empathy towards the students.</li> <li>Observing the emotional world of the students.</li> </ul>	<ul style="list-style-type: none"> <li>Inclusion, patience and empathy towards the students.</li> <li>Forming interpersonal relationships with the students.</li> </ul>
<b>Professional skills</b>	<ul style="list-style-type: none"> <li>Knowledge and proficiency in the learned materials and teaching strategies.</li> <li>Adapting teaching methods to the students' abilities.</li> <li>Diverse and creative teaching methods.</li> </ul>	<ul style="list-style-type: none"> <li>Increasing students' motivation and cooperation.</li> <li>Presence and assertive ability.</li> </ul>
<b>Relationship with the educational staff in the classroom and the school</b>		
<b>A challenging experience</b>	<ul style="list-style-type: none"> <li>Difficulty communicating with the training teacher.</li> <li>Conflicts with staff and their resolutions.</li> </ul>	The reflections did not indicate similar difficulties during the 2 <sup>nd</sup> semester.
<b>A meaningful positive experience</b>	<ul style="list-style-type: none"> <li>Meaningful support by the staff.</li> <li>A sense of belonging and involvement in the classroom and at the school.</li> <li>Demeanor of the training teacher in the classroom.</li> </ul>	<ul style="list-style-type: none"> <li>Meaningful support by the staff.</li> <li>A sense of belonging and involvement in the classroom and at the school.</li> </ul>
<b>The relationship with the classroom students</b>		
<b>The relationship with the classroom students</b>	<ul style="list-style-type: none"> <li>A profound acquaintance with the students and the formation of a personal relationship with them.</li> <li>PSTs' perceptions of the students' traits.</li> </ul>	<ul style="list-style-type: none"> <li>A profound acquaintance with the students and the formation of a personal relationship with them.</li> <li>The experience of saying goodbye to the students.</li> </ul>

### 3.2.2 Discussion and Conclusions

In line with our hypothesis, the analysis of the content of the findings of the reflections written by the PSTs at the end of the 1<sup>st</sup> and 2<sup>nd</sup> semesters, indicated that differences were found between the short-term and long-term in the perceived impact of a special education practicum program among Arab and Jewish PSTs on their professional identity development. Herein are the main identified differences identified:

1. **Concerns and challenges** – the topic of concerns and challenges was dominant in the PSTs' reflections at the end of the 1<sup>st</sup> semester, however, this topic was not mentioned in the reflections at the end of the 2<sup>nd</sup> semester, after a yearlong practicum experience.
2. **Requesting help** – the topic of requesting help by PSTs from the role partners was dominant in the PSTs' reflections at the end of the 1<sup>st</sup> semester, however, this topic was not mentioned in the reflections at the end of the 2<sup>nd</sup> semester, after a yearlong practicum experience.
3. **A challenging experience** – in the description of the PSTs' relationship with the class and school staff, the topic of a challenging experience was mentioned in the reflections of PSTs at the end of the 1<sup>st</sup> semester, however, this topic was not mentioned in the reflections at the end of the 2<sup>nd</sup> semester, after a yearlong practicum experience.

The above findings indicate that there are differences between the two time points in the professional development of PSTs during their practicum experience, namely, that their development was more significant following a lengthy practicum period, at the end of the 2<sup>nd</sup> semester. As per our hypothesis, the analysis of the content of the PSTs' reflections indicated that the PSTs underwent a development in their professional identity as special education teachers. The main explanations for this as identified in the research are as follows:

**Learning and Personal Insight Processes:** at the end of the 1<sup>st</sup> semester, the PSTs described their learning and personal insight processes following the practicum in mainly technical aspects, namely, in preparing and teaching learning materials. However, at the end of the 2<sup>nd</sup> semester, the PSTs referred to other aspects, such as: adopting tools and learning strategies in special education; teaching of adaptive, successful and experiential lessons; and adapting their teaching to the various levels of the students in the practicum classroom. In addition, at the end of the 1<sup>st</sup> semester, the PSTs referred mainly to the ability of developing a personalized and educational approach towards special education students, where at the end of the 2<sup>nd</sup> semester, they noted the aspect of the importance of acquaintance with their students' inner world. Another aspect referred to by the PSTs in their learning processes during their practicum participation is **learning from role partners**.

While at the end of the 1<sup>st</sup> semester, they referred to the learning processes following the feedback they received from the training teacher and the pedagogical instructor, at the end of the 2<sup>nd</sup> semester, they focused on the demeanor of the training teacher with the classroom students and the partnership with fellow PSTs in the practicum as a source of learning. These findings verify our hypothesis and are in line with research literature, according to which the key factor in the professional development of PSTs is the quality of the interaction between the training teacher and the students and the importance in providing the PSTs with actual practical experiences during the practicum, rather than focusing on theoretical and technical aspects (McElwee et al., 2018; Arbiv-Elyashi and Lederer, 2011; Schepens et al., 2009).

**The Creation of a Beneficial Class Climate.** The PSTs also referred in their reflections to the manner of creating a beneficial class climate. At the end of the 1<sup>st</sup> semester the PSTs mainly referred to the need for a deep acquaintance with the students, described the methods used by the staff in the classroom and even noted their request for help from the training teacher and/or aide, at the end of the 2<sup>nd</sup> semester, the PSTs described actions they had taken on their own to create a beneficial class climate. Such actions include adapting their teaching to the various levels in the classroom; forming a safe relationship with the students; setting of clear rules and boundaries during the lessons; and even implementing theories they learned in college in the practicum classroom.

These findings verify our hypothesis and are in line with research literature, according to which PSTs should be exposed to special needs children early on in their training, to allow them to experiment in interactions with their students, colleagues as well as the administrative and educational staff at the school, while implementing theoretical and academic skills they acquired during their college studies. The goal of the practicum is to provide them with these genuine experiences that may improve their future abilities as teachers and contribute to the advancement of their special education professional development more than purely academic studies (Schepens et al., 2009; Romi et al., 2009; Landon-Hay et al., 2020; Maheady et al., 2014).

**The Perception of the Role of the Special Education Teacher.** the PSTs described their perceptions of the special education teacher. In both semesters, they viewed the teacher as having **high level personal and professional skills**. Regarding **personal skills**, in both semesters, the PSTs referred to inclusion, patience and empathy abilities of the teacher towards the students. The main different between the semesters was that at the end of the 1<sup>st</sup> semester they mainly referred to observing the emotional world of the students, whereas at the end of

the 2<sup>nd</sup> semester, they referred to the importance of creating personal relationships with the students.

Regarding **professional skills**, at the end of the 1<sup>st</sup> semester, the PSTs perceived the teacher's role as having knowledge and proficiency in learning materials and strategies. However, at the end of the 2<sup>nd</sup> semester, they addressed other issues, such as the presence and assertiveness of the teacher in the classroom and the teacher's ability to increase their students' motivation and cooperation. These findings verify our hypothesis and are in line with research literature, according to which the PSTs' perceptions regarding the teacher's role alters during the course of their training and depends on their ability to develop their skills and implement the knowledge they acquired during their studies. The more advanced their learning is, the more their perception of the teacher's role changes in accordance with their professional and educational development. During the initial phase, the PSTs place a larger emphasis on the emotional factor. As their training progresses, they focus on other professional qualities. This is in line with the suggestion to initiate the practical training of PSTs as early as possible in their studies, to allow them to better comprehend the complexity of their role and allow them to formulate a professional role perception (Choya et al., 2014; Caspi et al., 2019; Levy-Keren, 2018; Ronen & Weissblit, 2021; Assadi & Murad, 2017).

**The Relationship with the Classroom Students.** The PSTs further described their relationship with the students in the practicum classroom. At the end of both semesters, the students described their deep acquaintance with the students and the personal relationship they formed with them. The main difference between the two semesters, was that at the end of the 1<sup>st</sup> semester, the PSTs described the students according to their perception, whereas at the end of the 2<sup>nd</sup> semester, they described their goodbye from the students, who became very meaningful to them. These findings indicate of a more significant development in the PSTs professional identity following the practicum at the end of the 2<sup>nd</sup> semester as opposed to the end of the 1<sup>st</sup> semester.

### **3.3 STUDY 3 - The PSTs' perceptions regarding the impact of the practicum training on various personal and professional aspects (Qualitative study)**

#### **3.3.1 Findings of Study 3**

The findings of the interviews are presented in accordance with the topics that were discussed in the interviews held with the 30 PSTs regarding their practicum experience.

Table 2 presents the categories and the themes of the PSTs interviews at the end of the academic year.

**Table 2.** *Categories and themes of the PSTs interviews at the end of the academic year.*

<b>(1) Personal Experience of PSTs in a Special Education Classroom Practicum</b>		
<b>Theme 1: A Meaningful and Positive Experience</b>	<b>Theme 2: A Challenging Experience</b>	<b>Theme 3: The Difficulty of the Practicum</b>
<ul style="list-style-type: none"> <li>• A sense of fulfillment from the practicum</li> <li>• Meaningful support by role partners</li> <li>• Learning and professional development</li> <li>• A sense of self-efficacy</li> </ul>	<ul style="list-style-type: none"> <li>• The requirements of the role</li> <li>• Substitutions</li> <li>• Difficulty connecting with the students and accommodate them</li> </ul>	<ul style="list-style-type: none"> <li>• Student characteristics: age, disability, language, behavior, etc</li> <li>• Communication with the training teacher</li> </ul>
<b>(2) The Contribution of the Practicum to Professional Development</b>		
<b>Theme 1: Professional Development as a SE Teacher</b>	<b>Theme 2: Development of Teamwork Skills</b>	
<ul style="list-style-type: none"> <li>• Exposure to the variety of disabilities in special education</li> <li>• Development of sensitivity towards students and forming a personal connection with them</li> <li>• Development of lesson planning ability and adaptation to the various levels in the classroom</li> <li>• Development of assertiveness and an ability to deal with disciplinary problems</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborations between role partners in the classroom</li> <li>• Guidance by the pedagogical instructor</li> <li>• Support and accompaniment by the training teacher</li> <li>• Feedback from the training teacher and the pedagogical instructor</li> </ul>	
<b>(3) The Strengths Identified Among PSTs Following the Practicum</b>		
<b>Theme 1: Personality Traits</b>	<b>Theme 2: Pedagogical Abilities</b>	
<ul style="list-style-type: none"> <li>• Learning and development</li> <li>• Empathy, inclusion and patience towards the students</li> <li>• Sensitivity to the students' needs</li> <li>• Personal relationship with the student</li> </ul>	<ul style="list-style-type: none"> <li>• Stance in the classroom and in teaching</li> <li>• Adapting the lesson to the student population</li> <li>• Experiential and creative teaching</li> </ul>	
<b>(4) The Challenges Experienced by PSTs during the Practicum and Coping Mechanisms</b>		
<b>Theme 1: Difficulties Related to the PSTs</b>	<b>Theme 2: Difficulties Related to the Students</b>	
<ul style="list-style-type: none"> <li>• Assertiveness and setting boundaries for students</li> <li>• Lack of proficiency in the various subjects</li> <li>• Adapting the learned materials to the students' abilities</li> <li>• Difficulties when being observed during lessons</li> </ul>	<ul style="list-style-type: none"> <li>• Students' characteristics: disability, age, language</li> <li>• Complex behavioral and emotional difficulties</li> <li>• Extreme differences between the educational level of the student population in the classroom</li> </ul>	

<b>Theme 1: Coping Mechanisms and Assisting Sources</b>		
<ul style="list-style-type: none"> <li>• Role partners: the classroom staff, pedagogical instructor and other PSTs (peers)</li> <li>• Collaboration with students and receiving solutions from them</li> <li>• Adaptive teaching</li> <li>• Personal learning and research of the subjects</li> <li>• Reflective thinking</li> </ul>		
<b>(5) The Perceptions of PSTs Regarding the Role of a SE Teacher Following the Practicum</b>		
<b>Theme 1: Pedagogical Roles</b>	<b>Theme 2: Unique Roles in Special Education</b>	<b>Theme 3: Personality Roles</b>
<ul style="list-style-type: none"> <li>• Investment in preparing lessons and proficiency in the learned materials</li> <li>• Adapting the content to the various levels in the classroom</li> <li>• Being flexible according to the students' needs</li> <li>• Significant repetition of the educational content</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarity with the student population and adaptations of important matters</li> <li>• Planning a personal educational program that would fit everyone</li> <li>• Dealing with emotional difficulties and complex behavioral situations</li> <li>• Maintain student hygiene</li> </ul>	<ul style="list-style-type: none"> <li>• Special sensitivity and inclusion of the students</li> <li>• Empathetic communication with the parents</li> <li>• Forming a personal relationship with the students</li> <li>• Being a meaningful figure with values</li> </ul>
<b>(6) Tools Acquired by the PSTs during the Practicum that can facilitate their Future Success as Teachers</b>		
<b>Theme 1: Pedagogical Tools in SE Teaching</b>	<b>Theme 2: Psycho-pedagogical Tools in SE</b>	
<ul style="list-style-type: none"> <li>• Adapted teaching to the student population with reference to the various levels</li> <li>• Creation of experiential and diverse teaching</li> <li>• Alternative communication according to the population (hearing impaired, autism, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Dealing with complex emotional and behavioral difficulties</li> <li>• Familiarity with the various needs of the students</li> <li>• Communications with the staff, the parents and the students</li> <li>• Teamwork ability</li> </ul>	
<b>(7) Future Challenges and Insights of PSTs</b>		
<b>Theme 1: Pedagogical Challenges</b>	<b>Theme 2: Interpersonal Challenges</b>	
<ul style="list-style-type: none"> <li>• Control of and Proficiency in the educational content in the different subjects</li> <li>• Adapting the teaching to the student population and the various levels in the classroom</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarity with the student population and their needs</li> <li>• Coping with behavioral problems</li> <li>• Communication with the parents</li> </ul>	
<b>(8) Coping Mechanisms with Future Challenges</b>		
<b>Theme 1: Independent Coping</b>	<b>Theme 2: Collaborative Coping</b>	
<ul style="list-style-type: none"> <li>• Adoption of tools acquired during the practicum.</li> <li>• Participation in courses and education programs</li> <li>• Research and learning of the subjects</li> <li>• Field experience</li> </ul>	<ul style="list-style-type: none"> <li>• Coping mechanisms via collaborations</li> <li>• Personal conversations with students</li> </ul>	

### **3.3.2 Discussion and Conclusions**

Below is the discussion and conclusions regarding the research questions in Study 3, which aims to examine the perceptions of the PSTs regarding their difficulties, support systems and help they received during the training, and their contribution to the PSTs' professional identity development?

The analysis of the findings of the interviews indicates that the PSTs perceive the practicum experience in special education as a meaningful experience of success, on one hand, and a challenging experience with difficulties and challenges, on the other. Moreover, the findings indicate that PSTs see great importance in the meaningful support they received from their role partners, namely the classroom staff and the pedagogical instructor, which contributed to the development of their professional identity, following their participation in the practicum. These findings verify our above hypothesis.

#### **3.3.2.1 Contribution of the Practicum Program to Professional Development**

The PSTs shared the contribution of their experience in the practicum program to the development of their professional identity, which was expressed by two main components: **development as a special education teacher** and the development of their teamwork ability. Regarding the development as a special education teacher, the PSTs referred to: being exposed to a variety of disabilities in special education, developing sensitivity towards the students and forming a personal relationship with them, the ability to plan a lesson and adapt it to the various levels in the classroom; assertiveness and ability to handle disciplinary problems.

Regarding the development of their ability for teamwork, the PSTs referred to: cooperation between role partners, guidance, support and supervision by the training teacher and the pedagogical instructor, in addition to the feedback conversations with them at the end of each lesson. These findings support the significant contribution of the practicum program to the development of the professional identity of PSTs following their practicum participation. These findings are also in line with research literature, according to which the practicum contributes to the professional development of PSTs, as it is an experience that allows them to undergo a variety of interactions with the students, colleagues and administrative staff, while implementing theories they acquired during their college studies (Landon-Hays et al., 2020; Maheady, Smith & Jabot 2014; Fisherman & Weiss, 2008; Schepens et al., 2009).

Furthermore, the practicum allows the PSTs to become acquainted with many populations of special needs children, ranging from children with learning disabilities, ADHD, conduct disorders, emotional disorders, autism, cerebral palsy to intellectual disabilities



(Bracha & Hoffenbartal, 2021). Another advantage of the practicum is the fact that the PSTs receive feedback from other education professionals. Feedback is considered to be a main aspect that facilitates the learning process of PSTs and encourages their professional development as well as their perception of teaching (Nevo, 2011; Sperling, 2016).

### **3.3.2.2 The Contribution of the Practicum Experience to the Perception of the Role of a SE Teacher**

The PSTs described **their perception of the role of the teacher** as having three main roles: **pedagogical roles, unique roles in special education and personality roles**. In their perception of pedagogical roles, the PSTs referred to: proficiency in the learning materials of the different subjects; the adaptation of teaching to the various levels of the students; applying flexibility in accordance with the needs of the students during the lesson. In their perception of unique roles in special education, the PSTs referred to, inter alia: acquaintance with special populations; planning unique educational programs for each student; dealing with emotional difficulties and complex behavioral situations; maintaining student hygiene. In their perception of the personality roles, the PSTs referred to: inclusion and special sensitivity towards the students; forming a personal relationship with them, the perception of the teacher as a meaningful and valuable figure; communication with the parents. All these issues concerning the role of the teacher indicate a development in both professional and personal identity of the PSTs following the practicum program. These findings also align with the research literature, which found that the challenge in being a special education teacher is the unique skills and specific traits that are required of the teacher, as well as the use of significant knowledge and proficiency they must possess regarding various subjects (Sindelar et al., 2014). The PSTs perception of the role of the teacher depends on their ability and skills in implementing the knowledge they acquired during their studies and during the practicum experiences in the classrooms (Choya et al., 2014).

### **3.3.2.3 Tools acquired during the Practicum Experience**

The PSTs described the two **tools they acquired during the practicum**: pedagogical tools and **psycho-pedagogical tools**. The pedagogical tools included: teaching adapted to the population and the various levels of the classroom students; creation of an experiential and diverse learning; use of alternative communication according to the student population. The psycho-pedagogical tools included: dealing with complex emotional and behavioral difficulties; familiarity with the various needs of the students; teamwork; good communication

with the students and their teachers. These findings are in accordance with the research literature, according to which the practicum provides PSTs with the opportunity to become acquainted with various aspects of the educational system, including curriculum, student populations, study books, didactic aids, teaching methods, work habits, preparation of effective class plans and presentation of successful teaching units (Assadi & Murad, 2017). The PSTs statements regarding the acquisition of these tools indicates the development of their professional identity development following their practicum experience.

Moreover, the PSTs further shared that during their practicum experience they found strengths in themselves in both aspects of **personality traits** and **pedagogical abilities**. Regarding the personality traits, the PSTs referred to: their learning and development ability; empathy, inclusion and patience towards the student and the formation of personal relationships with them. Regarding the pedagogical abilities, the PSTs referred to their stance in class and while teaching; adapting the lessons to the student population using interesting, experiential and creative teaching, which allowed for self-reflection as part of their professional and personal identity development, following their practicum experience. These strengths are also backed by research literature (Sindelar et al., 2014; Assadi & Murad, 2017).

#### **3.3.2.4 Difficulties during the Practicum Program**

Apart from the positive experience, the PSTs also described the **difficulties** they experienced during their practicum program, mainly: difficulties relating to the **students in the practicum classroom** as well as difficulties relating to the PSTs themselves. Regarding difficulties related to the students, the PSTs referred to: student characteristics, such as: age, disability, disciplinary problems, various educational levels in the classroom. Regarding difficulties related to the PSTs themselves, they referred to their challenges in coping with the aforementioned difficulties of the students. These difficulties are also described in prior research literature by Hillel-Lavian (2008), who examined the difficulties of special education PSTs during their practicum experience. In this study, the PSTs saw the process as challenging and difficult. They pointed to high stress levels with regard to their functioning in teaching; overload of work at the school; coping with challenging behaviors of special education students and difficulty planning class lessons that meet the various needs of each student, while coping with various situations in the classroom.

### **3.3.2.5 PSTs Coping Mechanisms during the Practicum Program**

The PSTs described their coping mechanisms with these difficulties, mainly focusing on **the support** they received from their role partners, being the training teacher, the aide and the pedagogical instructor. They further described an **independent coping mechanism**, which was the studying of the fields they struggled with and the development of a reflective thinking ability. The PSTs also foresaw **future challenges** they may be required to face as teachers, namely, **pedagogical challenges** and **interpersonal challenges**. Regarding the pedagogical challenges, the PSTs referred to: proficiency in the learning materials of different subjects as well as the need to adapt the teaching according to the student population and the various levels in the classroom. Some of the potential coping mechanisms offered by the PSTs in facing these challenges were **independent coping** and **collaborative coping**. These coping mechanisms are also mentioned in prior research literature (Hillel-Lavian, 2008; Schepens et al., 2009).

It is therefore evident that the PSTs see significant importance in their continued training and collaborations as an effective means for their future professional development.

In summary, the findings of this study prove the contribution of the practicum and the importance of the support of role partners to the professional development of PSTs following the practicum.

## **CHAPTER 4.**

### **DISCUSSION AND GENERAL CONCLUSIONS**

The purpose of this doctoral thesis was to examine professional identity development, role perception and the sense of self-efficacy of PSTs who have undergone a practicum during their special education training at a Teaching College in Northern Israel. The particularity of the current study is that the PSTs participating in the study come from the two main cultures and ethnicities in the Israeli society: Jewish and Arab. Both groups attend a pedagogical course that accompanies the College's Practicum program.

#### **4.1 Conclusions regarding the comparison between Jewish and Arab PSTs (Quantitative data)**

During their first and second years of studies, the Arab PSTs scored higher than the Jewish PSTs in terms of their professional identity development, perception of the role of the special education teacher and sense of self-efficacy.

The Practicum program was found to contribute to the PSTs of both cultural sectors in their professional identity development in terms of professional efficacy and sense of self-efficacy in teaching. Furthermore, there was no change in the perception of the role of the special education teacher following the PSTs' practicum experience.

The PSTs' sector and the study model contributed significantly to the EPV of the total scale of the professional identity development questionnaire as well as to the subscale of career choice confidence. The improvement rate in these variables was significantly higher among Arab PSTs compared to Jewish PSTs. Also, the improvement rate in these variables was significantly higher among PSTs who learned in the concurrent model compared to the consecutive model.

#### **4.2 Conclusions regarding the contribution of the Practicum Training to personal and professional aspects of the Special Education pre-service teachers (Qualitative data)**

The Practicum training was found to provide PSTs with a variety of experiences across an entire year, both as professional teachers to special needs students in the practicum classroom, and as members of the classroom and school staff, which allowed them to experience collaborative work in both the practicum classroom and the school.

It was further identified that the Practicum exposed the PSTs to various student populations, to become better acquainted with them and form significant relationships with them. Through this experience, the PSTs uncovered personal and professional skills and abilities they did not know they possessed. Moreover, the Practicum training equipped the PSTs with knowledge as well as pedagogical and psycho-pedagogical tools in addition to unique tools in special education, which they can use in their work as future teachers.

#### **4.3 Conclusions regarding the contribution of the Practicum Training to developing Coping Mechanisms (Qualitative data)**

The Practicum training allowed the PSTs to develop coping mechanisms to face struggles they experienced with special needs students in the Practicum classroom. The practicum further provided the PSTs with support sources, such as the training teacher, the aide and the pedagogical instructor, who can assist them in coping with difficulties. Moreover, it was found that the PSTs also see significant importance in their follow up training using courses and continuing educational programs in Special Education as well as to collaborations as an effective means for their future professional development.

#### **4.4 Theoretical, methodological and practical implications**

The current research expands the theoretical knowledge regarding the contribution of the Practicum program to the teachers' professional development, while also broadening the knowledge about intercultural analysis of the role of Special Education Practicum in the professional identity of Israeli PSTs in both Jewish and Arab sectors in Israel.

The research further proves the importance of a practicum program that ties the theoretical knowledge that was taught during the teachers' training and their first experience as teachers in the schools. Our findings indicate that the Practicum program promotes the Arab and Jewish PSTs' professional identity development, their perceptions of the role of special education teachers and their self-efficacy in teaching.

In addition, the current research sheds light on the need to continue developing the Practicum training program to further accommodate the PSTs' needs to experience teaching, while receiving feedback and personal accompanying from education professionals.

The findings of the study can be used to offer the policymakers of the special education training programs to initiate the practicum programs as early on as possible during the first year of studies. The goal of early practicum would be to facilitate the professional development of PSTs and to strengthen their sense of self-efficacy, while contributing to the formation of a positive perception of the role of the special education teacher.

#### **4.5 Research limitations and future research directions**

The current research had several main limitations:

1. The research was conducted in one academic Jewish college attended by Jewish and Arab PSTs, studying in the Special Education program. There is need for further research to be conducted in other teacher training academic institutions, to examine the professional development of PSTs, their sense of self-efficacy and their perception of the role of the Special Education teacher following the Practicum trainings.

The Covid-19 pandemic was still raging during the academic year (2021-2022) in which the data were collected. The first semester of the year included quarantines and lockdowns, which led to the PSTs to experience in remote teaching and learning. It is therefore important to conduct the research again when the PSTs will undergo a yearlong physical practicum in the classrooms.

Our recommendations for further research are as follows:

- (1) There is need for further research in other teacher training academic institutions, in order to conduct an in-depth examination of the explanation for the differences between Arab and Jewish PSTs in their professional development and self-efficacy. These data can have a significant value in terms of communication and assessment of practicum training programs in multi-cultural societies.
- (2) There is need for further research in other teacher training academic institutions, in order to conduct an in-depth examination of the differences between the consecutive model and the concurrent model.

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