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**Education, Reflection, Development****PROFESSIONAL IDENTITY AND ROLE PERCEPTIONS OF  
ISRAELI PRE-SERVICE TEACHERS IN SPECIAL EDUCATION**

Janette Saied (a)\*, Alina Simona Rusu (a), (b)  
\*Corresponding author

(a) Gordon College - Special Education, Tchernichovsky St 48, Haifa, Israel.  
Jano.sa3eed@gmail.com

(a) Doctoral School "Education, Reflection, Development", Faculty of Psychology and Educational Sciences, Babes-Bolyai University, 7 Sindicatelor Street, Cluj-Napoca, Romania

(b) Faculty of Animal Science and Biotechnologies, University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Calea Manastur Street, No. 3-5, Romania

**Abstract**

This study aims to examine the differences and similarities between Arab and Jewish pre-service teachers in Israel, in terms of their professional identity, their perceptions of the role of a Special Education (SE) teacher and their self-efficacy in teaching. The sample comprised of 205 students from a college for education in Israel, 141 Jewish and 64 Arab students. All the participants study for B.A. in Special Education. The research instruments were Teacher Professional Identity Scale; Teacher's Self Efficacy Scale; Professional identity Scale for SE teachers. The results indicated that Jewish and Arab pre-service teachers (PSTs) differ significantly in their professional identity, their perceptions of the role of a Special Education (SE) teacher and their self-efficacy in teaching according to the year of study. In addition, positive correlations were found between the pre-service teachers' perceptions regarding their professional identity, their self-efficacy and their professional self-identity in special education. Findings are discussed from the perspective of the applicability of the concept of professional identity in developing training programs for special education PSTs with different cultural backgrounds living in the same country.

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## 1. Introduction

### 1.1. Professional identity

Professional identity (PI) is part of a person's individual identity, and it is the answer to the question, "Who am I, or what am I as a professional?" (Kozminsky, 2008). Tickle (1999) defines professional teaching identity as a teacher's feeling of belonging to the profession and identifying with it. The PI concept includes two components that have reciprocal relations: (1) The way teachers perceive themselves as teachers, in their work and professional life, based on experiences and personal background; (2) The way in which the teacher is perceived in the eyes of others (students, colleagues, parents, or general public). Professional teaching identity can impact in various ways the teacher's behavior, work method, ways of thinking, beliefs, and statements (Altman & Katz, 2001), as well as obligation, satisfaction from work (Kelechtermans, 2009), the sense of burnout and the failure to remain in the education system (Fisherman, 2016).

The formation of PI in pre-service teachers (PSTs) was addressed in numerous studies dating back to the mid 2000's. Schepens et al. (2009) examined the formation of PI in two aspects: being a teacher from birth (i.e., based on demographics and personality traits) and becoming a teacher (i.e., based on experience and education). The results indicated that although the type of the teacher's education can play a significant role in predicting self-efficacy, commitment and professional orientation, the most important predictor of these factors in pre-service teachers seemed to be the extent to which the pre-service teachers felt prepared for the teaching profession during their education. The study further identified personality traits and initial motivation as input variables for predicting the level of professional identity at graduation. The findings confirm that PI is formed by way of integration between the individual and collective perceptions of several aspects identified as relevant to teaching (Schepens et al., 2009).

Živković (2018) examined the self-reported attitudes towards the main PI aspects in PSTs, indicating that the PSTs perceive the role of teaching more as a specific job rather than as a profession. As a result, they are not focused on their professional development as a combination of cognitive and personal factors. They are rather goal-oriented towards their job as teachers, and perceive their practice as a part of their studies and not as a result of their PI development as teachers. One potential explanation offered by Živković (2018) is that beginning teachers might experience PI tensions, especially during the transition period from the status of PST to the one of being a teacher. The reconciliation between the personal and professional aspects of being a teacher appears to be a dynamic and very complex process for the early stages teachers, influenced by many occurrences, practices and people.

### 1.2. The Perception of the Teaching Role

The role perception (RP) is defined as the conscious part of the mind of the individual performing the role (Poper & Ronen, 1992). According to Manor-Binyamini (2001), RP includes two components: *seeing the role as a part of reality* and *seeing the role as an ideal* that needs to be achieved.

The primary perception of the PSTs of their role during the first year of their studies at various education colleges in Israel was found to change during the various stages of their training process.

During their initial training stage, the PSTs who were undergoing training placed a larger emphasis on the emotional factor and as a result perceived the teaching profession as very dynamic. As their training progressed, the pre-school PSTs focused on other professional traits, somewhat disregarding the originally focused-on emotional factor (Caspi et al., 2019). This shift was interpreted to be in line with the theoretical and practical learning processes, such that as the learning progresses, the PST's perceptions vary depending on the stage of their professional and learning development.

Laron and Shkedi (2006) examined the professional-pedagogical development of PSTs with regard to their RP during the training program in one of Israel's education colleges, focusing on the first and second year practicums. During the course of the study, changes in RP were identified as part of the PSTs' professional development process. The participants were able to preserve their ideological passion and translate it into actions throughout their first year of practicum in informal education. The change in their perceptions occurred in the beginning of the second year, when they began teaching regular (formal) lessons in schools. According to the researchers, the PSTs were unable to preserve their ideological vision in the formal school framework due to the difficulties they faced while teaching and steering the classroom and in light of the demanding standards by the school systems. A proposed way to preserve the sense of vision and mission of the PSTs lies in finding a new practicum approach that will allow PSTs to face the reality in schools, while simultaneously encouraging them to maintain their early on-set ideological motivation and vision throughout their professional development (Laron & Shkedi, 2006).

### **1.3. Self-Efficacy in Teaching**

According to Bandura (1997), self-efficacy is a person's belief in his/her 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.

Kass and Friedman (2005) explored the sources that structure the teachers' sense of self-efficacy from their standpoint and in a holistic view. The study found that the cognitive and emotional aspects of the teachers' early personal life, originating back to their parents' and their immediate family, has a stronger impact on their professional sense of self-efficacy, compared to the impact that their actual professional experiences, including verbal encouragement by their professional surrounding, their observation of the behaviors of colleagues and their personal interpretation of situations, has on their sense of self-efficacy.

Mahajna (2014) examined the relationship between the PSTs' environmental factors and their self-efficacy in teaching, through motivational and behavioral factors. In the study participated young students from the Arab sector, who attended various internship programs in a teacher training college in Israel. The findings indicated that the environmental factors (the perceptions of society towards the teaching profession and the quality of the relationship with colleagues), the motivational factors (personal feelings towards the profession and reflective thinking) and the expressive teaching skills factor, contributed to predicting self-efficacy in teaching. According to Mahajna (2014), teacher training programs are meant to explicitly emphasize contents with the goal of cultivating the professional commitment to the profession and strengthening the professional identity, while cultivating the teacher's reflective thinking ability,

which likely has a positive effect on self-efficacy. Since self-efficacy in teaching is affected by various factors and is primarily evolved during the training years, such programs are meant to provide opportunities and experiences that may promote the development of self-efficacy among PSTs.

#### **1.4. Jewish and Arab Societies in Israel**

Israel is considered a heterogeneous, multi-ethnic and multi-cultural society. The different groups that comprise the society differ from each other in terms of their national, religious, ethnic, class, and political affiliation (Aden et al., 2001; Al-Haj, 2012). A majority (~74%) of the citizens in Israel are Jewish. There are also minorities, the largest of which is the Arab minority (~21.1%), which includes Muslims and Christians (Central Bureau of Statistics, 2022). Israel was established as the Nation-State of the Jewish people (Boimal et al., 2009; Haider, 2005). From the date of its establishment, the citizens of Israel were divided into two main populations: “Jewish” and “non-Jewish”. The latter category is mostly comprised of the Israeli Arab population (Haider, 2005). Due to the Jewish-Hebrew-Zionistic nature of the state of Israel and in light of its economic and political structure, Arabs and Jews differ in all of the daily aspects of life. As such, there are differences in culture, language, religion, nationality, geographic location, ideology, customs, education and employment systems (Abu-Baker, 2012; Boimal et al., 2009).

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, inter alia, due to the following factors: they may operate a separate education system funded by the government and are free to cultivate their culture due to their geographic-cultural concentration (Ali & Daas, 2018).

The education system in Israel is comprised of universities, research institutions and a wide range of colleges that award an academic degree, located throughout the country (Ayalon & Yogev, 2005; Shochat & Zilkha, 2007). Researchers claim that in recent years, education in general and higher education in particular and considered as very valuable and are at the top of the priorities of the Arab minority in the Israeli society (Ali & Daas, 2018). Higher education is perceived as an important and exclusive means that can promote their social mobility (Haj-Yahya & Arar, 2009); improve their status and financial standing (Ali & Daas, 2018). Over the years, an increase in the attendance rate of Arab citizens higher education institutions has been identified, as well as an improvement in the status of Arab women and an overall increase in the quality of life (Hadad Haj-Yahya, 2016). According to data of the The Council for Higher Education in Israel (2020), over the last decade, the number of Arab students in the higher education systems has significantly increased and even doubled in size.

Despite the aforementioned increase in the integration of Arab students in higher education institutions, a stagnation has been identified among Arab males who attend higher education institutions and their number has barely increased over the last decade (Haj-Yahya et al., 2021). The primary intense encounter between young Jewish students and young Arab students is within the walls of the higher education institution. To date, very few studies were conducted on the combination of Arab students in Jewish colleges and the difficulties they encounter during their years of education.

## 2. Research Aims

This study examines the differences and similarities between Arab and Jewish pre-service teachers (PSTs) in Israel, in terms of their professional identity, their perceptions of the role of a Special Education (SE) teacher and their self-efficacy in teaching. The pre-service teachers participating in the study come from the two main cultures and ethnicities in the Israeli society: Jewish and Arab. The hypotheses related to these research questions are:

- i. The PSTs in their second year are expected to exhibit higher professional identity, self-efficacy in teaching, and professional self-identity in special education - in both sectors.
- ii. In light of the lack of current comparative studies between the two cultural backgrounds of the PSTs, no hypothesis has been formulated regarding the cultural differences in the investigated variables.
- iii. Significant positive correlations will be found between the PSTs' perceptions regarding their professional identity, students' self-efficacy in teaching and the students' professional self-identity in special education among the whole sample and among each sector.

A significant contribution will be found of the PSTs' demographic characteristics to the explained variance of their professional identity, self-efficacy in teaching and the professional self-identity in special education.

## 3. Research Design and Methodology

### 3.1. Participants

A number of 205 students (12 men and 193 women) who are studying for B.A. in Special Education at a college for education in northern of Israel had participated in this research. The students' ages ranged between 19 and 52 ( $M = 27.80$ ,  $SD = 7.83$ ). 141 Jewish students (9 men and 132 woman) and 64 Arab students (3 men and 61 woman) were samples from the first and the second study years at the college (68 first year students, 135 second year students). Chi-square analysis indicated that the participants from the two sectors did not differ in study year. Table 1 presents the background characteristics of the students who participated in the current study by sector.

**Table 1.** Students' background characteristics by sector

Background characteristics	Values	Jewish ( $n = 141$ )	Arab ( $n = 64$ )	$\chi^2$	$p$
Gender	Male	9 (6.4%)	3 (4.7%)	.23	.632
	Female	132 (93.6%)	61 (95.3%)		
Year of study	First year	50 (35.5%)	18 (28.1%)	1.07	.301
	Second year	91 (64.5%)	46 (71.9%)		
Study model	Concurrent	118 (83.7%)	36 (56.3%)		
	Consecutive	23 (16.3%)	28 (43.8%)	17.73***	.001

Marital status	Single	94 (66.7%)	46 (71.9%)	.55	.458
	Married	47 (33.3%)	18 (28.1%)		
Religious <sup>1</sup>	Orthodox	1 (0.7%)	0 (0.0%)	4321.50	.592
	Religious	10 (7.1%)	9 (14.1%)		
	Traditional	67 (47.5%)	27 (42.2%)		
	Secular	63 (44.7%)	28 (43.8%)		
Living	In the center of Israel	10 (7.1%)	2 (3.2%)	1.21	.272
	In the north of Israel	131 (92.9%)	61 (96.8%)		
Living type	Mixed city or locality	74 (52.5%)	51 (79.7%)	13.69***	.001
	A city or settlement only of Jews or Arabs	67 (47.5%)	13 (20.3%)		
Additional specialization	No	70 (49.6%)	44 (68.8%)	6.51*	.011
	Yes	71 (50.4%)	20 (31.3%)		
Previous course in special education	No	131 (92.9%)	50 (78.1%)	9.31**	.002
	Yes	10 (7.1%)	14 (21.9%)		
Previous experience with special education students	No	82 (58.2%)	45 (70.3%)	2.76	.097
	Yes	59 (41.8%)	19 (29.7%)		

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ; <sup>1</sup>Variable in an ordinal scale – Mann-Whitney was conducted.

There are two main models that coexist for teacher training programs in Israel. The first is the **concurrent** model. It is designed for those who turn to teaching as their first career. It is a relatively young population with limited life experience. The duration of studies in this model is normally four years and the studies integrate disciplinary and pedagogical studies. The model 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. 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).

Although the percentage of students of both sectors in the concurrent study model is higher than the percentage of students in the consecutive study model, the percentage of Arabs in the consecutive study model is higher than the percentage of Jews. The two sectors also differ significantly in the residential area. The percentage of Arabs who reside in a mixed city or locality is higher than the percentage of Jews who reside in the same areas. While a higher percentage of Jews have an additional specialization except for special education, a higher percentage of Arab had previously taken courses in special education aside from their college studies.

### 3.2. Research instruments

Teacher Professional Identity Scale (Weiss & Fisherman, 2011).

The scale is comprised of 27 were translated into Hebrew by Luzzato and Rusu (2019). The items are divided into 4 factors (Table 2).

**Table 2.** Teacher Professional Identity Scale – psychometric properties

Factor	Cronbach 's alpha	Example
Career choice confidence	$\alpha = .91$	("I'm certain I did well by choosing teaching").
Professional efficacy	$\alpha = .76$	("I know the tricks of the trade in teaching, and what to do in that profession").
Sense of mission	$\alpha = .65$	("I've always felt my mission in life was to be a teacher").
Reputation	$\alpha = .60$	("When I see a teacher, I feel admiration for him").

The internal consistency level of all items in the questionnaires was high in the current study,  $\alpha = .92$ .

*Teacher's Self Efficacy Scale* (Tschannen-Moran & Hoy, 2001).

This scale measures the level of ability and competence in teaching. The scale contains 24 items that are divided into 3 factors (Table 3).

**Table 3.** Teacher's Self Efficacy Scale – psychometric properties

6	Cronbach 's alpha	Example
Efficacy in student engagement	$\alpha = .87$	("I can get students to believe they can do well in their schoolwork").
Efficacy in classroom management	$\alpha = .90$	("I can control disruptive behavior in the classroom").
Efficacy in instructional strategies	$\alpha = .91$	("I can use a variety of assessment strategies").

The internal consistency level of all items in the questionnaires was high in the current study,  $\alpha = .96$ .

Professional identity Scale for Special Education teachers (Hao et al., 2014).

This scale was used among special education teachers to measure how special education teachers perceive the teaching profession to be. The scale contains 17 items that were divided into 5 factors (Table 4).

**Table 4.** Professional identity Scale for Special Education teachers - psychometric properties

Factor	Cronbach 's alpha	Example
Professional self-image	$\alpha = .85$	("I like being a special education teacher" instead of "I like being a nurse").
Benefit of retention and risk of turnover	$\alpha = .54$	("Turnover will cause me emotional wounds").
comparison and self-reflection	$\alpha = .51$	("I try to become familiar with the condition of other career fields so that I can make my professional belief stronger").
Independence of career choice	$r = .09$	("I will choose the job I like no matter what other people say").
Social modeling	$r = .73$	("I like to know more development stories of some successful people in special education field").

Since the reliability levels of three out of five factors were less than 0.60, statistical analyses were conducted only on the total measure of this questionnaire. The internal consistency level of all items in the questionnaires was high in the current study,  $\alpha = .87$ .

#### 4. Results

Before examining the study questions and hypotheses, Shapiro-Wilk tests were conducted, in order to examine whether the dependent variables were normally distributed for each sector (Jewish, Arab) and for each year of study (First year, Second year). The distributions of all the dependent variables deviated significantly from normal distribution. Therefore, we examined the study questions and hypotheses by conducting both parametric and non-parametric tests. The non-parametric analysis was Mann-Whitney test. Mann-Whitney tests were conducted in order to examine the differences between the two sectors in the dependent variables for each year of study and the differences between the two study years in the dependent variables in each sector. Since the findings of the non-parametric analyses indicated the same level of significance as the parametric analyses, the findings of the parametric analyses were presented in this section and the interaction between Sectors and Year of study were reported.

##### 4.1. Differences in the students' perceptions regarding their professional identity, self-efficacy in teaching and professional self-identity by sector and year of study

In order to examine the differences in the total score on the students' s perceptions regarding their professional identity, two-way ANOVA was conducted and in order to examine the differences in the four sub scales of the students' perceptions two-way MANOVA was conducted (see Table 5).

**Table 5.** Mean, SD and F-values of the scores on the students' perceptions regarding their professional identity questionnaire by sector and year of study

Scales	Year of study	Jewish			Arab			Total			F-values ( $\eta_p^2$ )		
		N	M	SD	n	M	SD	n	M	SD	Sector	Year of study	Interaction
Career choice confidence	First year	50	3.36	0.49	18	2.89	0.52	68	3.26	0.52	.02	.16	26.29***
	Second Year	91	2.94	0.45	46	3.34	0.41	137	3.08	0.47	(.00)	(.00)	(.12)
	Total	141	3.09	0.51	64	3.24	0.47	205	3.14	0.50			
Profession efficacy	First year	50	3.40	0.32	18	3.10	0.51	68	3.32	0.42			
	Second Year	91	3.23	0.35	46	3.51	0.36	137	3.32	0.38	.01	3.76	23.49***
	Total	141	3.29	0.37	64	3.40	0.44	205	3.33	0.40	(.00)	(.02)	(.11)



Sense of mission	First year	50	3.3	0.5	1	2.9	0.5	68	3.2	0.5	.73 (.00)	.04 (.00)	14.63*** (.07)	
	Second Year	91	3.0	0.4	4	3.2	0.5	13	3.1	0.5				
	Total	14	3.1	0.5	6	3.1	0.5	20	3.1	0.5				
			1	2	0	4	7	6	5	4	2			
Reputation	First year	50	3.2	0.5	1	3.0	0.8	68	3.1	0.6	.77 (.00)	.20 (.00)	1.79 (.01)	
	Second Year	91	3.1	0.6	4	3.1	0.6	13	3.1	0.6				
	Total	14	3.1	0.6	6	3.1	0.6	20	3.1	0.6				
			1	7	1	4	3	7	5	6	3			
Total score	First year	50	3.3	0.3	1	3.0	0.5	68	3.2	0.4	.06 (.00)	.13 (.00)	28.84*** (.13)	
	Second Year	91	3.0	0.3	4	3.3	0.3	13	3.1	0.3				
	Total	14	3.1	0.3	6	3.2	0.4	20	3.1	0.4				
			1	5	8	4	6	4	5	9	0			

\*\*\* $p < .001$

As can be seen in Table 5, the interactions of Sectors and Year of study were significant in the total score as well as in the scores on the sub scales of the students' perceptions regarding their professional identity: career choice confidence, profession efficacy and sense of mission. T-test for two independent samples indicated that while in the first study year the scores were significantly higher among the Jewish students compared to the Arab students ( $p < .01$ ), in the second study year, the scores were significantly higher among the Arab students compared to the Jewish students ( $p < .01$ ). No significant differences were found between the two sectors in the scores on the sub scale reputation in both study years [ $t(66) = 1.33, p = .188$  for the first study year and  $t(135) = .42, p = .678$ ] for the second year.

**Table 6.** Mean, SD and F-values of the scores on the students' self-efficacy in teaching questionnaire by sector and year of study

Scales	Year of study	Jewish			Arab			Total			F-values ( $\eta_p^2$ )		
		N	M	SD	N	M	SD	n	M	SD	Sector	Year of study	Interaction
Efficacy for student engagement	First year	50	4.1	0.5	1	4.0	0.8	68	4.1	0.6	2.32 (.01)	.69 (.00)	13.01** (.06)
	Second Year	91	3.9	0.5	4	4.4	0.4	13	4.1	0.5			
	Total	14	4.0	0.5	6	4.2	0.5	20	4.1	0.5			

		1	3	3	4	9	9	5	1	6			
Efficacy for classroom management	First year	50	4.10	0.53	18	4.04	0.82	68	4.08	0.61	3.69 (.02)	.10 (.00)	6.33* (.03)
	Second Year	91	3.89	0.57	46	4.31	0.50	137	4.03	0.58			
	Total	141	3.96	0.56	64	4.23	0.61	205	4.05	0.59			
Efficacy for instructional strategies	First year	50	4.01	0.66	18	4.06	0.83	68	4.02	0.70	7.38* (.04)	1.57 (.01)	4.89* (.02)
	Second Year	91	3.92	0.53	46	4.39	0.46	137	4.07	0.55			
	Total	141	3.95	0.57	64	4.29	0.60	205	4.06	0.60			
Total score	First year	50	4.10	0.53	18	4.03	0.82	68	4.08	0.61	4.94* (.02)	.75 (.00)	8.78** (.04)
	Second Year	91	3.92	0.48	46	4.36	0.43	137	4.07	0.51			
	Total	141	3.98	0.51	64	4.27	0.58	205	4.05	0.55			

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

As can be seen in Table 6, the interactions of Sectors and Year of study were significant in the total score as well as in the scores on the three sub scales of the students' self-efficacy in teaching questionnaire. T-test for two independent samples indicated that while in the first study year the two sectors did not differ ( $p = .290-.805$ ), in the second study year, the scores were significantly higher among the Arab students compared to the Jewish students ( $p < .001$ ).

In order to examine the differences in the total score of the Professional Self Identity in Special Education by sector and year of study, two-way ANOVA was conducted (see Table 7).

**Table 7.** Mean, SD and F-values of the scores on the Professional Self Identity in SE questionnaire by sector and year of study

Sector		Jewish			Arab			Total number			F-values ( $\eta_p^2$ )		
Students' perceptions regarding the role of SE teachers	First year	50	3.98	0.57	18	3.73	0.73	68	3.92	0.62	2.19 (.01)	3.43 (.02)	20.02*** (.09)
	Second Year	91	3.76	0.46	46	4.27	0.46	137	3.93	0.51			
	Total	141	3.84	0.51	64	4.12	0.59	205	3.93	0.55			

As can be seen in Table 7, the interaction of Sectors and Year of study was significant in the total score on the Professional Self-Identity in Special Education. T-test for two independent samples indicated that while in the first study year the score was significantly higher among the Jewish students compared to the Arab students ( $p = .020$ ), in the second study year, the score was significantly higher among the Arab students compared to the Jewish students ( $p < .001$ ).

In order to examine the correlations between the students' perceptions regarding their professional identity, students' self-efficacy and the students' professional self-identity in special education, Pearson correlation analyses were conducted (see Table 8).

**Table 8.** Correlations between the students' perceptions regarding the examined variables

		Self-efficacy in teaching	Professional self-identity in SE
Perceptions regarding professional identity	All sample	.63***	.66***
	Jewish ( $n = 141$ )	.52***	.61***
	Arab ( $n = 64$ )	.79***	.73***
Self-efficacy in teaching	All sample		.59***
	Jewish ( $n = 141$ )		.46***
	Arab ( $n = 64$ )		.77***

\*\*\* $p < .001$

As it can be seen in Table 8 and as hypothesized, significant positive correlations were found between the students' perceptions regarding their professional identity, students' self-efficacy and the students' professional self-identity in special education. All correlations were significant at alpha level of .001 and with medium-high coefficients. These results indicate that the more positive the students' perceptions regarding their professional identity were, the higher their self-efficacy was and the more positive their professional self-identity in special education was, respectively.

In order to examine the contribution of the students' background characteristics to the explained variance (EPV) of their perceptions regarding the explored variables, multiple regression analyses were conducted for each sector separately in a stepwise manner. In this manner, only variables that contribute significantly to the EPV were entered into the regression model (see Table 9).

**Table 9.** The contribution of the students' background characteristics to the explained variance of the examined variables

Explained variables	Explanatory variables	B	SE.B	$\beta$	$R^2$
Jewish ( $n = 141$ )					
Perceptions regarding professional identity	Year of study <sup>1</sup>	-.31	.06	-.39***	.151***
	Self-efficacy in teaching	-.18	.09	-.17*	.029*
Professional self-identity in special education	Study model <sup>2</sup>	-.32	.11	-.24**	.055**
Arab ( $n = 64$ )					
Perceptions regarding professional identity	Year of study <sup>1</sup>	.34	.12	.35**	.125**
Self-efficacy in teaching	Gender <sup>3</sup>	.69	.33	.26*	.066*
Professional self-identity in special education	Year of study <sup>1</sup>	.52	.15	.40***	.163***

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ; <sup>1</sup>Year of study (0 = First year, 1 = Second year); <sup>2</sup>Study model (0 = Concurrent, 1 = Consecutive); <sup>3</sup>Gender (0 = Male, 1 = Female).

As can be seen in Table 9, the year of study contributed significantly 15.1% and 12.5% to the EPV of the Jewish and Arab students' perceptions regarding professional identity, respectively. However, while the negative  $\beta$  coefficient was found for the Jewish student group, positive  $\beta$  coefficient was found for the Arab student group.

These results indicated that while the Arab students' positive perceptions regarding professional identity of teachers decreased during the second year among the Jewish students, Arab students' positive perceptions regarding professional identity of teachers increased during the second year. Similarly, a significant decrease during the second study year was found among the Jewish students in the self-efficacy in teaching, whereas a significant increase during the second study year was found among the Arab students in the professional self-identity in special education.

These results are in line with the ANOVAs results indicating a significant interaction between Sector and Year of study. The students' background characteristic: "study model" had a relatively modest yet significant contribution to the EPV of the Jewish student's self-efficacy in teaching (2.9%).

The negative  $\beta$  coefficient indicated that Jewish students who learned using a concurrent model tended to report higher self-efficacy in teaching compared to Jewish students who learned using a consecutive model. Finally, the students' gender had a relatively modest yet significant contribution to the EPV of the Arab students' professional self-identity in special education (6.6%). The positive  $\beta$  coefficient indicated that females tended to report more positive perceptions regarding to the professional self-identity in special education compared to males.

## 5. Conclusions

During their first study year, Jewish PSTs had more positive perceptions regarding their professional identity and their Professional Self Identity in Special Education than the Arab students. During the second study year, the Arab PSTs had more positive perceptions regarding their professional identity and their professional self-identity in Special Education than the Jewish students. Moreover, the PSTs' sense of self-efficacy in teaching was significantly higher among Arab students compared to Jewish students participating to this study.

Another significant conclusion is that the more positive the PSTs' perceptions regarding their professional identity, the higher their sense of self-efficacy was and the more positive their professional self-identity in Special Education was, among the whole sample and among each sector. The results of the regression analyses indicated that in light of the first research hypothesis, the Arab PSTs in their second year exhibited higher scores on the research variables compared to PSTs in their first year. The hypothesis was not confirmed among the Jewish PSTs who scored lower during their second study year compared to their first year. Finally, the study model contributed significantly to the EPV of the Jewish student's self-efficacy in teaching and the students' gender had a relatively modest yet significant contribution to the EPV of the Arab students' professional self-identity in Special Education. The good psychometric properties of the instruments used in this study in Arab and Hebrew languages in order to investigate the role perception, the professional identity in Special Education, and the self-efficacy recommend them to the academic community investigating this aspects in the multicultural Israeli society.

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