

How the students in educational sciences perceived their future professional roles in the current social context

Urea Ionela Roxana, Associated Professor, Bucharest University, 030018 Bucharest, Romania

Adler Carmen*, Ph.D Student, Bucharest University, 030018 Bucharest, Romania

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Abstract

This study, conducted between October 2020 and December 2020, aimed to highlight how students in education sciences – special education/psychopedagogy – perceived their future professional roles in the current social context marked by the coronavirus disease 2019 pandemic. We used the research method of Super's Professional Values Questionnaire, a questionnaire for perceiving the professional roles of students in educational sciences/special education. Both questionnaires were administered in an online format according to GDPR rules. We used IBM Statistical Package for the Social Sciences 25 for statistical data processing. The resulting conclusions are as follows: (a) it allows a better understanding of the professional training process of students in education sciences; (b) it highlights how students programme their future professional career; and (c) it reveals new types of complex psychopedagogical services that the investigated subjects intend to initiate for vulnerable people.

Keywords: Professional roles, special education.

* ADDRESS FOR CORRESPONDENCE: **Adler Carmen**, Ph.D Student, Bucharest University, 030018 Bucharest, Romania.

E-mail address: adlercarmen20@gmail.com

1. Purpose of the article

Today, choosing a career path is no longer a simple process, especially for those who intend to become a practitioner in the field. Starting with the initial professional formation, the process involves serious personal resources and also a serious analysis of the tendencies of the labour market and also analyses that show the professional roles that a future graduate student can play.

In educational sciences, in particular, in special education, the initial professional profession of future experts has an interdisciplinary approach and it is related to the specificity of the interventional recovery programmes addressed to vulnerable persons (persons with disabilities) and is also related to the socio-economic context. The competencies that are acquired during the initial professional formation and the experiences gained by graduated students influence the 'perception about the quality of higher education' (Akareem & Hossain, 2016, p. 52).

Around the world, experts have conducted a series of researches to offer some milestones that colleagues can use in the contextual approach of initial professional formation of the specialist in the field of educational sciences (Johnson, 2002).

This study approaches a penetration into the basic or derived processes connected with the need to analyse the perception of the roles that current students in educational sciences/special education will play on the labour market, in the current social context marked by the effects of the coronavirus disease 19 (COVID-19) pandemic. There is a real spiral of criticisms regarding the quality of the educational formation programmes provided by faculties in educational sciences with real community awareness of the long-term implications, resulting from the educational and social policy.

2. Conceptual analyses and background

Becoming a specialist in educational sciences signifies a constant process of professional development and starts with the initial professional formation through university bachelor's programmes.

Each initial professional formation programme has 'three objectives: (a) the first is intended to cover the distance between theory and practice; (b) the second is to prove to the future novice teacher some aspects that his previous experience as a student had not made him know or even had concealed from him; (c) the third, as simultaneously scientists and practitioners, it seems clear that theoretical concepts are paramount' (Arun, 2018, p. 46). In fact, these three objectives contribute to the foundation of a future professional career in educational sciences and 'targets' general competencies, specific competencies and transversal competencies (Urea, 2015).

The professional career, in educational sciences/special education, is determined by several types of factors: cognitive personal factors like self-realisation, need for autonomy, social status, personal development or financial success, and contextual or environmental factors such as social pressure, family members' professional activities, labour market or economic environment (Haase & Lautenschlager, 2011), regional conditions etc.

A professional career in educational sciences is linked to a specific social perception phenomenon. The process itself is a continuum and based on categorising and it was called in 1990 by Fiske and Neuberger (1990): 'The continuum model of impression'. According to this model, the perceiving subject evaluates the others according to a unique continuum of impression formation. Assessments based on categories and individualised responses are two extremes. This model states that (a) category-based responses take precedence over more individualised reasoning and (b) movement along the continuum, from the answers based on categories to the individualised answers, are made according to factors of interpretation, motivation and attention. According to this model, the perceiving subjects meet, in the first stage, 'a target' and classify it automatically as part of a particular social group. In the second stage, they consider as personal relevance the target thus categorised according to the current

interests and goals. If the target is of only minor interest, then the impression formation process will be short-circuited and the evaluations will be essentially category-based. If the target is of major interest, then perceiving the subject will put into play all the personal resources of attention to evaluate all the personal characteristics of the target, thus triggering the search for a more individualised impression.

The model mentioned above is practically one of the milestones of a professional career in educational sciences and can explain the fact that a professional career in educational sciences is an individual process (Bennett et al., 2013) and depends more and more on student' work placement experience: 'Students with work placement experience developed a more "realistic" view of learning and teaching compared to students without this experience' (Lamote & Engels, 2010, p. 3). Heikonen et al. (2007, p. 250) showed that 'experiences of insufficient abilities to solve pedagogically and socially challenging student situations have a crucial effect on early career teacher's capacity for adaptive reflection'.

As, an educator and also as an educational therapist, the current students in the special education bachelor programme, 'should be able to train in himself the following pedagogical abilities: (1) communication accessibility; (2) emotional sensitivity (professional awareness, to others to be able to sympathise, to have an inner intuition); (3) mobility, willpower to participants in the educational process possession of the ability to influence and convince; (4) emotional stability (self-esteem, self-control, self-control); (5) predict the future optimally; (6) professional independence, possession of creative abilities' (Toshtemirovich, 2019, p. 103).

In special education, in Romania, the process of understanding the mission and the future professional roles that will be played in the labour marked by future graduate student of the bachelor programme is shaped and facilitated by the experience gained: during the faculty's practicum stages (professional, pedagogical and practicum stage for the accomplishment of the bachelor's thesis), during the volunteer internships carried out under the guidance of experts from non-governmental organisations from community centres.

3. Methods

3.1. Methods

In our investigation, we used the quotative method. Our reason for using the quotative method was dictated by the dimensions of our research.

'Super's Professional Values Questionnaire' was adapted for the Romanian adult population. The questionnaire features are: internal consistency = 0.815 and fidelity index = 0.776.

The 'questionnaire for perceiving the professional roles of students in educational sciences' was created in 2017. It has the following features: internal consistency = 0.794 and fidelity index = 0.753.

In our investigation, to analyse the collected data, we used IBM Statistical Package for the Social Sciences 25 software.

3.2. Participants

We carried out our research on 90 students from the Department of Special Education/Psychopedagogy, University of Bucharest, aged between 19 and 24 years (Ma = 19.6, Std = 2.85), 18% were male and 82% were female, and 44% had had previous professional experiences in the field of special education.

3.3. Procedure

In our research, we respected the General Data Protection Regulation (GDPR) of UE. Each investigated student was informed about: the aim of the research, the tasks that he/she has to fulfil during the research, about our intention to publish an article (by respecting the code of ethics) related to the aspects that we investigated, about our intention in sharing the collected data with third parties. We asked and obtained the students' consent for collecting the data, for processing and analysing it, for publishing the article. We did not obtain their consent for sharing the collected data with third parties.

Our research was carried out between October and December 2020 in online administration forms which had two stages: an initial testing procedure on 35 students and the obtained Cronbach's alpha indexes ($\alpha_1 = 0.664$) allowed us to extend the research to stage two. The testing procedure that occurred in stage two was conducted with 90 students from the Department of Special Education, University of Bucharest, and focused on (a) revealing the students' professional values and (b) revealing the students' perceived professionals' roles as future practitioners in the field of special education.

Since the research was carried out in an online environment with general data identification (age and gender), the Hawthorne effect did not occur to our investigated subjects.

4. Results

Our major goal was to reveal, in the COVID-19 pandemic social context, how students who are in the initial formation programme in special education perceived their future professional roles, taking into consideration their current professional values.

4.1. Investigation of student's professional values

The first objective of the research was aimed at revealing the specific professional values that the students from special education bachelor' formation programme operate with.

The data analysis process pointed that the distribution was uniform for: (a) students with previous professional experience in the special education field: the skewness index values 0.884–2.741 and the standard error of skewness from 0.628 of 1.977, and the kurtosis index values from 1.207 to 1.938, respectively, and the standard error of kurtosis from 0.885 to 1.799; and (b) students without previous professional experience in the special education field: the skewness index values from 1.264 to 2.952 and the standard error of skewness from 0.768 of 2.468, and the kurtosis index values from 1.289 to 2.052, respectively, and the standard error of kurtosis from 1.085 to 1.664

We further present the data related to the answers analysed on the students' professional values (see Table 1).

Table 1. Students' professional values

Professional values	Students with previous professional experiences in the special education field		Students without previous professional experiences in the special education field	
	Ma	Std	Ma	Std
Altruism	4.68	2.678	4.25	3.182
Aesthetic sense	2.64	2.204	3.15	2.986
Creativity	3.78	2.571	3.60	2.605
Intellectual stimulation	3.98	2.272	4.02	2.448
Objectified success	3.51	1.789	4.15	2.389

Independence	4.14	1.986	3.21	2.544
Prestige	3.65	1.775	4.02	2.225
Leading others	4.28	1.804	3.25	2.637
Material advantages	3.50	1.605	3.88	2.965
Safety	3.65	1.733	3.25	2.884
Work environment	4.02	1.662	3.45	2.601
Relationship with superiors	3.75	1.886	4.07	2.948
Relationship with work colleagues	4.15	1.602	3.88	3.023
Lifestyle	3.75	1.406	3.80	2.206
Cultural diversity	3.50	2.045	3.60	2.447

4.2. Investigation of students' perceived future professional roles

The second objective of the research was aimed at revealing the perceived future roles that will be played by practitioners after graduation from the bachelor formation programme by all the investigated students.

The data analysis process pointed that the distribution was uniform for: (a) students with previous professional experiences in the special education field – the skewness index values from 1.044 to 1.731 and the standard error of skewness from 0.898 of 1.593, and kurtosis index values from 1.168 to 1.775, respectively, and the standard error of kurtosis from 1.031 to 1.608 and (b) at students without professional experiences in the special education – the skewness index values from 1.154 to 1.973 and with the standard error of skewness from 0.965 of 1.882, and kurtosis index values from 1.192 to 1.763, respectively the standard error of kurtosis from 1.004 to 1.607.

We further present the data related to the answers analysed on the students' perceived future professional roles (see Table 2).

Table 2. Student' perceived future professional roles

Perceived future professional roles	Students with previous professional experiences in the special education field		Students without previous professional experiences in the special education field	
	Ma	Std	Ma	Std
Promoter of equal opportunities	4.18	2.728	4.25	3.422
Evaluator of the potential of children/people with the special educational needs	2.74	2.234	3.05	2.991
Facilitator of school inclusion of children with SEN	4.02	2.772	3.65	3.018
Developer of alternative services for the recovery of children/persons with SEN	3.64	2.366	4.07	2.699
Active partner, together with parents, in complex recovery process of child/ person with SEN	3.75	1.704	3.50	2.644
Organiser of exchanges of good practices with other specialists	4.05	2.011	3.17	2.697

Counsellor for the insertion on the labour market of persons with SEN	3.20	1.544	3.98	2.257
Therapist in ABA behavioural therapy	3.98	1.809	4.21	3.277
Mentor of children/persons with SEN	3.50	1.601	3.10	2.941
Parent counsellor	3.61	1.753	3.25	2.912
Opinion-maker	4.02	1.635	4.10	2.785
Mediator	3.70	1.882	4.25	2.973
Expert in expertise of the work capacity of persons with SEN	3.55	1.615	3.12	3.144
Educational advisor	3.55	1.508	3.65	2.729
Counsellor in the school and professional orientation of children/persons with SEN	3.40	2.012	3.12	3.017
Creator of teaching materials adapted to children with SEN	4.02	2.011	3.44	2.943
Evaluator of the progress registered by the children/persons with SEN following the application of methods, complex recovery procedures	4.01	1.406	3.15	2.841
Vocational counsellor	3.01	1.773	3.22	2.608
Emotional support of children/people with SEN	4.05	1.228	4.55	3.277

5. Discussion

5.1. Investigation of students' professional values

From the data collected in Table 1, first of all, we have to say that *all investigated students, in a dominant manner, are guided by altruism, which it is one of the most important professional values that operates in the special education field. Based on this value, the principles of intervention in the complex recovery' process of children/persons with SEN are constituted as norms of professional ethics, as elements that will guide them as professionals/practitioners in the special education field.*

Also, from the same data (Table 1), we notice that the students with previous professional experiences *associated professional values with the legal provisions that regulate in Romania the activity in the special education system which became criteria of the norm of their professional value conduct.*

In the same context, at the students without previous experience in the special education field, the *majority of professional values are linked more to a personal approach of the complex recovery process of children/persons with SEN; an approach that is the result of internalised theoretical frame of special education delivered by academic staff during the university courses.*

Based on statistical data analysis (t-test for independent sample), we found that the data analysed are significant for the investigated teachers (Table 3).

Table 3. The t-test on students' professional values

Typology of investigated students	T	df	Sig. (2-tailed)	Test value = 0			
				Mean difference	95% confidence interval of the difference		
				Lower	Upper		
Altruism	6.215	40	0.000	0.800	3.954	4.980	
Aesthetic sense	4.474	40	0.000	3.400	1.241	4.650	
Creativity	4.256	40	0.000	2.240	2.270	4.520	
Intellectual stimulation	5.111	40	0.000	1.210	3.448	4.680	
Objectified success	5.244	40	0.000	1.315	3.200	4.550	
Independence	6.769	40	0.000	1.115	3.520	4.750	
With previous experience in special education field	Prestige	6.224	40	0.000	1.305	3.200	4.420
	Leading others	7.446	40	0.000	0.800	3.850	4.850
	Material advantages	5.129	40	0.000	1.204	3.100	4.400
	Safety	5.288	40	0.000	1.304	3.200	4.420
	Work environment	5.617	40	0.000	1.022	3.450	4.600
	Relationship with superiors	4.891	40	0.000	1.219	3.014	4.400
	Relationship with work colleagues	6.225	40	0.000	0.950	3.780	4.800
	Lifestyle	4.387	40	0.000	1.240	3.048	4.300
	Cultural diversity	5.227	40	0.000	1.205	3.120	4.400
Without previous experience in special education	Altruism	5.862	50	0.000	0.900	3.424	4.980
	Aesthetic sense	5.228	50	0.000	3.200	1.641	4.680
	Creativity	4.162	50	0.000	2.250	2.274	4.540
	Intellectual stimulation	5.845	50	0.000	1.210	3.500	4.800

field	Objectified success	5.111	50	0.000	1.245	3.450	4.700
	Independence	5.244	50	0.000	1.600	2.680	4.100
	Prestige	6.769	50	0.000	1.250	3.600	4.900
	Leading others	6.224	50	0.000	1.198	2.840	4.100
	Material advantages	7.446	50	0.000	1.350	3.150	4.300
	Safety	5.129	50	0.000	1.380	2.650	3.900
	Work environment	5.288	50	0.000	1.300	2.600	4.00
	Relationship with superiors	5.617	50	0.000	1.160	3.620	4.800
	Relationship with work colleagues	4.891	50	0.000	1.277	3.150	4.300
	Lifestyle	6.225	50	0.000	1.350	3.400	4.400
	Cultural diversity	4.387	50	0.000	1.200	3.270	4.500

Taking all the findings into consideration we can say: (a) altruism is the essential professional value of current students in bachelor special education programme that will guide them as future practitioners and facilitates internalised the principles of intervention in the complex ‘recovery’ process of children/persons with SEN in norms of professional ethics; (b) there are differences between the students with previous experiences in the special education field and those without previous experiences in special education field regarding professional values; (c) students with previous professional experiences in special education field associated professional values with the legal provisions which became criteria of the norm of their professional-value conduct; and (d) for students without previous experience in special education field, the majority of professional values are linked to the internalised theoretical frame of special education delivered by academic staff during the university courses.

5.2. Investigation of students’ perceived future professional roles

The data synthesised in Table 2 allow us to see that the future roles that all our investigated students will assume dominantly after graduation from the bachelor special education programme: promoters of equal opportunities for all children/person with SEN and opinion-makers in the same direction; both assumed roles which signified that they will be delivering universal values, a conclusion that was initially found by Ezer et al. (2010, p. 391) in their research on novice teachers.

From the same data, we also noticed that the students with previous experiences in the special education field are more aware of the specificity of the interventional programme due to the unicity of the needs of each child/person with SEN and assess the risks associated with their future professional roles. Moreover, they are willing to extend their initial professional formation by acquiring a new set of specific competencies to get a higher professional status.

The roles that the students without previous experiences in the special education field will assume are more related to the personal vision on the professional role: an idealistic approach that is the result of the internalised good practices in the special education field through faculty courses and seminars. It is in fact what Bennett et al. (2013, p. 397) pointed in their research: ‘Professionals roles enacted in the eye of the beholder. In their reflections, student subjectivities, internationality, and engagement with workplace affordances are relevant’.

Based on statistical data analysis (*t*-test for independent sample), we found that the data analysed are significant for the investigated subjects (Table 4).

Table 4. The t-test on students perceived future professional roles

		<i>t</i>	<i>df</i>	Sig. (2-tailed)	Mean difference	95% confidence interval of the difference	
						Lower	Upper
With previous experience in the special education field	Promoter of equal opportunities	8.415	40	0.000	0.950	3.850	4.920
	Evaluator of the potential of children/people with special educational needs	5.421	40	0.000	2.250	1.241	3.600
	Facilitator of school inclusion of children with SEN	5.186	40	0.000	1.050	3.660	4.800
	Developer of alternative services for the recovery of children/persons with SEN	4.175	40	0.000	1.210	3.110	4.320
	Active partner, together with parents in complex recovery process of child/person with SEN	4.843	40	0.000	1.340	3.200	4.580
	Organiser of exchanges of good practices with other specialists	7.769	40	0.000	0.900	3.840	4.800
	Counsellor for the insertion on the labour market of persons with SEN	5.228	40	0.000	1.310	2.700	4.000
	Therapist in ABA behavioural therapy	6.446	40	0.000	1.022	3.500	4.500
	Mentor of children/persons with SEN	4.829	40	0.000	1.204	3.000	4.200
	Mentor of children/persons with SEN	4.829	40	0.000	1.204	3.000	4.200
	Opinion-maker	6.687	40	0.000	0.720	3.700	4.500
	Mediator	5.291	40	0.000	1.125	3.300	4.450
	Expert in expertise of the work capacity of persons with SEN	4.225	40	0.000	1.044	3.350	4.400
	Educational advisor	4.387	40	0.000	1.240	3.048	4.300
	Counsellor in the school and professional orientation of children/persons with SEN	4.320	40	0.000	1.205	3.120	4.450
	Creator of teaching materials adapted to children with SEN	7.956	40	0.000	0.825	3.700	4.600
	Evaluator of the progress registered by the children/persons with SEN	7.623	40	0.000	0.920	3.750	4.700

	following the application of methods and complex recovery procedures						
	Vocational counsellor	4.112	40	0.000	1.680	2.201	3.800
	Emotional support of children/people with SEN	7.699	40	0.000	0.900	3.650	4.600
	Promoter of equal opportunities	8.685	40	0.000	0.920	3.820	4.900
	Evaluator of the potential of children/people with special educational needs	5.621	40	0.000	1.800	2.400	4.100
	Facilitator of school inclusion of children with SEN	4.883	40	0.000	1.050	3.160	4.200
Without previous experience in the special education field	Developer of alternative services for the recovery of children/persons with SEN	8.061	40	0.000	1.022	3.420	4.500
	Active partner, together with parents in complex recovery process of child/person with SEN	4.843	40	0.000	1.340	2.600	4.00
	Organiser of exchanges of good practices with other specialists	4.167	40	0.000	1.900	2.240	4.100
	Counsellor for the insertion on the labour market of persons with SEN	6.248	40	0.000	1.310	3.200	4.590
	Therapist in ABA behavioural therapy	8.316	40	0.000	1.025	3.800	4.800
	Mentor of children/persons with SEN	4.229	40	0.000	1.460	2.500	3.900
	Mentor of children/persons with SEN	4.569	40	0.000	1.350	2.400	3.760
	Opinion-maker	8.335	40	0.000	0.820	3.750	4.600
	Mediator	6.395	40	0.000	1.100	3.600	4.700
	Expert in expertise of the work capacity of persons with SEN	4.587	40	0.000	1.240	2.500	3.800
	Educational advisor	5.387	40	0.000	1.120	3.300	4.350
	counsellor in the school and professional orientation of children/persons with SEN	4.330	40	0.000	1.250	2.300	3.680
	Creator of teaching materials adapted to children with SEN	4.956	40	0.000	1.440	2.400	3.900
	Evaluator of the progress registered by the	4.102	40	0.000	1.360	2.450	3.800

children/persons with SEN following the application of methods and complex recovery procedures						
Vocational counsellor	4.312	40	0.000	1.620	2.201	3.830
Emotional support of children/people with SEN	8.949	40	0.000	0.880	3.850	4.750

Considering all the findings we can say the following: (a) all investigated students, after the graduated bachelor special education programme, will deliver universal values to all community members; (b) the students with previous experiences in the special education field are more aware of the specificity of the interventional programme due to the unicity of the needs of each child/person with SEN and assess the risks associated to their future professional roles and will extend their initial formation; (c) the roles that the students without previous experiences in the special education field will assume are related to an idealistic approach that is the result of the internalised good practices in the special education field through faculty' courses and seminars.

The correlational analyses data revealed:

- direct significant correlation between 'altruism' as professional value and the following professional roles: (a) promoter of equal opportunities ($r = 0.799$, $p = 0.01$); (b) opinion-makers ($r = 0.804$, $p = 0.01$).
- direct significant correlation between 'independence' as professional value and the following professional role: creator of teaching materials adapted to children/pupils with SEN ($r = 0.684$, $p = 0.05$).
- direct significant correlation between 'leading others' as professional values and the following professional role: 'organiser of exchanges of good practices with other specialists' ($r = 0.704$, $p = 0.01$).

6. Conclusion

This research had the goal to reveal specific perceived future professional roles.

In our investigation, we used specific and adapted instruments.

With the help of statistical analysis, we found that Cronbach's alpha index is 0.832.

We found the following:

- The dominant professional values – altruism – determine the future graduated students in special education to be delivered of universal values to all community members.
- There are differences between the students with previous experiences in the special education field and those without previous experiences in the special education field regarding professional values and the way in which they perceived future professional roles.
- Students with previous professional experiences in the special education field associated professional values with the legal provisions, which became criteria of the norm of their professional value conduct.
- Students without previous experience in the special education field, link the majority of professional values with the internalised theoretical frame of special education delivered by academic staff during the university' courses.

- Students with previous experiences in the special education field are more aware of the specificity of the interventional programme due to the unicity of the needs of each child/person with SEN and assess the risks associated with their future professional roles and will extend their initial formation.

7. Recommendations

Our findings (implications of the research) can be useful for university professors to:

- develop students in special education and educational sciences objective and professional criteria for assessing the future professional roles concerning different types of pupils with SEN;
- create and develop efficient strategies for vocational counselling of future generation of students in educational sciences;
- create partnerships with the non-governmental association for increasing the chances for students in getting previous experiences in the educational field and in particular the special education field.

Our conclusions have the following theoretical implications:

1. A better understanding of the process of planning a professional career for students in the educational sciences/special education field;
2. Better planning of practicum stages for increasing the functionality and operability of specific competencies in the educational sciences/special education field;
3. Improving the quality of the relationships between teachers and students in the teaching–learning process.

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