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Changing Needs of Special Education Preservice Teachers in the Professional Experience

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Abstract: Self-determination theory (SDT) suggests that people strive to fulfill three basic needs of competence, autonomy, and relatedness. In teacher education research, fulfilling those needs is connected to positive skill development and increased wellbeing of preservice teachers and their students. Teacher education programs for special education preservice teachers (SEPT) include a professional experience in various school settings with neurodiverse students. This professional experience gives rise to specific needs for these SEPT. In-depth interviews were conducted with 12 SEPT, studying at various stages of two teacher education programs. The findings were analyzed qualitatively. Results revealed developing and changing needs throughout the educational program, reflecting different settings and phases of the professional experience. SDT was found to be useful framework to interpret the findings. Implications for designing teacher education programs are discussed.

Introduction

Professional experience is "any teacher preparation activities within an authentic school-based setting that integrate course work and require teacher candidates to work directly with students" (Nagro & de Bettencourt, 2017). Gan (2013) describes the encounter between preservice teachers and the professional experience as “reality shock”. It is even more challenging for special education preservice teachers (SEPT), because it includes coping with different challenges presented by students with disabilities. The SEPT are required to practice adapted interventions and teaching methods, and to establish personal relationships with students who present multidimensional needs collaborating with interdisciplinary staff (Ergul et al. 2013; Forlin & Chambers, 2017; Young, 2018). Thus, the encounter between SEPT and the professional experience raises a unique set of needs potentially different from general preservice teachers. Understanding those needs and addressing them in teacher education programs should improve the quality and effectiveness of the professional experience.

The authors of the current article have served as pedagogical instructors (PI) for 10-11 years in the special education department at a leading Academic School of Education in Israel. In the past few years, the educational program in the Special Education Department has undergone changes to align it with shifting policies and trends in the educational field and in teacher education literature. Considering those changes, we saw the need to reexplore SEPT's needs during their professional experience. The intended outcome of this research

was to provide knowledge to assist with designing more relevant teacher education programs. The Self Determination Theory (SDT) framework was used to explain the findings.

Research Context

The Educational System in Israel

The Israeli educational system, like others, is going through changes regarding inclusion of students with special needs. In 2018 the Israeli Parliament enacted a revision of the law encompasses a systematic process promoting inclusion of students with special needs in inclusive schools (Viseblay, 2020). According to the Special Education Act, a special education student is defined as a child aged 3-21 with significant disability - physical, mental, emotional-behavioural, sensual, cognitive, or linguistic - that limits his/her ability to adaptive behaviour (autism spectrum disorder (ASD), intellectual and developmental disability (IDD), physical disability, emotional or psychiatric disorders, behaviour disorders, specific learning disorders and deaf and blind students).

Currently in Israel there are four placement alternatives for students with special needs: An inclusive class with or without an inclusive assistant, a special class within mainstream schools or a special education school. In the first two alternatives the students learn in an inclusive class with a general teacher and receive extra group or individual support from a special education teacher, therapists, and healthcare professionals. In the special education class and school, the students learn in small groups with special education teachers and teaching assistants and receive support from therapists and healthcare professionals. The special classes and schools are usually organized according to students' diagnosis, but parents have the right to choose the type of class/school their child will study in. About 60% of students with special needs in Israel learn in inclusive education (Viseblay, 2020). Special education teachers in Israel can teach in all four alternatives mentioned above, hence the teachers' education program should prepare them for those diverse settings.

Teachers' Education in Israel

The role definition of special education teachers is being modified due to changes in the educational system and inclusive trends. Those changes and shifting of responsibility for students with special needs to general teachers has led to ambiguity and blurred boundaries between teachers and can impact significantly on the work of the special education teacher. The role definition of special education teachers also differs between inclusive and segregated schools in terms of philosophy, duties, and teaching methods (Young, 2018). Hence, many models for special education teachers' education exist around the world.

According to the Israeli Ministry of Education (1996), to be a special education teacher, one has to complete a B.Ed. in special education and a teachers' education program to receive a teaching certificate. After graduating, the teacher has to complete 6-10 months of internship, work as a teacher with the guidance of a mentor teacher and participate in a guided support group of peers in college. The mentor-teachers and the school principals evaluate the new teachers to approve their license.

In most special education teacher programs, studies last four years (eight semesters), while the internship can start in the fourth year or later. Most SEPT in Israel study for a second disciplinary teaching certificate such as in mathematics, history, science, etc. along with the special education program. The Ministry of Education is the legal authority responsible for planning, funding, and evaluating teacher education institutes.

In their educational program, SEPT are required to develop an understanding of complex abilities, assessment skills, design programs, apply evidence-based interventions and practices, integrate assistive technologies, work with interdisciplinary support staff, etc. (Ergul et al. 2013; young, 2018). Because of the variety of placement alternatives for students with special needs mentioned above SEPT also need to acquire skills enabling them to work in a variety of inclusive and segregated settings, and cope with ambiguous and changing role definitions. For that purpose, the teachers' education programs include theoretical and pedagogical studies as well as professional experience in those different settings and complex environments to prepare the SEPT for the field.

Professional Experience of SEPT. Different models for professional experience exist in Israel. In most cases professional experience starts in the second semester or second year, while in our college the Special Education Department is one of the few departments in which preservice teachers receive field experience from the first semester. This is based on findings that professional experience is considered the most important learning experience in teacher education, a perception held by the preservice teachers themselves (Nagro & de Bettencourt, 2017; Smith & Lev-Ari, 2005). Ergul et. al. (2013) found that preservice teachers recommended extending the duration of the professional experience, extending it throughout the teachers' education program and strengthening the connection between theoretical courses and the field.

The special education professional experience in our college extends over three years and includes practice in different school settings: an inclusive class, special education schools and individual lessons for students with special needs that learn in inclusive classrooms. Each year the professional experience includes one to two days weekly for two semesters in one type of school setting. In their fourth year the graduates complete their internship working as teachers and complete their studies for a B.Ed. in special education.

In the professional experience SEPT are required to design and teach lessons in an inclusive classroom and in special education schools and participate in school activities, and to design and deliver individual interventions as part of action research. Each year a mentor teacher from school and PI from college accompany the SEPT.

The Role of the Pedagogical Instructor. The models for instruction of preservice teachers had also undergone changes over the years. From the traditional model where the instructor delivered the knowledge to the preservice teachers, there was a move towards a constructivist approach that implied a collaborative construction of knowledge by students and mentors (Flores Delgado, 2019).

In most colleges and universities in Israel the PI accompanies the SEPT in their professional experience. The PI is the mediator between the theory learned in college and the field and assists preservice teachers to develop their professional and personal identities and practices (Ran, 2017). The intensity and style of this instruction varies across different institutes. In our college we moved from a few visitations by the PI in the professional experience during the practice year to a constant presence during the experience day with a group of students: once a week during the first and third years, once every two weeks in the second year (due to logistic limitations). The PIs usually hold a Ph.D. and are experts in various aspects of special education. The PI meets a group of 15-20 SEPT in two courses in college- a theoretical-pedagogical course, and a course for personal development in which the PI provides opportunities for exploring dilemmas and reflective thinking with the group. In the professional experience, PIs assist the SEPT to design their field assignments, give feedback for SEPT's practice, and help them reflect on challenges with students and school staff.

Theoretical Framework
Self-Determination Theory

According to Deci and Ryan's (2000) Self-Determination Theory, three fundamental and universal needs for competence, autonomy and relatedness are inherent in human life, and that fulfilment of those needs will lead to intrinsic motivation, psychological health and wellbeing, optimal functioning, and self-actualization.

The need for *competence* is the desire to experience oneself as capable of realizing aspirations, goals and feeling effective. The need for *autonomy* is the need for authentic self-expression, meaning and freedom of choice; it is a person's need to realize abilities and to formulate his/her identity. The need for *relatedness* is the desire to have close, secure, and fulfilling relationships with others, to be part of a community, to feel worthy of love and to be protected (Deci & Ryan, 2000).

Over the last two decades, intensive efforts have been made to investigate SDT in the educational field, but only a few studies have applied it to teacher education research (e.g., Evelein et al., 2008; Karaarslan et al., 2013; Korthagen & Evelein, 2016; Liu & Siteo, 2019; Poom-Valickis et al., 2017; Vermeulen et al., 2012). Findings reveal that fulfilling the three basic needs influence preservice teachers' behaviours. For example, fulfillment of the competence need resulted in leadership behaviours and structure in the classroom (Korthagen & Evelein, 2016). Self-efficacy (competency) is linked to the preservice teachers' willingness to try and use new strategies and to reduced feelings of teachers' burnout (Sciuchetti & Yssel, 2019). Fulfillment of relatedness need was correlated with closeness and supportive relations with students (Korthagen & Evelein, 2016). Preservice teachers flourish when they get social support, guidance and advice, as well as acknowledgment from peers and teacher educators (Anttila et al., 2017). Fulfillment of autonomy need resulted in promoting more freedom and less controlling strategies in the classroom (Korthagen & Evelein, 2016). Preservice teachers with autonomous motivation are more willing to tackle challenges to improve teaching competence (Poom-Valickis et al., 2017). When level of autonomy was low, preservice teachers felt pressured, less motivated and less oriented to their students' autonomy (Evelein et al., 2008).

Research Aims

Drawing on a literature review of the importance of need fulfillment for preservice teachers, the principal aim of this study is to analyze the variety of SEPT's needs during their professional experience. SDT was found to be a relevant framework to analyze regular preservice teachers' needs (e.g. Korthagen & Evelein, 2016; Liu & Siteo, 2019; Poom-Valickis et al., 2017 and others). We hypothesize that SEPT's needs would reflect the basic needs of competence, autonomy, and relatedness.

The teaching profession and especially special education suffers from attrition due to burnout and the difficulty in meeting teacher's complex needs in a changing and complex environment (Sciuchetti et al., 2018). Previous studies report that SEPT and special education teachers are prone to experience more pressure and stress because of lack of structured training programs, basic didactic skills, low self-efficacy, and students' challenging behaviours (Brown et al., 2016; Stempien & Loeb, 2002; Youngs et al., 2011).

The importance of this study is to highlight the needs of SEPT while working with neurodiverse students, in a large range of ages, needs and abilities in various school settings. We believe that understanding those needs will help SEPT's educators to design a more sensitive professional experience that will prepare SEPTs for the field, and perhaps help them to deal better with the complexity of being a special education teacher after graduation.

This study can be valuable as it focuses on SEPT as a special population because to the best of our knowledge, the investigation of needs among SEPT is poorly represented in the literature. This can be explained by the changes in teachers' education in some countries and the inclusion trends. Nevertheless, as SEPT are still required to work with neurodiverse students, regardless of the type of class they are in and because some parents still choose to send their children to special education classes and schools, the teachers' education program should prepare the SEPT to those setting in their professional experience.

The current study aims to explore those needs, by focusing on the professional experience and the PI accompanying the professional experience.

The research questions were:

1. What are SEPT's needs during their educational process, specifically in the professional experience?
2. Are there differences in needs according to SEPT's developmental stages during their teacher education program?

Method

This study employed an interpretive phenomenological approach, which aims to describe and interpret the shared meaning for several individuals of their actual experiences of a phenomenon (Creswell, 2013). In this study the phenomena in focus were SEPT's perceptions about their needs during their professional experience and the relationship with their PIs. As we are in the process of improving our training program and trying to meet the SEPT's needs, we must relate to their point of view and listen to their feedback. Understanding the shared experience of SEPTs can help design strategies for improving the professional experience as a fundamental learning tool in special education teachers' education.

Participants

The study was conducted in a leading college for education in northern Israel. The students at the college come from all over the country. The participants included 12 preservice teachers participating as students in teachers' education for special education teachers. The inclusion criterion was being a student in the second, third or fourth year of the Special Education Program. The interviews were taken in the first semester, so first year students were not recruited because, as we understand, first year students are focused on adjustment to college life and its demands and have limited field experience.

An email explaining the research aims was sent to 30 students randomly selected from the special education students' lists, asking them to participate in the study. Twelve students replied. To ensure the principle of maximum variation sampling (Creswell, 2013) we confirmed that participants were of different ages, had different backgrounds and prior experience, and were at different stages in the training program, practiced in different schools, and each had different PIs (see table 1). The variety enabled us to include all the students that agreed to participate.

Name	Age	Sex	Phase of studies	Prior teaching experience	First year professional experience	Second year professional experience	Third year professional experience
Daniel	36	Male	Fourth year	Experience as a substitute teacher in junior high school*; caregiver at an after-school daycare; drama guide; an inclusive teacher-assistant to students with ASD in elementary and high school	Inclusive class	Special education school (behaviour disorders)	Individual lessons for students with special needs studying in an inclusive classroom
Rose	28	Female	Fourth year	Experience as teacher assistant in kindergarten; a counselor in a youth movement; volunteered in a children's home. Military service- a teacher in a home for children with special needs	Inclusive class	Special education school (behaviour disorders)	Individual lessons for students with special needs studying in an inclusive classroom
Taylor	30	Female	Fourth year	Experience as a teacher's assistant in kindergartens regular and special education (ASD)	Inclusive class	Special education school (ASD)	Individual lessons for students with special needs studying in an inclusive classroom
Sheila	27	Female	Fourth year	Experience as a leader in a youth movement for children with ASD; teacher's assistant in kindergarten. Military service- a teacher for soldiers in a military prison.	Inclusive class	Special education school (IDD)	Individual lessons for students with special needs studying in an inclusive classroom
Olivia	25	Female	Third year	Experience as a leader in a youth movement. Military service- a language teacher for immigrant soldiers.	Inclusive class	Special education school (behaviour disorders)	Individual lessons for students with special needs studying in an inclusive classroom
Sarah	27	Female	Third year	Experience as a counselor in an after-school program; a coordinator in an after-school program for teenagers	Inclusive class	Special education school (IDD)	Individual lessons for students with special needs studying in an inclusive classroom

Zoey	25	Female	Third year	She has no prior experience in education.	Inclusive class	Special education school (ASD)	Individual lessons for students with special needs studying in an inclusive classroom
Harriet	22	Female	Second year	Experience as a youth counselor in summer camps for children with diabetes; teacher's assistant for deaf children; Community service- teacher of immigrant children and as a teacher for deaf children;	Inclusive class	Special education school (ASD)	
Grace	22	Female	Second year	Military service- a language teacher for immigrant soldiers and for soldiers completing their twelve-year education certificate.	Inclusive class	Special education school (ASD)	
Bella	22	Female	Second year	Community service- a teacher for teens at risk.	Inclusive class	Special education school (complex specific learning disorders)	
Yvonne	24	Female	Second year	Experience as a leader in a youth movement	Inclusive class	Special education school (behaviour disorders)	
Amy	23	Female	Second year	Experience as leader in a youth movement Community service- a teacher in a school for at-risk students	Inclusive class	Special education school (behaviour disorders)	

Table 1: Participants characteristics

* Daniel worked as a temporary substitute teacher without certification, which is possible in some cases in Israel, when a shortage of substitutes exists.

The participants in the current study participated in two different professional experience programs. In both programs the SEPT are experiencing one day per week for two semesters. The differences between the programs were the order of the settings of the professional experience, the intensity of the presence of the PI in the professional experience, and the size of the groups in each school. Daniel, Rose, Taylor, Sheila, and Olivia are in their third or fourth year. In their first year they had a professional experience in an inclusive classroom. They arrived at the schools as a group of 22 SEPT accompanied by a PI. In their

second year the professional experience included individual instruction of students with special needs learning in an inclusive classroom. They were assigned to different schools, and the PI visited them at the school one day each semester. In the third year the professional experience took place at special education schools (behaviour disorders/learning disabilities/IDD/ASD), with 2-4 SEPT per school who were accompanied by a PI expert in the specific disability, visiting at the school once every semester.

Grace, Harriet, Bella, Yvonne, Zoey, Sarah, and Amy, studying in their second and third years, had their first-year professional experience in an inclusive classroom and in special education classrooms within mainstream schools. They arrived at the school as a group of 15 accompanied by a PI. In their second year they were assigned to special education schools, arriving as a group of ten, while the PI arrived at the schools once every two weeks. In their third year they taught individual students with special needs in an inclusive classroom.

Data Collection

Data was collected over two years. The participants were asked to complete their demographic background including age, number of years in college, previous experience in the educational field, professional experience settings, and to sign a consent form. The research data was collected through semi-structured interviews conducted by one of the researchers with each of the participants. Interviews lasted for 40-90 minutes. Because second year SEPT could only discuss their first- and second-year professional experience, their interviews were shorter, and data collected was limited. Therefore, second year SEPT had a follow-up interview in their third year.

The Interview was defined as semi-structured, because it employed a blend of open and closed questions and was conducted conversationally with one participant at a time. The conversations focused on the research aims, but were dialogic and flexible in nature (Adams, 2015). Questions used in this study were: How would you describe your ideal professional experience? What are your needs as a SEPT and a college student, regarding the professional experience and your relations with your PI? Describe your experience and needs in the first, second and third year and across different professional experience settings.

Data Analysis

All interviews were recorded and transcribed, with the consent of the participants. First, the interviews' protocols were divided into units of meaning expressing a single idea. Most of the analysis units included one or two sentences. When a complex sentence contained more than one idea, it was divided into several units (Flick, 2006). In the first stage of the analysis, open coding was conducted on one randomly selected interview in which codes were assigned to each analysis unit, line by line. The next step was to categorize the codes by grouping them around phenomena revealed in the data (Flick, 2006). This included a constant comparison to check that the data supported the emerging categories (Corbin & Strauss, 2008).

In the second stage axial coding was performed, in which the most relevant categories and subcategories were selected and refined, and the relations between them were elaborated (Corbin & Strauss, 2008; Flick, 2006). Based on those categories, we coded the rest of the interviews, where we identified shared themes for all the participants, and themes and categories specific to some participants.

Validity and Reliability

Validity and Reliability were addressed in different ways: first, we drafted the structured part of the interview and re-checked it after the first interview. Each researcher listened to the first interview and made notes after which minor changes were made to get more accurate information in a dialogic manner between the two researchers. Second, to decrease bias, each researcher analyzed the first interview separately, after which a discussion was held to define categories and themes to achieve full agreement (Guba, 1981; Lincoln, 1995). Further analysis was performed in a dialogical manner by the two researchers, who had served as PIs for 10-11 years in the Special Education Program. We created a database and documented several stages in the analysis process that can be made available to other researchers (Shkedi, 2005). By approaching a variety of participants, we tried to broaden our sources of information (Creswell, 2013). the maximum variation sampling principle was applied.

Ethical Issues

The ethics committee of the college approved the research plan and the recruitment process. Then we approached students in the Special Education Program by an email with a written explanation about the study and a request to participate. Twelve of the SEPT who were approached agreed to participate in the study. There was no authority relationship between the researchers and the students at the time of data collection. We made sure that the participants were not in any chance going to participate in any of our courses in the future. All names in the manuscript are pseudonyms, to safeguard participants' privacy.

Findings

Interviews were analyzed qualitatively to identify SEPT's needs regarding the professional experience. From the analysis we identified a variety of needs. For this study, we related to needs that were common to most participants.

Based on needs expressed by SEPT, we identified three main themes regarding 1) the intensity of the PI's presence in the professional experience; 2) reliance on external and internal sources; and 3) emotional and professional support from the PI and from the peer group. Each theme contains needs that are unique to specific phases of the teachers' education program, changing over time in intensity and focus. In the following section we will present the three themes as continuums of needs.

Intensity of the PI's Presence in the Professional Experience

All the participants pointed out their need for the PI to be present in the professional experience all day long in the first year of their studies. Rose said regarding her first-year professional experience:

I think it was necessary that in the first year the guidance was intensive. Our PI was present in school with us all day and it was very good, because we always had questions and felt anxious, so we could approach her and ask.

Regarding the presence of the PI during the second year, the SEPT emphasized the significance of her involvement in the professional experience. Harriet said: "I often ask for guidance and want the PI to enter my class", but overall, they felt that they did not need the

intensive presence they needed in the first year. When Harriet was asked about it, she said: “Even once every two weeks or once a month is enough”. Amy also mentioned that “once every two weeks is enough, but when she comes, she needs to be available for personal guidance”.

In the third year, the SEPT ask for a chance to be more independent in their decision making, and thus do not view the PI’s continuous presence in the schools as critical. They do emphasize that the PI’s involvement in the professional experience is essential for their professional development. Olivia referred to the need for the PI’s presence in the third year:

Now I feel less anxious, I feel this is right for me because next year I’m facing my internship, so I do need to experience some independence. It will be too extreme if for three years I will have an instructor accompanying me each day, and next year I will be completely alone. I think the gradual process is good.

Sheila added:

It feels too needy if the PI is there all the time (in the third year). Maybe gradually, not in the first year every week, and in the second and third year not at all. Something in between.

Reliance on External and Internal Sources

Participants pointed out the need to rely on external sources in the first and second years, and to acquire knowledge and skills according to the professional development phase and professional experience context. In the beginning they feel that they needed more guidance and specific instructions on how to approach their students. Olivia said regarding the first year:

The PI in the first year should teach us about tools we can use in the classroom. I think that before we talk about DSM and different disabilities, we must get a basic understanding of the teacher’s role-definition and duties; feelings I hold about teachers I had in the past and processing them; what are the expectations from me as a preservice teacher; how should I start teaching my class, and tools for communication with my students.

Daniel said: “I think one of the most important things is that the PI in the first year will be the entrance gate for the college. She should be like a homeroom teacher in school”. Sarah also said that one of the PI’s roles in the first year is “to coordinate the students’ needs inside the college”. Rose focused on the need to acquire common language, specifically planning a lesson: “In the first year I think there should be some strictness, because each one comes from a different background, and we need a common path to follow”.

Further along the educational process, in the second year, the need arises for acquiring extensive knowledge and tools to address the students’ special needs in the professional experience in special education schools, such as augmentative and alternative communication. Olivia explained this need:

Regarding learning about students with special needs and practicing with them, we need tools that we can practice, teaching techniques, to know how to make knowledge accessible to nonverbal students like students with developmental disabilities; we need to talk to teachers who are experienced with challenging behaviours.

Grace explained her need to acquire more tools to address students’ needs: “Because I had no experience with those students, and I didn’t know how to approach them”. Regarding the professional experience in the second year, Harriet added: “Mostly I need practical tools, what I should do in the classroom”.

Finally, in the third year the SEPT were able to rely more and more on themselves. The SEPT expressed their need to bring about their uniqueness and autonomy, and to have the opportunity to present their developing self in the professional experience based on the knowledge they had acquired in the past two years. Olivia pointed out that:

In the third year it is important to me that my teachers encourage my own unique place. Next year each one of us will teach in a different school without guidance, and I would like to be able to become the teacher I want to be according to my own values, beliefs, and attitudes. The PIs should not inspire us to be homogeneous. I feel that I'm still not in a position to bring about my own expression, I'm still in a template and I want to grow out of it.

Sarah said:

Gradually the PI should give us more and more autonomy. This is what my PI did and that was very good for me, it gave me a sense of self confidence. She said to me "you can do it and I am here if you need me".

Rose added:

Over the years I had hard and painful moments like the pain during delivery of a child and also good experiences of success and joy, like a mother feels after her baby is born. Like a baby developing slowly I, too, built my inner model of values as an educator to be.

Emotional and Professional Support from the PI and Peer Group

The need for emotional support was expressed for all participants throughout the years. The SEPT pointed out the importance of personal relationships with the PI. Daniel said:

The common ground I can find, in respect to all the PIs that I felt close to, was the feeling I was safe, confident, the feeling I can trust them. I felt I could express myself, my needs, my difficulties, and I knew they would treat me in an honest, personal, individual way, not just in general.

Rose added: "Every year I say the same thing about the PIs- personal relations".

Grace adds about her PI: "I think I had a safe place to share, express my feelings, dilemmas and problems". Zoey said: "The PI should give us emotional support. I didn't get along with my mentor teacher and the PI helped me and supported me, so I could eventually enjoy my professional experience".

The participants also emphasized the need to have a place to raise questions and to think over situations and dilemmas from the field. As Olivia said: "The availability of the PI before I teach my class and having a place to ask and get advice was meaningful for me and gave me confidence". Sheila also described this need: "I need the presence of someone who is professional to help and give me answers". Amy stressed: "I needed regular meetings with the PI to consult about my lesson plans, is it right or wrong, is my lesson plan good and how can I improve it".

Another source of emotional support was the peer group in the school. Harriet said: "We share with one another... I share with my friends". Grace added that sharing with the group can help overcome personal difficulties: "I felt that the group is a good place for me to share. The relations were built up gradually, we got closer and closer and felt that we could share".

The need to consult professionally also included peers, and not just the PI. The participants pointed out the importance of thinking and sharing with their colleagues and learning from their experience. Harriet said:

It helps me to ask and get answers... to bring my dilemmas from the field and hear from other student-teachers that they experienced similar situations, and then they can give some advice or say something that will shed some light on things I didn't think of.

The need for emotional and professional support was expressed regarding all the participants but was more prominent regarding the professional experience in the special education schools whether their professional experience took place in the second or in the third year. These schools are usually characterized by more complex students' needs and include students who need more intense support, so their parents chose not to send them to mainstream education.

The participants expressed the need for emotional support regarding the encounter with complex special education students, especially regarding students with severe developmental disabilities. Grace expressed her encounter with the students: "I think that in the first month of the professional experience in the special education school I was in some kind of shock, I was terrified, really scared. I jumped at every move they made; I was uncomfortable". Those feelings raised the need for emotional support as Bella said: "I think that the emotional support we did get in the first year, we need more intensively this year because of the different students we meet". Taylor added: "Especially in the special education school for students with ASD, I needed emotional support...I reached out to my PI for emotional help. This was something I really needed in this special school, the emotional guidance". Yvonne stated the same idea:

We need a place to share what we experienced even more when it is a school for special students, it brings a lot of things to the surface. I experienced a tantrum of a student, and I needed a place to process it, someone to support my emotions following the incident.

Discussion

Findings revealed three continua reflecting a change in intensity and focus of SEPT's needs over time and implying a developmental process. To understand those developments in needs, we used SDT (Self Determination Theory) as a framework for interpreting the findings. We suggest that the three universal needs of competence, autonomy and relatedness are expressed in the changing needs of SEPT.

The Need for Competence: Expressed by the Changing Need for the PI's Presence in the Professional Experience

All the participants pointed out their need for the PI to be present in the professional experience, but the findings revealed a change in the intensity of this need over the years. While in their first-year participants expressed the need for intensive presence and involvement of the PI in the professional experience, they also expressed less intensive need for the PI's presence in the following years. The SEPT see the PI as a source for comfort, stability, and security in the school's challenging setting. Thus, this finding can be explained by the growing confidence and the growing sense of competence the SEPT gained over the educational program: in the first year they feel insecure and need more protection, and as they acquire more experience and confidence, they feel that they can manage school's life with less intense help and support. Experiencing security implies a fulfillment of competence needs (Ryan & Deci, 2000). These findings are supported by previous research about self-

efficacy of education students in general and special education. For example, Sciuchetti and Yssel (2019) found a statistically significant increase in self-efficacy of preservice teachers regarding their behaviour management over their educational process. Evelein et al., (2008) also found a change in preservice teachers' competence as they gain more field experience.

The Need for Autonomy: Expressed by Moving from Reliance on External to Internal Sources

This process is characterized by the initial need for understanding the field and acquiring the professional language. Dreer (2020) defined this as the need for introduction. In this phase the SEPT express a need for clear instructions, templates, and common language. They want the PI to tell them what to do, what to think, what tools to use. Karaaslan et al. (2013) inferred that to feel competent science preservice teachers needed support and knowledge from other people in their community.

Further along in the second year, the need arises for acquiring additional knowledge and tools regarding the students' special needs. Still in this phase the need is for structure, common knowledge about special interventions, recipes for dealing with challenging behaviours, etc.

Finally, in the third year, the SEPT stress their need to express their uniqueness and autonomy, and to have the opportunity to present their developing self in the school. They now feel they have the knowledge and skills to be able to apply them with a sense of self identity, choice, and self-belief, and to rely on their acquired knowledge, skills, and values (Ryan, 2003).

This was supported in previous studies that showed a growth in preservice teachers' autonomy over time (Evelein et al., (2008; Flores-Delgado 2019): While in the first stages of the professional experience the student-teachers showed autonomous behaviour that was limited to the planning and delivery of their classes, as they moved forward in their professional experience, they exhibited autonomous behaviour such as taking more initiative, looking for extra resources and designing different types of activities that they considered would be more effective for their students.

The Need for Relatedness: Expressed by the Changing Need for Emotional and Professional Support from PI and Peers

All the participants regarded the PI and the peers' group as a main component of a good professional experience all over the years. They stressed a need for emotional and professional support both from the PI and the group. They found them as a source of comfort and safety, a place to confide, ventilate feelings and get professional advice. We believe that this can express the need for relatedness, as the PI and peers' support gave the SEPT a sense of community and security.

Although this need for relatedness was expressed throughout the training program, we found that it was intensified when practicing in the separate special education schools. This can imply that the relatedness need intensity is influenced by the setting of the school. The special challenges that arise in dealing with students with complex needs are expressed by the SEPT's desire for intense emotional support beyond what is required in different professional experience contexts. Participants expressed a variety of feelings regarding this experience that are related to challenging behaviours and students' complexity. It seems that this change is not linear and depends on the setting more than on the SEPT's developmental process. Researchers (e.g. O'Brian et al., 2007; Roberts et al., 2014) recommend emotional support to develop the ability to cope efficiently with stress and loneliness accompanying special

education settings. Emotional support was found to be one of the most valued supports from PI for preservice teachers (Smith & Lev-Ari, 2005). Goh et al. (2009) noted that preservice teachers appreciated the PI's accessibility and intimacy as a source of coping and adjusting to the school environment.

Karaarslan et al. (2013) found that sense of relatedness can influence competence in preservice teachers: To feel competent the preservice teachers needed support from other people in their community. Mentors' and peers' support was also mentioned as a facilitator of growing autonomy (Flores-Delgado, 2019).

We believe that the special education environment, especially in special education schools, promotes the need for relatedness to the PI and to peers more intensively among those SEPT. While teachers in mainstream education often direct and fulfil their relatedness needs through their pupils (Evelein et al., 2008), special education teachers may find that more difficult to achieve. We hypothesize that relatedness needs were found to be prominent in SEPT because of the special characteristics of the students and the special challenges they pose.

Our findings suggest developmental processes regarding the three basic needs of competence, autonomy, and relatedness that SEPT express through the teacher education program. Because the PIs accompany the professional experience, the participants in this study often describe them as the source of fulfilling their needs regarding the professional experience.

This developmental process includes forming a personal and professional identity, from novice SEPT in the first year to maturity in the third year of the training. The SEPT pursue a path that builds up their ability to be more independent, self-reliant, competent, and autonomous, and thus the intensity of their needs change over time. This developmental path is expressed by the need for less intensive guidance over the years, less intensive presence of the PI during the practice day, and a growing need for the opportunity to be more independent and autonomous, based on the knowledge acquired during the training program. Along with growing competence and autonomy, there is a constant need for relatedness that increases in intensity in the most stressing and challenging professional experience setting- the special education school.

Sciuchetti and Yssel (2019) found a change over time in the SEPT's needs, such that initially more general needs were dominant, and over time more specific needs arose. Yuksel (2014) believes that the field experiences provided challenges that disrupted participants' preexisting beliefs, thus challenging them to reassess their perceived capabilities, knowledge, and training needs. This could be the case in the current study, as the nature of practice changes over the years, influencing the SEPT's needs.

Limitation and Future Research

The study included a small number of participants. First year students weren't included in the study. It is recommended in future studies to broaden the number and diversity of the participants- diversity of academic abilities and different teaching skills, and to include students in their first year.

The study was qualitative in nature. To broaden the understanding of needs we recommend adding in future research a survey about needs during the professional experience that would include all the students in the training program. This can be an enlightening addition to the interviews.

In the current study we intentionally included different contexts of professional experience, but this could also be a limitation. Future research can focus on more homogenous contexts and make more nuanced observations.

As PIs we should consider the preservice teachers' needs as presented in this study. The implications for fulfilling those needs should be discussed in further research. Further research should also focus on the perceived role and personal traits of the PI that would promote fulfilling those needs.

Concluding Remarks

Theoretical Implications

In this study we focused on the special needs expressed by SEPT. Unlike teachers' education for regular teachers, special education teachers' studies are a more complex task eliciting personal and professional needs, including the need for acquiring knowledge about different disabilities, teaching techniques and skills, along with the need to develop a sense of self-competence and resilience when dealing with special education students. Thus, a different approach should be taken considering those challenges.

Another theoretical highlight of this study was the focus on changing and developing, although universal needs emerged from the interview analysis. Previous studies dealt with professional and novice teachers' needs, but few have revealed the changes and development of needs according to professional experience settings and to different phases of the teachers' education program. The participants in our study emphasized their changing needs in accordance with the SDT's three basic needs of competence, autonomy, and relatedness (Deci & Ryan, 2000). In that way, we find the SDT to be helpful framework to understand SEPT's needs.

These findings can contribute to understanding the SEPT's motivation and the PI's special role as a source of knowledge, a source of emotional support and his/her important role in building a peer group that also serves those two roles.

Implications for Practice

When observing the findings holistically, some implications should be considered regarding the design and planning of the teachers' education program for special education teachers. Three main principles are inherent in this study, PI's presence in the professional experience is critical, but should be gradually reduced over the years to promote SEPT independence and autonomy; professional guidance should be more intense in the first and second years of teachers' education programs; one of the most important roles of the PI is to support the SEPT emotionally, especially in special education school professional experience, and to actively create a support community of preservice teachers.

We suggest some strategies to promote the fulfillment of those needs: To promote competence: as the active presence of the PI is perceived as a source for developing competence, the PI should enable routine personal and group meetings, to promote sharing of feelings, dilemmas, and brainstorming, provide relevant assignments connected to those dilemmas. The PI should also deliver affirmative assessments to SEPT's lessons (McLennan et al., 2021) and encourage peer feedback.

To promote autonomy: the PI should encourage choice, initiatives and creativity (McLennan et al., 2021), in a graduate way and give the SEPT the opportunity to rely more on their internal knowledge in their third year.

To promote relatedness: Design small educational group experiences in the same school. This would enable close relations with each SEPT, know them personally, and provide more routine intensive emotional and professional support (Smith & Lev-Ari, 2005). Build a community of learners and opportunities for collaborative work (Karaarslan et al., 2013; McLennan et al., 2021).

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References

- Adams, W.C. (2015). Conducting Semi-Structured Interviews. In Newcomer, K.E., Hatry, H.P., & Wholey, J.S. (Eds.), *Handbook of Practical Program Evaluation* (4th edition, pp. 492-505). John Wiley and Sons. <https://doi.org/10.1002/9781119171386.ch19>
- Anttila, H., Pyhältö, K., Soini, T., & Pietarinen, J. (2017) From Anxiety to Enthusiasm: Emotional Patterns among Student Teachers. *European Journal of Teacher Education*, 40(4), 447-464. <https://doi.org/10.1080/02619768.2017.1349095>
- Brown, O., Howcroft, G., & Jacobs, T. (2016). The Coping Orientation and Resources of Teachers Educating Learners with Intellectual Disabilities. *South African Journal of Psychology*, 39(4), 448-459. <https://doi.org/10.1177/008124630903900406>
- Vermeulen, M., Castelijns, J., Koster, B., & Kools, Q. (2012). Measuring student teachers' basic psychological needs. *Journal of Education for Teaching*, 38(4), 453-467. <https://doi.org/10.1080/02607476.2012.688556>
- Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3rd ed.). SAGE Publications. <https://dx.doi.org/10.4135/9781452230153>
- Creswell, J. W. (2013). *Qualitative Inquiry & Research Design: Choosing among Five Approaches* (3rd ed.). SAGE publications.
- Deci, E. L., & Ryan, R. M. (2000). The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behaviour. *Psychological Inquiry*, 4, 227-268. https://doi.org/10.1207/S15327965PLI1104_01
- Dreer, B. (2020). Towards a Better Understanding of Psychological Needs of Student Teachers During Field Experiences. *European Journal of Teacher Education*. <https://doi.org/10.1080/02619768.2020.1744557>
- Ergul, C., Baydik, B. & Demir, S. (2013). Opinions of In-Service and Pre-Service Special Education Teachers on the Competencies of the Undergraduate Special Education Programs. *Educational Science: Theory & Practice*, 13(1), 518-522.
- Evelein, F., Korthagen, F., & Brekelmans, M. (2008). Fulfilment of the Basic Psychological Needs of Student Teachers during their First Teaching Experiences. *Teaching and Teacher Education*, 24(5), 1137-1148. <https://doi.org/10.1016/j.tate.2007.09.001>
- Flick, U. (2006). *An Introduction to Qualitative Research* (3rd edition). SAGE.
- Flores Delgado, L. D. (2019). *An Exploration of the Development of Student-Teacher Autonomy and the Role of Professional Identity and Mentoring: A Case Study of ESOL Trainees in a Northern University in Mexico* (Doctoral thesis, University of Southampton, United Kingdom). University of Southampton Institutional Repository. <http://eprints.soton.ac.uk/id/eprint/437593>

- Forlin, C., & Chambers, D. (2017). Catering for diversity: Including learners with different abilities and needs in regular classrooms. In R. Maclean (Ed.), *Life in schools and classrooms, Education in the Asia Pacific region: Issues, concerns and prospects* 38, (pp. 555-571). Singapore: Springer. https://doi.org/10.1007/978-981-10-3654-5_33
- Gan, Z. (2013). Learning to Teach English Language in the Practicum: What Challenges do Non-Native ESL Student Teachers Face? *Australian Journal of Teacher Education*, 38(3), 92-108. <http://ro.ecu.edu.au/ajte/vol38/iss3/6>
<https://doi.org/10.14221/ajte.2013v38n3.3>
- Goh, K. C., Wong, A. F., Choy, D., & Inn Tan, J. P. (2009). Confidence Levels after Practicum Experiences of Student Teachers in Singapore: An Exploratory Study. *Journal of Educational Policy*, 6 (2), 121-140.
- Guba, E. (1981). Criteria for Assessing the Trustworthiness of Naturalistic Inquiries. *Educational Resources Information Center Annual Review Paper*, 29, 75-91. <https://doi.org/10.1007/BF02766777>
- Karaarslan, G., Ertepinar, H., & Sungur, S. (2013). Use of Self-Determination Theory to Support Basic Psychological Needs of Preservice Science Teachers in an Environmental Science Course. *Environmental Education Research*, 19, 342-369. <http://dx.doi.org/10.1080/13504622.2012.695013>
- Korthagen, F.A.J., & Evelein, F.G. (2016). Relations between student teachers' basic needs fulfillment and their teaching behavior. *Teaching and teacher education*, 60, 234-244. <https://doi.org/10.1016/j.tate.2016.08.021>
- Lincoln Y.S. (1995). Emerging Criteria for Qualitative and Interpretive Research. *Qualitative Inquiry*, 3, 275-289. <https://doi.org/10.1177/107780049500100301>
- Liu, W. C., & Siteo, C. Y. (2019). Student Teachers' Psychological Needs, Subjective Experience and Perceived Competence in Teaching During Practicum. *Asia Pacific Journal of Education*. <https://doi.org/10.1080/02188791.2019.1696746>
- Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 50(4), 370-96. <https://doi.org/10.1037/h0054346>
- McLennan, B., McIlveen, P. & Perera, H. (2021): A Pedagogical Model of Autonomy, Competence and Relatedness for Pre-Service Teacher Educators. *Journal of Education for Teaching*. <https://doi.org/10.1080/02607476.2021.1876500>
- Ministry of Education (1996). Regulation for Teaching License Permission. *Report of the Ministry of Education* (Hebrew).
- Nagro, S.A., & deBettencourt, L.U. (2017). Reviewing Special Education Teacher Preparation Field Experience Placements, Activities, and Research. Do We Know the Difference Maker? *Teacher Education Quarterly*, 44(3), 7-33. <https://www.jstor.org/stable/90010901>
- O'Brian, M., Stoner, J., Appel, K., & House, J. J. (2007). The First Field Experience: Perspectives of Preservice and Cooperating Teachers. *Teacher Education and Special Education*, 30, 264-275. <https://doi.org/10.1177/088840640703000406>
- Poom-Valickis, K., K. Rumma, D. Francesconi, and K. Joosu. (2017). *Relations between Student Teachers' Basic Needs Fulfillment, Study Motivation, and Ability Beliefs*. Paper presented at the 8th International Conference on Education and Educational Psychology, Portugal, October 11-14. <https://doi.org/10.15405/epsbs.2017.10.74>
- Ran, A. (2017). *The Role of the Pedagogical Instructor in the Country and in the World: Selected Models from Ireland, Holland, Israel, Singapore and Sweden*. L. Yosefsberg Ben-Yehoshua (Ed.). Mofet institute (Hebrew).

- Ryan, R.M. (2003). Differentiating Autonomy from Individualism and Independence: A Self-Determination Theory Perspective on Internalization of Cultural Orientations and Well-Being. *Journal of Personality and Social Psychology*, 84(1), 97-110. <https://doi.org/10.1037/0022-3514.84.1.97>
- Ryan, R. M., & Deci, E. L. (2000). The Darker and Brighter Sides of Human Existence: Basic Psychological Needs as a Unifying Concept. *Psychological Inquiry*, 11(4), 319–338. https://doi.org/10.1207/S15327965PLI1104_03
- Roberts, C. A., Benedict, A. E., & Thomas, R. A. (2014). Cooperating Teachers' Role in Preparing Preservice Special Education Teachers Moving Beyond Sink or Swim. *Intervention in School and Clinic*, 49(3), 174-180. <https://doi.org/10.1177/1053451213496162>
- Sciucheti, M.B., Robertson, P.M., McFarland, L.A., & Garcia, S.B. (2018). Preservice Special Education Teachers' Reflection on their Developing Professional Awareness Via In-Context Learning. *The Teacher Educator*, 53(2), 150-166. <https://doi.org/10.1080/08878730.2017.1419393>
- Sciuchetti, M. B., & Yssel, N. (2019). The Development of Preservice Teachers' Self-Efficacy for Classroom and Behavior Management across Multiple Field Experiences. *Australian Journal of Teacher Education*, 44(6), 19-34. <http://dx.doi.org/10.14221/ajte.2018v44n6.2>
- Shkedi, A. (2005). *Multiple Case Narrative: A qualitative Approach to Studying Multiple Populations*. John Benjamin Publishing Company. <https://doi.org/10.1075/sin.7>
- Smith, K. & Lev-Ari, L. (2005). The Place of the Practicum in Pre-Service Teacher Education: The Voice of the Students. *Asia-Pacific Journal of Teacher Education*, 33(3), 289-302. <https://doi.org/10.1080/13598660500286333>
- Stempien, L. & Loeb, R. (2002). Differences in Job Satisfaction between General Education and Special Education Teachers: Implications for Retention. *Remedial and Special Education*, 23, 258-267. <https://doi.org/10.1177/07419325020230050101>
- Young, K. (2018). CO CREATE: Teachers' voices to inform special education teacher education. *Issues in Educational research*, 28(1), 220- 236.
- Youngs, P., Jones, N., & Low, M. (2011). How Beginning Special and General Education Elementary Teachers Negotiate Role Expectations and Access Professional Resources. *Teachers College Record*, 113, 1506–1540. <https://doi.org/10.1177/0161468111111300704>
- Yüksel, H. (2014). Becoming a Teacher: Tracing Changes in Pre-Service English as Foreign Language Teachers' Sense of Efficacy. *South African Journal of Education*, 34(3), 1-8. [https://DOI: 10.15700/201409161104](https://doi.org/10.15700/201409161104)
- Viseblay, E. (2020). *The Reform in Special Education – Implementation of the 11 Correction to Special Education Law*. Knesset, Research and Information Center (Hebrew).

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