Economic and social barriers: Identifying and prioritising professional needs of Iranian novice teachers

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This research aims to identify and prioritise the professional needs of novice teachers using the Delphi technique. This qualitative, emergent design employs semi-structured interviews to collect data and the Atride-Sterling style for thematic analysis. Twelve novice teachers with different educational qualifications were purposively selected, and the data were analysed using MAXQDA, which revealed five inclusive themes, 23 organising themes and 79 basic themes. The results indicated that the professional needs of novice teachers, based on their priority, include economic, social, administrative, emotional, and educational needs, which are interconnected. The results also indicate that the needs of novice teachers are in line with Maslow's hierarchy of needs. By capturing holistic data on needs rather than just professional needs, our study's approach has uncovered something obvious but missing from the extant literature on the needs of novice teachers: only when their basic needs are met can they focus on their role as teachers. In the West, where salaries may be lower than similar professions, teachers still make enough to meet their basic needs. In Iran, this is not always the case. This study suggests new priorities in novice teacher support that are essential before professional educational support can be effective.

Introduction

Transitioning from the teacher training stage to the profession is considered a challenging career stage (Kelchtermans, 2017; Marz et al., 2016; OECD, 2019a). Novice teachers have described this transition as the experience of being "lost at sea" (Flores & Day, 2006). In the research literature, it has been defined as "reality shock" (Veenman, 1984) and "practice shock" (Dicke et al., 2015). This has been further clarified and simplified by Able et al. (2018), who described it as the expectations not meeting the entire realities of the working environment. Inadequate preparation for the profession has been linked to higher-than-normal attrition rates for beginning teachers (Virtanen & Laine, 2021), teacher burnout (Doherty, 2020; Sun & Zhang, 2023), and low job satisfaction (Reeves et al., 2022).

There is near unanimous agreement that novice teachers require extra support in the early years of their careers (Keese et al., 2023) and that the problems they face are universal (Kearney, 2019). These problems include but are not limited to lack of adequate knowledge, low self-efficacy, high stress, and professional uncertainty (Virtanen & Laine, 2021. The *Teaching and Learning International Survey* (TALIS), which compares the work of novice and experienced teachers from 23 countries, shows that although novice teachers

create the right conditions for teaching and learning in their classrooms, they spend more time on classroom discipline than experienced teachers and report a lower level of self-efficacy than their experienced colleagues (Jensen et al., 2012). These findings, both old and new, indicate that novice teachers' challenges need to be mitigated.

In Iran, Irannezhad et al. (2020) put the needs of new schoolteachers into three categories: individual challenges, professional challenges and organisational challenges. There is a significant overlap compared to Western educational systems (OECD, 2019a). Various theoretical frameworks have been proposed in the research to explain the challenges faced by novice teachers. The first is the deficit assumption, which presupposes that the theoretical foundation of teacher training programs needs to be revised compared to more practical programs that include a lot of experiential teaching (Sela & Harrell, 2019). In this model, student teachers have limited access to authentic teaching environments and must develop the skill set to teach effectively.

Another framework examines the problem as an organisational socialisation issue (Kearney, 2015). In these cases, the need for more professional support, usually induction and mentoring (Frederiksen, 2020), causes many problems that novice teachers face. In these cases, the school is either unable or unwilling to provide the support necessary for novice teachers to thrive (Jones et al., 2013). In addition to the deficit assumption, due to the diversity of student needs and the ever-expanding programs, the teaching profession has become increasingly complex and complicated due, in part, to the new waves of accountability and performance standards (European Commission, 2010; Gore et al., 2023).

Globally, novice teachers face many of the same problems despite local differences. While much English language literature dominates academia and is focused on the Western experience, other countries must add to the rich literature in this area. Iran faces many of the same issues that other Western countries face (OECD, 2019a); however, there needs to be more critical evaluation within the Iranian educational system. The present study seeks to identify the needs of the newly trained teachers graduating from Farhangian University, one of Iran's teacher training centres, at the beginning of their service. Unlike other studies in Iran, this study aims to identify, to the greatest possible extent using the Delphi technique, all the needs that different groups of novice teachers face at the beginning of their service.

Method

Design of study

The Delphi technique is used to determine and prioritise the professional needs of novice teachers at the beginning of their service. In this study, a 'needs assessment' approach is undertaken, identifying needs and ranking them in order of priority and then selecting needs that should be reduced or eliminated (Barbazet, 2005; Fathi Vajargah, 2013). In other words, the demands by novice teachers in various fields constitute their needs. A qualitative design employing semi-structured interviews was used in an emergent design to

collect data and then analyse thematically (Brown & Clark, 2006). In addition, the "theme network" developed by Atride-Sterling (2001) was employed for analysing and classifying the identified themes into a systematic process of basic themes, organising themes, and inclusive themes, which formed the foundation for discussing the results.

Participants

Purposive sampling was employed to recruit 12 novice teachers teaching in urban and rural schools in Iran with 1 to 3 years of teaching experience in different fields and sector of study. Data were collected during November 2022 to February 2023.

Table 1: Details of participants (novice teachers, N=12)

Demographic		No.
Teaching place	Village	8
	City	4
Gender	Male	5
	Female	7
Degree	BA	10
	MA	2
Educational sector	Primary school	6
	Lower secondary school	3
	Higher secondary school	3

Instrument

Semi-structured interviews in Farsi language were conducted with the participants, and the transcribed interviews were analysed using MAXQDA software. Due to the geographical dispersion of the participants and Covid-19, the interviews (lasting about 60 to 80 minutes in a single session) were conducted via *WhatsApp* software.

Procedures for data collection and analysis

According to the Delphi technique, the novice teachers were first interviewed, and then the interviews were uploaded and analysed for emergent themes in MAXQDA. After each interview, each audio file was immediately transcribed and uploaded into MAXQDA for analysis. Subsequent interviews were conducted after analysing the previous interview, and the coding process reached saturation after 12 interviews.

In the next stage, a list of identified needs (organising themes) was sent to the novice teachers to establish agreement and prioritise them. The priorities assigned by the novice teachers were re-analysed, and the table of priorities (Appendix 2) was sent to them again to obtain a final agreement.

To ensure the validity of the results, in addition to the basic, organised and inclusive themes being identified from existing theoretical frameworks and passed through member

checking, the extracted themes were presented to and approved by the researchers' colleagues. The feedback from this group of experts led to further refining the themes. By comparing these two stages and based on the degree of agreement between the codes identified in the two stages of coding, the reliability coefficient was calculated by using the Holsti (1969) method:

$$Pao = 2M/(n_1+n_2) \rightarrow 2 \times 361 / (437+411) = 0.85$$

Pao means the percentage of observed agreement (reliability coefficient), M is the number of agreements in two stages of coding, n_1 is the number of units coded in the first stage, and n_2 is the number of units coded in the second stage. The estimation result (i.e., 0.85) shows the high reliability of the findings.

Findings

Thematic analysis

In the first step, simultaneously converting audio files to text, the researchers completed an iterative review of the interview transcripts (Rowlands, 2021) and developed the initial thematic ideas for codes. Then, the interviews were uploaded to MAXQDA, and initial codes were created. In the first stage of coding, 437 codes (n_1) were identified, and in the second stage, under the supervision of experts, 411 codes (n_2) were identified. In the third step, related codes were merged to form the basic themes. Therefore, in total, 79 basic themes were formed (see Table 2 and Appendix 1). By examining and re-refining them, we made the themes more specific, distinct and non-repetitive, as well as inclusive enough to incorporate a set of ideas raised in the texts. Table 2 illustrates classifying needs of novice teachers at the beginning of service into five inclusive themes.

Table 2: Frequency of basic and organising themes

Inclusive themes	No. of organising themes	No. of basic themes
Social needs	4	11
Emotional needs	3	12
Administrative needs	5	18
Economic needs	2	9
Educational needs	9	29

In the fourth step, based on Atride-Sterling's thematic analysis technique, the themes were grouped (See Appendix 1), and a theme network was created (Figure 1), offering clear distinctions between different themes. Finally, 23 organising themes based on the five inclusive themes were identified. After creating the network of themes, it was necessary to return to the original text and interpret them with the help of networks (Attride-Sterling, 2001). In the following sections, each of the needs is examined.
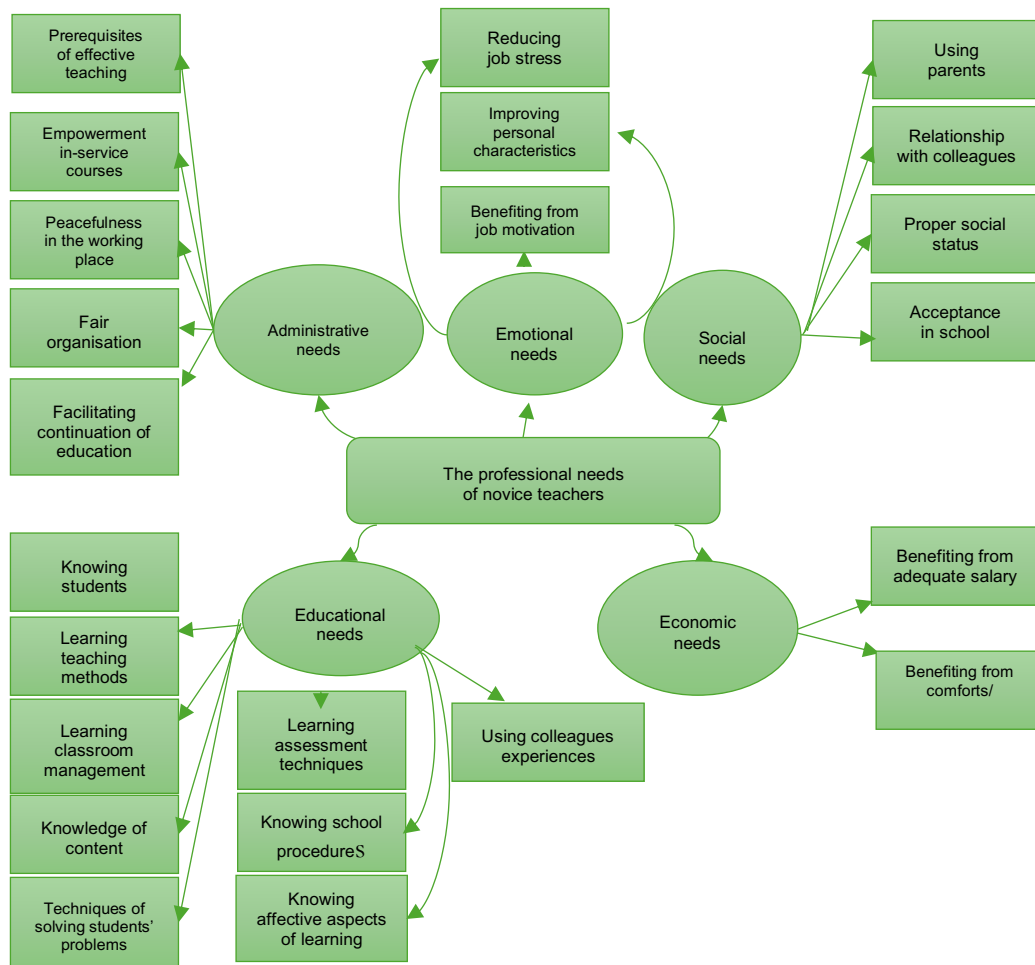
Figure 1: Network of themes for novice teachers' responses

Social needs

According to Figure 1, social needs include the following organising themes: gaining acceptance in school, benefiting from a suitable social position in society, the possibility of active and constructive communication with colleagues and benefiting from the potential of students' parents. One of the concerns and needs of new teachers is to benefit from dignity and appropriate social relations. This is necessary for the school environment, the organisation, and, more generally, among society. Similarly, Marz and Kelchermans (2020) argued that novice teachers must communicate with colleagues in the school and the people in their formal and informal networks. These relationships become valuable resources that facilitate the socialisation process of novice teachers into the teaching profession.

The data shows that the participants acknowledged that gaining acceptance, cooperation, and relationships with school colleagues can meet the most urgent needs of novice teachers. Mansfield and Gu (2019) also reported that the support provided in school by colleagues has a positive and significant impact on meeting the needs of novice teachers. Accepting the new teacher creates legitimacy for her/him and conveys a message that they are valuable and practical. For example, one of the novice teachers told a story of their effectiveness:

> A beautiful thing that happened at the beginning of the school year was that I had told the children about the power of saying no. When someone offered psychotropic pills to the students on the way back home, the student, who was an average student, refused to take the pills and said that my teacher had emphasised that we should have the strength to say no. This incident had a great impact on me and I realised that my students accept me and that I am an effective agent in the classroom. (n2)

In addition to the school environment, new teachers need to acquire a suitable social position in society outside the school and educational system. They should be seen as good people with specialised training and valuable skills in this field. Novice teachers require validation of their position as one of value to society writ large. One of the novice teachers articulated it this way: "An issue that has settled in our country is that no teacher receives a salary commensurate with his position, and this is an accepted issue among employees" (n5). While the pay gap between teachers and other professionals in similar fields is not confined to Iran, it is exacerbated in Iran due to gender disparities, economic constraints, entitlement dynamics, and legal complexities (Tayebi, 2023).

Once relationships are established, communication within those relationships is crucial. Communicating actively and constructively with experienced teachers allows novice teachers to benefit from their experience and expertise. These colleagues become a valuable source of support for novice teachers and play an irreplaceable role in the formation of their teaching identity:

> If the principal of the school establishes a good relationship with me, I will be encouraged to participate in cultural and artistic activities, ceremonies and even educational activities in my classroom with more enthusiasm (n12).

These relationships extend beyond the classroom and include relationships with parents and the community, which helps them fulfil their duties by supporting children. One of the novice teachers put it this way:

> Novice teachers should be introduced as experts who have completed a four-year specialised course and have been trained for the mission of teaching. Because a new teacher at the beginning of her activity, in addition to being stressed that she can perform well or not, she may not be accepted by the parents due to her lack of experience, and they may not have the necessary cooperation with him. (n9)

Emotional needs

According to Figure 1, the organising theme of emotional needs includes job motivation, the possibility of improving personality traits and helping to reduce job stress and anxiety. Novice teachers need the organisation to recognise their strengths and try to improve their weaknesses. Kane and Francis (2013) emphasised that novice teachers' evaluations and perceptions of the educational system's contact and attitudes towards them impact their professional development. Looking favourably at novice teachers' abilities and providing appropriate incentives and feedback can reduce occupational stress and anxiety and create loyalty to the school community. Myers et al. (2022) stated that novice teachers' professional self-perceptions shape their professional behaviours. A new teacher whose personality embodies a teacher's can experience more motivation to succeed. Schools should value their participation in school events to assist novice teachers' motivation and welcome their ideas. One of the new teachers reported:

> The second issue I intend to correct is paying attention to the novice teachers who have graduated from Farhangian University with a very high GPA or get very good grades in the masters entrance examination, or they are accepted in prestigious universities… Special attention should be paid to them, and their talent should be used (n_4).

The last emotional needs are personality traits related to teaching. The two personality traits that novice teachers emphasised were self-confidence and verbal ability. To perform well in front of a group of students and establish correct and effective communication requires proficiency in communication and reasonably high self-confidence: "The way a teacher speaks is very important. Some of my friends do not speak properly and cannot communicate well with others. How does such a teacher want to teach her students to speak correctly?" (n_8)?

Administrative needs

In Figure 1, the organising themes of administrative needs include fair organisation of human resources, enjoyment of peace in the work environment, the possibility of participating in empowerment courses, creating the prerequisites for effective teaching, and facilitating their continuation of education. Upon entering the teaching profession, novice teachers are employed in a government agency and have the same duties and rights as other government employees. Administrative needs refer to those rights of new teachers embodied in the government system. Establishing justice among employees is one of the legitimate demands of novice teachers. They expect not only to be free from discrimination but also to be given attentiveness because they are new and unfamiliar with the environment.

The educational system in Iran is overcrowded with informal educational plans and programs. Novice teachers need to know these informal curricula to teach more effectively. For example, in the United States, the *Great Beginnings* professional support program, novice teachers participate in 3-day orientation courses at the beginning of their service and become familiar with the region's curriculum, culture and educational plans.

This allows them to interact with and learn from experienced teachers (Nielsen et al., 2007). In the *Graduate Teacher Induction Program* (GTIP) in Australia, regional education departments prepare a knowledge-enhancing course for novice teachers to familiarise themselves with the educational standards of the regions (Mansfield & Gu, 2019).

One of the frequent demands on novice teachers in Iran's research is the fair human resources organisation, because of the nature of all teachers working for the Ministry of Education, which covers all areas of the country. Novice teachers must be prepared to teach anywhere in the country and are often sent to the most challenging regions. The data from this study indicate that novice teachers should be allowed to stay in the region where they are from so they are more familiar with the local cultural issues of the region. One of the teachers stated it this way:

> If I talk about commitment to service, I don't think any organisation takes its new recruits away from their families as much as a Ministry of Education. We must consider that a teacher who is in charge of such a sensitive task should not have disturbing intellectual and emotional concerns. The employees of other departments are employed in their own city and in an environment with suitable facilities after being accepted, but they demand a ten-year commitment from novice teachers and force them to be away from their families for years (n_1).

To help facilitate effective teaching, in-service professional development courses should be offered to familiarise novices with the region's administrative rules and specific curricula and provide adequate support. Participants emphasised that without suitable teaching aids such as educational kits, it is challenging to create exciting and meaningful lessons for students. It was also reported that novice teachers, specifically in unfamiliar regions, were working longer hours:

> When a new teacher enters the Ministry of Education, due to the lack of teachers in rural areas, lessons are imposed on her for which she is not prepared. In order not to go to several villages and stay in the same school, she has to accept the teaching of those subjects, even though she does not specialise in them (n_7).

Teaching outside one's expertise is more common among novice teachers (Luft et al., 2020) and can cause learning confusion (Tran, 2023) and adverse effects on both teacher efficacy (Virtanen & Laine, 2021) and student achievement (Luft et al., 2020).

Economic needs

The organising theme of economic needs includes adequate salary and conventional comforts. In Iran, teachers are paid less than comparable professionals (Tayebi, 2023). In the case of novice teachers, this problem is exacerbated by a lower starting wage compared with other, similarly remunerated professions. The economic demands upon novice teachers participating in our study are not focused on salary alone, as this is presumably understood before they start teaching, but are based on expectations they have, specifically when they are sent to regions where their familial support, most dominantly in the form of housing, is no longer available to them. The data suggest that

novice teachers expect proper boarding to be provided when sent far from the family home. In addition, providing insurance and paid overtime are reported as provisions that could reduce a part of the dissatisfaction and concerns of novice teachers:

> And finally, about the salaries and accommodations, in my opinion, someone who teaches in the remote villages of Bashagard, while respecting the people of Jask and Bashagard because they know that there are few facilities there, she is far from her family and place of residence, should have a noticeable salary difference with someone who teaches in his own place of residence (n3).

Internationally, evidence shows that spending is high to support beginning teachers. Kearney (2014) investigated beginning teacher induction programs in eight countries, noting that Japan "... invests over US$12000 per beginning teacher per year". In California, two of the best-known programs (BTSA and BEST) spend roughly the same amount. In addition to salaries and support mechanisms, the participants also mentioned overtime pay and rating systems as their main concerns. While paid overtime is rare among professions, hardship pay for teaching in hard to staff schools or in regional and remote areas, is common in many OECD countries, including Australia (OECD, 2019b). Rating systems for novice teachers are evaluative and not in keeping with the support mechanisms associated with international best practices (Kearney, 2023).

Conventional amenities are the basic facilities other government employees can access, but teachers still need to. While these conventional amenities may seem foreign to many Western teachers, this is an embedded feature of government employment in Iran. In line with the principle of fair treatment and prevention of discrimination, novice teachers expect these facilities to be provided for them so that they can focus their attention on teaching students. They provide a vehicle for commuting, a place to rest at work, and proper insurance. Moreover, accommodation when stationed away from one's home region is neither far-fetched nor a selfish demand. One of the novice teachers reported:

> If new teachers do not teach in the city where they live, which is usually the case, the education department should consider a dormitory, a teacher's house or a place for new teachers to stay because such accommodation is one of the essential needs for novice teachers, especially women (n2).

Educational needs

The last of the organising themes is educational needs, which includes getting to know students and various forms of professional knowledge development for teachers, including teaching methods and the school's procedures. These needs were the most frequent demands raised by participants. There was widespread recognition that despite learning many of these in training, there was a need for more contextualised learning in the new school environment. Since professional identity is tied to many of these issues, neglecting these learning needs causes novice teachers to lose efficacy. Kane and Francis (2013), in examining the problems and challenges of novice teachers, pointed to issues such as motivating students to learn, effective classroom management, planning for

responding to the student's needs and using appropriate evaluation strategies as the main issues that required attention.

It is recognised that university training alone is inadequate to prepare novices for the rigours of the classroom, which is why induction and mentoring have become so prominent (OECD, 2019a). Mentoring is often seen as the most critical aspect of a proper induction program and the most widespread means of preparing novice teachers for the classroom (OECD, 2019c). Sela and Harrell (2019) echoed this, pointing out that mentoring is one of the most effective support mechanisms for novice teachers and that effective mentors can help reduce stress and anxiety related to the problems beginning teachers face.

Getting to know students who may be culturally different is essential for all teachers but especially poignant for teachers with less experience. Giving novices time to get to know students allows them to get to know the culture, language, ethnicity, religion, and norms of the students. This can play a significant role in the quality of the teachers' teaching and the effectiveness of their educational activities. One of the new teachers says in this regard:

> A teacher must know and analyse her students not only from a scientific point of view but also from a social, cultural, and even economic point of view. In fact, the cultural level is completely related to the ability to learn, and we cannot assume that it is unimportant (n_{11}).

One of the challenges mentioned by most novice teachers participating in this research is adopting the proper classroom management techniques. This should come as no surprise since classroom management and managing complex behaviour are at the top of every list of problems that beginning teachers have faced since those lists began (Dropkin & Taylor, 1963; Hudson, 2012; Kearney, 2019; Veenman, 1984):

> Another challenge I faced was controlling overcrowding in the classroom. I taught the first year, the sixth grade, in a mixed class. Sometimes I lost control of the class and no matter how hard I tried, they wouldn't get quiet (n_8).

Novice teachers are neophytes to the profession and, as such, should not be expected to be fully trained and ready to take on the same responsibilities as their more experienced colleagues. Instead, it should be recognised that further learning and development need to take place, and some of these things need to be explicitly taught and others learned over time. The presence of experienced colleagues working with and teaching novice teachers plays a vital role in supporting new teachers and helping them develop into competent professionals.

Delphi technique

In the first stage, 12 novice teachers in different fields and sectors were interviewed individually regarding their professional needs in their initial years of service. The interviews were analysed using the theme analysis technique by MAXQDA software, and

23 needs (organising themes) were identified as five categories (inclusive themes). In the second step, the final list of identified needs (basic and organising themes) was sent to novice teachers in a 3-column table explaining each. The participants were asked to prioritise the needs in rank order from 1 to 23 (1 being most important and 23 being least important. After receiving the answers (1 person did not respond) and ensuring their agreement with the declared needs, the mean score for the priorities was obtained using the Delphi technique. In the third stage, the table containing the needs and air priorities was again sent to the new teachers, who were asked whether they agreed or disagreed with each. All participants agreed with the set priorities at this stage, as seen in Appendix 2. Economic needs are rated highest, confirming the significance of financial issues.

Discussion

During their four years of study at Farhangian University, novice teachers acquire the qualifications and initial preparation for the teaching profession. The curriculum combines theoretical and practical courses to develop the necessary professional skills of teachers. There are different definitions of professional competence. One of the most accepted is presented by Huntley (2008), who divided teachers' professional competencies into three areas: professional knowledge, professional skill, and professional commitment. Novice teachers should be able to turn these competencies into professional practice; however, Feiman-Namser (2001) asserted that novice teachers often cannot make this transition smoothly and face difficulties in starting their teaching career. One of the main reasons for this inability is the challenges and unfulfilled needs that novice teachers face when starting work.

The findings of this study indicate that novice teachers need a set of challenges that stand in the way of becoming competent and effective professionals. In this study, the needs of novice teachers were identified and prioritised by interviewing teachers and analysing their responses. There have been many studies concerning early career teacher support that focus mainly on professional needs. In contrast, our study attempted to take a more holistic approach and examine all the concerns and demands raised by novice teachers in various domains that can affect their professional lives, and, to the extent possible, every influential factor should be addressed. Furthermore, this research seeks to create a comprehensive picture of all the professional needs of novice teachers in all fields, so that the results can be used to design a professional support model for novice teachers.

The MAXQDA thematic analysis technique made it possible to systematically summarise and conceptualise the themes and concepts in the interviews. This facilitated the interpretation of results, creating an interconnected structure of themes and illustrating their relationships. This, in turn, helped to elucidate the patterns identified and provide a coherent conclusion.

Our primary findings include five categories of needs raised by novice teachers: social needs, emotional needs, administrative needs, economic needs, and educational needs. Any other needs not represented in this data could likely correspond to one of these

categories, thereby making these categories a comprehensive representation of novice teachers' needs. One should not look at the needs of novice teachers in a one-dimensional way and must consider all challenges equal in weight without favouring some over others.

The classification of these needs and the findings herein support findings in related literature. Notably, Yaqubnejad et al. (2015), examining the needs of novice teachers, found that students' characteristics can be beneficial in creating a supporting atmosphere in the classroom, consistent with prioritised needs 18, 3 and 19 (Appendix 2). Irannezhad et al. (2020) also considered the challenges of novice teachers to be individual, professional, and organisational, which are consistent with the identified needs of novice teachers in this research. Nolan's (2017) findings concerning novice teachers' anxiety about meeting expectations and acceptance are consistent with priorities 13 and 6 Appendix 2). Lastly, Kane and Francis (2013) introduced the challenges of motivating students, effective classroom management, meeting various student needs, implementing effective evaluation procedures, and interacting with parents, which align with needs 22, 11, 10, 14 and 18 in Appendix 2.

Conclusions

In prioritising needs, this study found that while most of the research on early career teachers focuses on professional needs, the priority of the Iranian teachers who participated in this study was economic. Therefore, by examining more than just the professional needs of teachers, we have found that, at least in Iran, teachers need to have their financial and social status accounted for before properly focusing on their professional needs. While their professional needs were similar to those reported in the West, the nature of appointing teachers to socially and culturally unfamiliar regions introduces additional complexity to an already complicated socialisation framework. Specifically, when these teachers are relocated outside their social and familial networks, they are more focused on their economic and social well-being and status than they otherwise might be, thus placing their professional needs farther down the priority list.

According to the theoretical foundations and evidence collected, this prioritisation is justified because while emotional and educational needs found in most Western studies can be facilitated and improved through induction and mentoring, inherent in the Iranian experience is the unknown variable of placement. Addressing economic, social, and administrative needs is mainly beyond these teachers' determination and will; therefore, these teachers must be appropriately responded to and fulfilled by government authorities so that they can focus on providing the best learning and teaching for their students.

The findings support Maslow's hierarchy of needs (1954), where physiological needs, safety and security and love and belonging, precede other needs, such as self-esteem and self-actualisation, which can be seen more in line with professional needs. Therefore, meeting the basic economic needs of novice teachers should be considered at least as important in their educational development. A one-dimensional consideration of the challenges of novice teachers should be avoided, and the nuance of systemic challenges needs to be considered.

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Appendix 1: Extracted themes from the novice teachers' responses

Basic themes	Organising themes	Inclusive themes
Acceptance of novice teachers by other teachers	Gaining acceptance in school	Social needs
Loving and accepting novice teachers by students		
Attention to the human dignity of the novice teacher	Benefiting from a suitable social position in society	
Looking at novice teachers without discrimination		
The value of the teaching job in the eyes of the people		
Improving the social status of novice teachers with adequate salaries		
Helping the novice teacher to communicate with the school principal	The possibility of active and constructive communication with colleagues	
Helping novice teachers to communicate with colleagues		
Helping novice teachers to communicate with parents of students		
Creating a calm atmosphere at home by parents	Using the potential of parents of students	
Taking care of the educational status of children by parents		
Encouraging and giving rewards to the novice teachers for their successes	Benefiting from suitable job motivation	Emotional needs
Benefiting from the novice teachers' competencies		
Cultivating a positive attitude in novice teachers regarding the teaching profession		
Using the ideas of novice teachers		

Basic themes	Organising themes	Inclusive themes
Paying special look at the talents of novice teachers		
Motivating new teachers to perform various activities		
Expressing the strengths of the novice teacher		
Involving novice teachers in school affairs		
Helping to improve the novice teacher's verbal expression ability	Ability to improve personality traits	
Helping to increase the self-confidence of novice teachers		
Having reasonable expectations from the novice teacher	Helping to reduce occupational stress and anxiety	
Reassuring the novice teachers about their ability		
Hiring the teachers from the natives of each region	Fair organisation of human resources	Administrative needs
Familiarising the teachers with the region and place they are teaching in		
Novice teachers' teaching in their own place of residence		
Early determination of the school where the novice teacher will be working		
Allocation of required forces to the school		
Paying attention to religion in distributing teachers		
Not using novice teachers in offices		
Preventing favouritism and unfair actions in the organisation of teachers	Benefiting from peace of mind at work	
Paying special attention to new non-native teachers		
Avoiding unfair/unjustified criticism in observing novice teachers		
Acquainting new teachers with administrative procedures	Ability to participate in empowerment in-service courses	
Acquaint novice teachers with plans and programs of Ministry of Education		
Not imposing additional teaching hours on novice teachers	Creating prerequisites for effective teaching	
Having the necessary teaching aids		
Reducing the volume of textbooks		
Not teaching non-specialised courses		
The possibility of changing majors at a higher level	Facilitating the continuation of education	
Cooperating with teachers to attend the university classroom		

Basic themes	Organising themes	Inclusive themes
Paying overtime to novice teachers for participating in programs	Benefiting from sufficient salary	Economic needs
Increasing the salary of novice teachers working in less-privileged areas		
Allocating sufficient monthly salary and benefits for novice teachers		
Implementation of rankings for novice teachers		
Providing amenities for novice teachers at their place of work	Benefiting from conventional comforts	
Considering boarding/residential places for novice teachers to stay at the place of employment		
Facilitating the marriage of novice teachers		
Providing appropriate insurance to novice teachers		
Providing transportation vehicles for novice teachers		
Training novice teachers to know students from an economic point of view	Knowing the students from different aspects	Educational needs
Training novice teachers to get to know students culturally		
Learning teaching methods	Teaching the teaching methods to novice teachers	
Teaching methods of teaching analysis and reflection to novice teachers		
Learning designing educational tasks		
Learning classroom management techniques	Teaching classroom management techniques to novice teachers	
Teaching new classroom management techniques		
Learning to develop content and materials	Increasing novice teacher's knowledge about educational content and materials	
Acquainting novice teachers with the structure and layout of textbooks		
Introducing novice teachers to teaching methods to weak students	Teaching methods to solve students' problems	
Familiarising novice teachers with blended approaches		
Acquainting novice teachers with teaching methods for students with learning disabilities/ disorders		
Teaching how to deal with addiction in students		
Training novice teachers for how to teach in the absence of facilities		
Learning evaluation methods	Teaching evaluation methods to students	
Training to prepare a question bank		
Teaching how to prepare a portfolio		

Basic themes	Organising themes	Inclusive themes
Acquainting novice teachers with the duties of colleagues in school	Getting to know the duties and procedures of the school	
Training to prepare a teacher's specialised work report		
Introducing new teachers to special school software		
Teaching the correct methods of dealing and interacting with students	Getting to know the emotional aspects of teaching students	
Teaching how to create motivation and interest in learning in students		
New teacher training in relation to students' maturity and growth		
Acquainting novice teachers with the relationships of students in a mixed-gender class		
Visiting/getting familiar the educational system of other countries	Benefiting from the experiences of colleagues	
Provision of colleagues' experience bank		
Introducing practical books to novice teachers		
Joint implementation of research on lessons by the novice teacher and colleagues		
Joint implementation of action research by the novice teacher and colleagues		

Appendix 2: The prioritised needs of novice teachers

Priority	Need	Category
1	Benefiting from adequate salary	Economic needs
2	Benefiting from conventional comforts	Economic needs
3	Benefiting from a suitable social position in the society	Social needs
4	Fair organisation of human resources	Admin. needs
5	Benefiting from suitable job motivation	Emotional needs
6	Benefiting from peacefulness in working place	Admin. needs
7	The possibility of improving personality traits	Emotional needs
8	Creating prerequisites for effective teaching	Admin. needs
9	The possibility of active and constructive communication with colleagues	Social needs
10	Teaching techniques to solve students' problems	Educational needs
11	Teaching classroom management techniques to novice teachers	Educational needs
12	Possibility to participate in in-service empowerment courses	Admin. needs
13	Getting accepted in school	Social needs
14	Teaching the students' evaluation techniques	Educational needs
15	Teaching the teaching methods to novice teachers	Educational needs

16	Increasing novice teachers' knowledge about educational content and materials	Educational needs
17	Facilitating the continuation of education	Admin. needs
18	Benefiting from the experiences of colleagues	Educational needs
19	Benefiting from the potentials of students' parents	Social needs
20	Knowing the students from various aspects	Educational needs
21	Knowing the duties and procedures of the school	Educational needs
22	Helping to reduce occupational stress and anxiety	Emotional needs
23	Knowing the emotional aspects of teaching students	Educational needs

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