

Using a simulation-based process to select applicants: enhancing quality evaluation of a teacher education programme

Teacher
education
programme

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Abstract

Purpose – This study aims to examine the process of using simulation to select candidates from a pool of teacher-education-programme applicants, considering the applicants' perspective. The population of applicants to teacher-education programmes has been the subject of numerous studies; however, only a minor portion of these examined the applicants' perspective regarding the applicant-selection process. Furthermore, the process of using simulation as a tool for applicant selection to a teacher-education has not been studied yet.

Design/methodology/approach – This case study focuses on applicants' experience of the simulation-based selection (SBS) and its potential advantages. A total of 188 applicants completed a reflection questionnaire and participated in interviews; 15 of them also participated in focus groups. The data were analysed using the thematic-cognitive method.

Findings – Data analysis revealed three major themes and nine subthemes, which represent the value of SBS from the applicants' perspective in terms of social-interpersonal, cognitive-professional and emotional-personal skills.

Practical implications – Research findings may enable decision-makers in teacher-education programmes to improve the candidate selection process, which will lead to the absorption of suitable teachers on the one hand and prevent the integration of unsuitable candidates on the other.

Originality/value – This pioneering study contributes to our understanding of the applicant-selection process and offers practical recommendations for using SBS to enhance the quality of the selection process.

Keywords Quality assurance, Teacher selection, Applicants, Simulation-based selection, Teacher education programmes

Paper type Research paper

Background

Selecting among applicants to teacher-education programmes is a necessary quality assurance process, yet it is a complex and challenging one. Although the population of teacher-education applicants has been studied, only a small portion of these studies focused on the applicants' perspective regarding the applicant-selection process. To date, no study has examined the use of simulation in the applicant-selection process. The current study examined the experience of applicants to teacher-education programmes after participating in a simulation-based selection (SBS) process. Given the novelty of using SBS in the field of



education, we decided to examine the efficacy of SBS in a cohort of teacher-education applicants (rather than among preservice teachers). We assumed that this population's feedback regarding the efficacy of the assessment process would be less biased than the feedback from those already enrolled in the teacher-education programme. The SBS method was intended to identify applicants with the potential to become preservice teachers, thus promoting quality evaluation of teacher-education programmes.

Selecting among applicants to teacher-education programmes: academic and non-academic criteria

Selecting among applicants to teacher-education programmes is an important topic; nevertheless, the conventional methods used until recently were not grounded in evidence-based research (Rutledge *et al.*, 2008). Moreover, the predictive validity of the standard selection methods used in higher education is increasingly being questioned (Klassen and Kim, 2019; Patterson *et al.*, 2016). Measuring the cognitive criteria, which until recently was a major condition for accepting applicants to teacher-education programmes, is a relatively simple task, whereas evaluating non-cognitive characteristics such as interpersonal skills, motivational tendencies and personality traits, criteria which are deemed critical for effective teaching (Rimm-Kaufman and Hamre, 2010), is a much more complex task. A recent review study showed either non-significant or negative associations between cognitive attributes and effectiveness (Bardach and Klassen, 2020). Non-cognitive criteria were found to be significantly related to teacher effectiveness (Kim *et al.*, 2019), underscoring the importance of including them in teacher-selection processes. The call to improve the process of selecting among teacher-education applicants by focusing on non-cognitive skills is heard in all parts of the world (e.g. OECD, 2005). Indeed, such claims were being made in the earliest stages of research in this field (Barr, 1952).

The requirements for being accepted to the teaching profession are global and local (Katz and Frish, 2016). One of the studies in this field (Heinz, 2013) examined the rationale behind the various criteria used to select among teacher-education programme applicants. It included a review of the entry requirements and selection criteria used by teacher-education programmes throughout the world, demonstrating that they had a common universal basis. Thus, for example, in Europe, the USA, Canada, Singapore and Hong Kong, the academic criteria were not the only factor taken into account; among the additional criteria were considerations such as personality traits, the applicants' value-based worldview and their motivations for pursuing a teaching career (e.g. Heinz, 2008; Moran, 2008). In the UK and recently also in Oman (Al Hashmi and Klassen, 2019), applicants to teacher-education programmes are reviewed using the situational judgement test (SJT), which is also used in other professional fields (Patterson *et al.*, 2012). SJT is a measurement tool in which applicants read a brief, context-rich and common scenario, depicting a challenging social situation. The reading is followed by the question "what should you do?" and a series of response options. These responses are designed to assess an applicant's procedural knowledge and situational judgment (Klassen *et al.*, 2020). SJT is directly relevant to selecting candidates for teacher-education programmes, as it could improve the reliability, validity and fairness of the selection process (Klassen *et al.*, 2014; Klassen *et al.*, 2020). Yet, "[t]here are still notable gaps in our knowledge and areas in need of more research with regard to SJTs for teacher selection" (Bardach *et al.*, 2020, p. 1).

Indeed, teacher-education programmes are seeking to expand the selection criteria to include non-academic indicators, such as attitudes, cultural responsiveness and commitment to the teaching profession (Heinz, 2013). In reality, teaching requires a blend of intellectual and personality traits; currently, however, there are no models based on these features (Katz

and Frish, 2016). The potential benefits of combining academic and non-academic acceptance criteria in teacher-education programmes concern not only the programme applicants but also the field of education as a whole. Conducting a qualitative selection among applicants will result in stronger teacher candidates and, consequently, will reduce the dropout rates at a later stage (Heinz, 2013). Furthermore, introducing a better selection process that can identify the strongest candidates will improve the quality of teachers overall and the image associated with this profession (Katz and Frish, 2016). Finally, the optimal selection of teacher candidates is critical to the educational, social and economic welfare of the nation (Hanushek and Rivkin, 2012).

Simulation-based selection: from health care to education

As there is still no research on SBS in the field of teacher education, the current review addresses research on the use of SBS in the fields of health care and medicine. Candidates' selection for health-care professions is typically a competitive and multistage process, which includes the assessment of cognitive abilities and personal characteristics (Salvatori, 2001). In contrast to the traditional selection method that was used in the field of medicine, which relied on interviews and academic performance to assess applicants' skills, nowadays medical schools are using the simulation tool to examine whether applicants meet the acceptance criteria. SBS was developed as a method for selecting applicants who meet the demands of the medical profession. The method's underlying principle is the notion of behavioural consistency; to this end, the simulation tool (i.e. the applicant's performance in a simulation) is considered a reliable predictor of the applicant's future performance in the field. The simulation tool is viewed as providing a "realistic preview," which helps not only the health-care programme directors to identify suitable candidates but also the applicants to determine their own suitability for the programme (Gardner *et al.*, 2016). Whereas SJs are based on applicants' *responses*, the simulations are based on a real-time *experience* of a relevant scenario. In the SBS method, the applicants' involvement is greater and more spontaneous. The majority of issues examined through simulations are related to interpersonal skills and professionalism. Thus, for example, the selection of candidates for a specialisation in surgery is focused on communication skills, social skills and teamwork, along with the ability to cope professionally with a medical problem (Gardner *et al.*, 2016). Hence, the assumption underlying the SBS method is that technical skills can be practised and improved, whereas other skills, such as interpersonal communication, teamwork and decision-making are more difficult to acquire. Using the SBS to select candidates for medical programmes is likely to render medical professionals who are well-versed in communication skills and hence will be able to empathise with their future patients (Kopel *et al.*, 2019).

Based on this, it appears that interpersonal and social skills are the aspects that need to be identified in advance and should guide the selection process (Gardner *et al.*, 2016). From the point of view of applicants to medical schools, SBS was considered a relevant and fair system, which allowed them to demonstrate their abilities (Cocciantone *et al.*, 2016) and draw insights regarding the professional field or specialisation in which they will have to operate if they are selected (Gardner *et al.*, 2016).

The SBS experience is not the sole factor used to select candidates. A study that conducted a systematic review of the use of SBS in the field of medicine found that the SBS tool is most effective when more than one simulation scenario is used and when SBS is used in combination with other selection and assessment tools (Ryall *et al.*, 2016).

In spite of the growing interest in using simulations in teacher-education, only a few studies have examined the implementation of this tool (e.g. Levin and Flavin, 2020) and even fewer – if any – in the context of applicant selection. Before the SBS method can be widely

used in teacher-education contexts, it must be carefully developed and researched. The aim of the current study is to address this lacuna in the professional research. The findings are intended to improve the selection methods and establish a foundation for future research.

Study goals

The current study examined the applicants' perspective regarding the use of simulation in the process of selecting candidates for teacher-education programmes. Accordingly, the following research questions were formulated:

- RQ1. How is the SBS experience perceived by the applicants?
- RQ2. According to the applicants, how does the simulation component contribute to or affect the selection process?

Materials and methods

Research context

The study was conducted at the simulation centre of an academic teacher-education college, which prepares teachers to work in the national education system. The candidates that attend this college represent a cross section of the local and diverse multicultural society; the principle of inclusivity guides the operation of the college. The simulation centre was established in 2017, in collaboration with the ERASMUS–DARE programme, and it is funded by the Ministry of Education as part of a national programme for integrating simulation-based learning (SBL) in teacher-education (<https://simulation.macam.ac.il/>).

The applicant-selection process was implemented on 26 separate days between December 2018 and October 2019. On each occasion, the selection was conducted as a multisystem procedure involving three consecutive phases: participation in a simulation with a professional actor; group debriefings consisting of observation and analysis of the simulation test, which is similar to the traditional SJT, but uses a video-based rather than a text-based format (Bardach *et al.*, 2020); and personal interviews. A total of 27 faculty members participated in the selection process (approximately four on each selection day), as well as three SBS instructors who had been pretrained in SBS use. In addition, a simulation technician was present, as the activity demanded the use of high-level technology.

Research population

There were 356 applicants, and every one of them participated in a video-recorded simulated scenario, in which the other participant was a professional actor. The recruitment criterion was participants' informed consent. Thus, of the 356 applicants, 188 participated in the current study; 109 of the study participants (58%) were accepted to the teacher-education programme at the college (i.e. a rejection rate of 42%). The sample's segmented characteristics are representative of the distribution of the student population at the teacher-education college. The research population demographics are presented in [Table 1](#).

Design of the study

To provide insight into candidates' perception of the SBS, a qualitative methodology was used, using a case study approach (Stake, 1995) consisting of 26 SBS days. Each day, different applicants acted out the same conflictual scenario relevant to the field of education. The scenario simulates a conversation between a teacher (participant) and a student (actor) who interrupts the teacher during the lesson. When the teacher initiates a conversation with

the student to find out the source of the behaviour, the student does not cooperate. The more the participant uses communication skills that promote conversation, the more the student opens up, becomes responsive and gradually begins to cooperate. Thus, the identical framework and the use of the same scenario permitted a case study design to be used, enabling us to analyse applicants' SBS experience from a broad perspective (Creswell, 2007).

Data collection

The research and recruiting took place at the simulation centre. Research assistants recruited the participants, gave a brief explanation of the study and collected the informed consent forms. Then participants received a link to an online reflection questionnaire. Two additional data collection tools are described below.

Reflections. At the end of each day, applicants were asked to freely elaborate about their experiences during the simulation. They were encouraged to describe their perceptions, challenges and whatever issues they found relevant. Overall, 188 written reflections were collected; of these, 16 reflections were either uninformative or were left empty, so that a total of 172 reflections were analysed.

Interviews. The interviews (188) were semi-structured; the applicants were asked to briefly reflect on their experiences during the simulation. Each interview lasted about 20 min. The interviewer had not been present at the simulation or debriefing sessions and was blind to the research purpose.

Focus group. The focus group was held after the selection process had been completed. It was attended by 15 first-year students who had been accepted to the teacher-education programme at the college. During the focus group, the participants were specifically asked to discuss their perspectives regarding the possible benefits that applicants may derive from the SBS experience. The focus group session lasted 1.5 h and was audio-taped and then transcribed. The research process is presented in Figure 1.

Data analysis

The data were analysed using the thematic-cognitive method based on open-content analysis (Shkedi, 2010). Content analysis involves several analytic phases, intended to draw meaningful distinctions and generalisations from the text (Weber, 1985). Finally, the categories discerned through content analysis are identified after a preliminary examination of the research literature. In the reflections, the interviews and the focus group, the participants were asked to freely describe how they coped with the SBS. Based on their descriptions, various kinds of perceptions were identified, as presented below. The first stage of the inductive analysis consisted of reading the content of the reflections to find statements relevant to the research questions. At this stage, each of the researchers worked

Gender M/F	Average age	(SD)	Language	(%)	Programme	(%)	Subject matter	(%)
15%/85	23	(3.6)	Hebrew	81	K-12 special education	35	Special education	44
			Arabic	15	Early childhood education	25	Early childhood	19
			Russian	2	Elementary school	15	Math	10
			Amharic	1	Special education for kindergarten	13	English language	9.5
			French	1	Middle and high school	12	Hebrew language and grammar	9
							Literature	5
				Science	2			
						History	1.5	

Table 1.
Demographic details
of the research
population

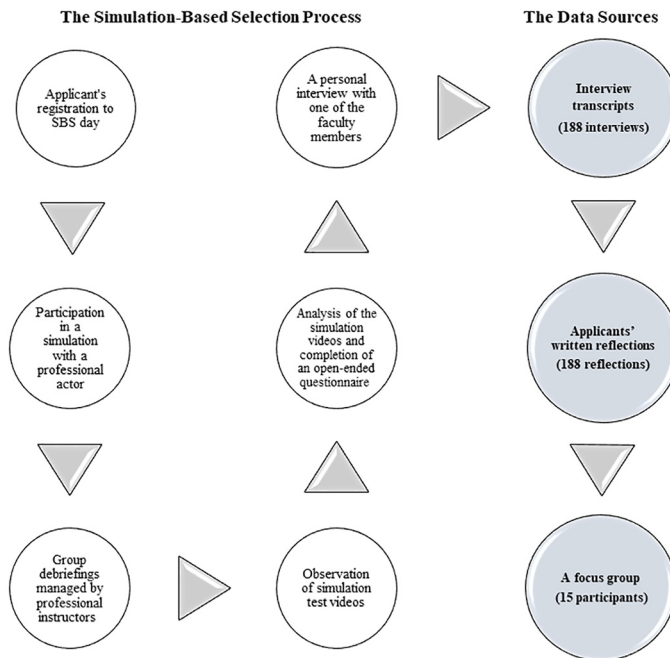


Figure 1.
Graphic depiction of
the three themes
revealed through
content analysis of all
transcript data

separately, reviewing the data sequentially, to provide a broad and encompassing orientation, while keeping in mind the context in which the data were embedded. The second stage of the analysis consisted of rereading the interview scripts and the focus group script jointly several times, to identify and focus on recurring themes (Shkedi, 2010). All of the transcript data were read in sequence to obtain a broad and general sense of the connections between the various concepts and motifs embedded in the data. During this stage, we used the strategy of continuous comparison (Guba and Lincoln, 1981). By the conclusion of this second stage, several themes had been identified, and significant representative statements excerpted from the data were grouped according to these themes. Similar or related themes were grouped under a single category. This microanalysis was used to ensure that no important ideas, themes or constructs were overlooked.

Procedure

The ethics committee of the academic college where the study took place confirmed that the study protocol met the standards for the protection of human subjects. The participants gave their informed consent. The request to write the reflections was sent to the candidates via a Google form, enabling them to refuse without experiencing inconvenience and ensuring their anonymity. Before conducting the focus group, the participants consented to have the session audio-recorded and were explicitly told that they were free to choose what they wanted to share and could withdraw at will, without risking any adverse consequences.

Findings

The content analysis of the data retrieved from the three research tools, namely, applicants' written reflections, transcripts of the interviews and the transcript of the focus group

discussion, revealed three major themes that describe the SBS function as it is perceived by the applicants. These themes were as follows: (1) The social–interpersonal theme: tools for interacting with others; (2) the cognitive–professional theme: formulating a pre-professional perception; (3) the emotional–personal theme: looking inward. Figure 2 provides a graphic depiction of these three themes.

(1) The social–interpersonal theme: tools for interacting with others

The aspect of participants’ social–interpersonal perception of SBS was related to the practical components of the simulation. We found that the simulation enabled participants to experience a scenario that required them to use various communication skills while allowing room for the *other* to express himself or herself and be heard. In this case, the *other* could be a student, the parent of a student or one’s peer applicants. As the simulation is conducted in a group format, the participants are exposed to a variety of opinions and approaches regarding interpersonal interactions. This theme included three subthemes, which are presented here in the order of their prevalence among the findings.

- Communications skills

Among the data retrieved, 107 phrases referred to the learning and practice of interpersonal communication skills. These included listening, demonstrating empathy, expressing assertiveness and building trust. According to the findings, participants either acquired or felt that they further developed these skills in the course of the selection event and as a direct result of participating in the simulation. Thus, for example, one participant said, “I learned that you need to know how to listen to others and you need to look directly at them. Gaining the learners’ cooperation in this manner can significantly influence their progress.” Another participant stated, “The most important thing is not to attack immediately with criticism; rather, first tell the learners where their strengths lie and only afterwards refer to weaker aspects.” A similar conclusion was expressed by another participant: “I learned not to approach with aggressiveness or complaints, but rather to explain the shared goal, which is

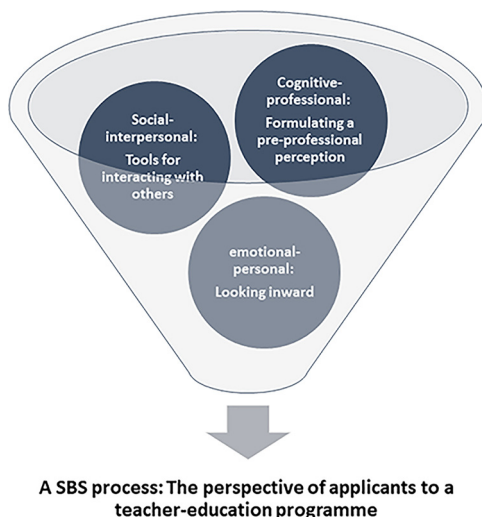


Figure 2.
Visual summary of
the findings of the
study, including the
three themes and the
nine subthemes

QAE

logical.” Yet another participant noted the need to carefully balance the use of communication skills:

I understood that I needed to find a balance between setting boundaries and allowing the learner to approach me and share concerns with me. I hadn't thought about the fact that the pupil might experience difficulties at school due to difficulties in the home environment. That's why it's really important to maintain open contact and always try to understand, instead of being judgemental.

Thus, it appears that the findings in this subtheme all relate to the use of communication skills intended to advance the conversation with the pupil, as the following quote further demonstrates:

My conclusion from the simulation workshop was that basic and personal trust are the foundations of dialogue, which create a common empathetic approach to the other, whoever it may be, whether a student or a parent. This is a good way to open the conversation. Furthermore, it is important to repeat the words of the interlocutor or to establish active listening and demonstrate a serious attitude. Finally, my understanding was that the way in which the conversation ends is also very important, specifically, by emphasising common goals and objectives for the next stage. Thus, it is possible to monitor the change in the relationship that is established between the student and the teacher.

- Various coping approaches

This subtheme was found in 26 phrases expressed by the participants. Specifically, they recognised the variability that characterises both situations and people. The participants identified the simulation as a tool that helped reveal this variability. This is how they described it:

I learned a lot! I learned about the various ways I look at different situations. In this profession, there are so many situations and events, and each one must be dealt with in a distinct manner.

The variability among people came to light in both the simulation scenario and in the discussion among the group peers during the debriefing stage. As one of the applicants said:

I learned that there are various ways to cope with different situations and I understood that there is no one right or wrong way, but rather that every person looks at things differently. In other words, many times different people react in a distinct manner and one must know how to cope with this. Also, in the simulation in which I participated, I learned that there are always some students that are not comfortable in the classroom and it is up to the teacher to contain the class as a whole and to support each student individually.

Another participant referred to the expansion of his personal perspective as a result of having observed his peers during the simulations:

I enjoyed the fact that I could see the way other people coped with the situation and it gave me pause to consider ideas that I hadn't thought of before.

- Seeing the other

The ability to imagine oneself in another's place as a result of participating in the simulation was reported in 21 phrases, which led them to empathise with the other and understand his or her emotions.

Upon entering into the simulation scenario, I found that my perspective shifted (from that of a student to that of a teacher) and thus I was able to identify with the student's despair and inability to succeed, which caused her to be interested in any number of things other than the lesson at

hand. This experience revealed to me how important it is to understand where the other person is coming from, his or her perspective and, in general, to have more empathy for and show more understanding towards the various people we meet throughout our lives.

One of the participants noted that the ability to see the other, which occurs in the course of the simulation, helps foster patience and reciprocity in the relationships between self and other: “Even a difficult issue can be discussed in a pleasant manner while seeing the good in the other. There’s always room to learn from the other.” It is interesting to note that one of the participants referred to the way in which the academic institution saw her as a programme candidate: “I felt that I was being tested, not only in terms of my personal qualifications and maturity but also as a human being.”

(2) The cognitive–professional theme: formulating a preprofessional perception

This aspect of the cognitive–professional theme refers to thoughts related to the participants’ familiarity with the profession of education, as these emerged in the course of the simulation experience. Given that the simulation represents real situations from the field, participants’ reactions can be said to reflect their professional expectations, views and concerns. Three subthemes emerged in this context, and the sequence in which they are presented is from the most to the least prevalent.

- Reflecting on the simulated challenge

In all, 21 phrases referred to participants’ perceptions after having experienced a scene from the professional life of a teacher and the thoughts that emerged after coping with this simulated challenge.

The simulation made me dive headfirst into a possible scenario that teachers encounter, and allowed me to solve the problem on my own. This simulation scene was challenging and allowed me to experience a situation that I hope to be able to manage in the future. The first thought that came to mind was coping, the fact that in this profession we will be forced to cope with complex situations. However, as these types of incidents can occur at any given moment, the more we learn about them, the better we will be able to cope.

In this context, participants noted:

The simulation inserts you into the real life of a teacher, which is no easy feat; yet it is worthwhile, as it prepares us to handle any type of situation.

- Insights about the teaching profession

This subtheme was found in 19 of the participants’ phrases. Some of them related to the importance of and the responsibilities inherent in the teacher’s role. This is reflected in the following quote:

This made me think about the amount of responsibility I will have as a member of this profession. I think that the teacher’s role is very dominant and important, as it is the teacher who helps shape the child and provides the foundation for his or her development. A teacher has to know how to educate as well as teach. Finally, being a teacher is a significant undertaking and it also informs the child’s attitudes towards the teaching profession and life as a whole.

Other participants noted that the combination of difficulty and the sense of satisfaction that characterises this profession: “My conclusion about the educational endeavour is that it is no simple matter and quite challenging, but also amazing in every minute aspect.” In this context, participants also emphasised the developmental aspect of the teaching profession,

as the following example demonstrates: “Mastering the educational profession is not a watershed event, but rather a process that develops over time.”

- An expanded perception of the profession’s boundaries

A change in their perception of the teaching profession as an outcome of the simulation experience was mentioned in 15 of the participants’ phrases. In general, these participants noted that the “[s]imulation gave [them] a peek into the world of teaching and education” and that the workshop gave them a “[b]roader perspective regarding this field of study[. . .] a realisation that education encompasses many issues” and that “[t]he world of education is immense, broad, and very interesting.” More specifically, participants emphasised the fact that the simulation experience exposed them to aspects of the profession of which they had been unaware beforehand, as the following example denotes.

Before I came to this workshop, I had disregarded many things. I hadn’t realised that dealing with parents is part of the teacher’s responsibility (and is no less difficult than coping with the students), that a student’s difficulty at school might be related to problems at home. This made me think that dealing with the parents can be stressful, but it would be helpful if they let us work on this in the course of the study programme.

(3) The emotional–personal theme: looking inward

The focus of this theme is on the emotional–personal aspect, particularly, the way in which coping with a professionally stressful situation in the simulation led the participants to cast their gaze inward. Three related subthemes emerged, which are presented here in their order of prevalence.

- Directing their reflections inward

This subtheme was mentioned in 29 of the participants’ phrases and was presented as a direct consequence of participating in the simulation. Upon reflecting inward, participants examined their characteristics and behaviour patterns. First and foremost, the participants noted the need to engage in self-aware reflection.

The simulation is a wonderful tool. It helped me learn more about myself because it reflects reality. The simulation provides an overview from which to consider situations that one encounters on a daily basis, and enables you to examine how you would manage.

Participants’ reports indicated that reflecting on behaviours is meant to improve their behaviour in future instances. Thus, for example,

It’s important to understand what the behaviour stems from. In the simulation, I learned about myself, about the way I react to a situation. This taught me to think twice rather than react instinctively.

- Self-efficacy and self-confidence

This subtheme, which emerged in 23 of the participants’ phrases, implies that the simulation led participants to examine their sense of self-efficacy and self-confidence. For example,

In the simulation, as I sat across from the student, I proved to myself that I am able and capable. Seeing that I managed this, then perhaps I can be a [good] teacher. It filled me with confidence.

Another participant stated the following:

I need to have more faith in myself and my abilities. I am more skilled and capable than I had thought and if I have something to say, then I should express it in the most positive way.

This is how another participant described her experience of the simulation:

Coping with the situation was very difficult. I didn't know exactly how to cope or what I should do and I froze. I didn't think I would be able to complete the simulation properly. However, as the simulation continued, the tension attenuated and I was able to overcome my fears and to explain to the mother in the scenario that we would be able to help her child. Proving that I am able to cope with situations such as this really strengthened my self-confidence.

Other participants noted that having to face an audience was a turning point for them: "I discovered that I'm not as afraid of an audience as I had thought [I would be]"; "Speaking before an audience and expressing my feelings was not as awful as I had anticipated."

- The motivation to study education

A total of 12 of the participants' phrases mentioned that the simulation strengthened their resolve to study education and helped clarify the specific education programme they wished to pursue.

After the simulation, I understood how much I really want to be involved in teaching and education. I always wanted to work with children. The simulation experience made this even clearer. During the simulation scenario, I felt that I really wanted to help that child and provide support. Education is definitely the field for me and I'm very excited to start studying.

In this context, one of the participants described her decision to study education as stemming from her love of the profession, along with the desire to contribute to this field:

During the workshop, I understood the extent to which the world of education interests me and how much I want to study it, as well as how much I can contribute to this field.

Another aspect that emerged in this subtheme was participants' insight regarding the precise education programme that they wanted to pursue.

The additional information that I received through the simulation helped me determine the direction I wish to pursue. [At first], it made me think that perhaps early-childhood education was more suitable for me than was the K-12 special-education programme, but then I came to understand that special education is where I belong.

Figure 3 provides a visual summary of the findings of the study, including the three themes and the nine subthemes.

Discussion

The current study examined the use of SBS from the perspective of applicants to a teacher-education programme. The focus on the perspective of the applicants is in line with conclusions drawn from research regarding the use of simulation in the field of medicine, according to which the perspective of the applicants should be taken into account because the way that they perceive this experience affects the long-term success of the selection process (Patterson *et al.*, 2011). Thus, the current study is of crucial importance to our theoretical understanding of the selection process; its practical implications are regarding the using of SBS to enhance the quality evaluation of applicants to a teacher-education programme.

This is important because the implications of implementing a process that is capable of selecting promising candidates include decreased professional dropout (Heinz, 2013; Kim *et al.*, 2019) and improved quality of teachers (Klassen and Kim, 2019; Klassen *et al.*, 2020), which strengthens the overall status of the teaching profession (Katz and Frish, 2016). Thus, an improved selection process ultimately improves the nation's social, economic and educational

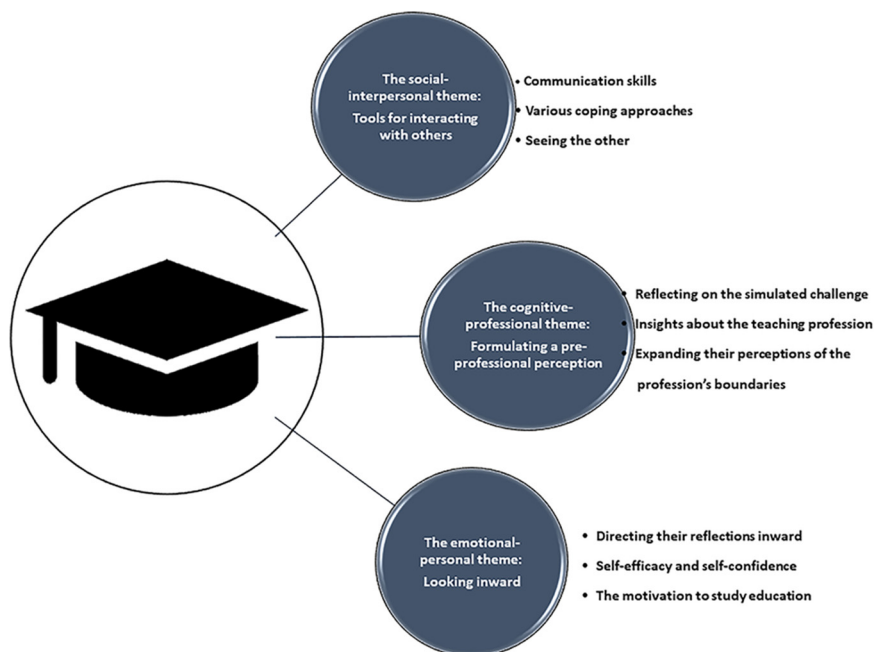


Figure 3.
Step-by-step
description of the
research process

welfare (Hanushek and Rivkin, 2012). In the discussion that follows, the implications of the study's findings are considered, in line with the themes that were identified.

Social-interpersonal theme: tools for interacting with others

This theme deals with the practical aspects of the selection process, as the SBS is based on the behaviours and practices of the applicant. Making a selection based on practical data is particularly relevant in the field of education and coincides with the findings of previous studies. SBS studies in the field of medicine found that the simulation served as an optimal tool to examine the non-cognitive characteristics of the applicants, which include the applicant's interpersonal communication skills (Cocciante *et al.*, 2016; Gardner *et al.*, 2016). In the field of education and in the current study, these skills are presented as critical criteria for a successful teaching experience (Rimm-Kaufman and Hamre, 2010). Furthermore, implementing these criteria in the selection process is essential for identifying the most promising teacher candidates by focusing on non-cognitive characteristics (Bardach and Klassen, 2020; OECD, 2005), which are significantly related to teacher effectiveness (Kim *et al.*, 2019). Finally, the current study's findings coincide with the perception underlying the SBS tool, according to which technical skills can be practised and improved, whereas interpersonal communication skills are more difficult to master (Kopel *et al.*, 2019).

The current findings also indicated that participation in the simulation makes the participants aware of the various educational approaches and enhances their ability to see the other. Moreover, these findings shed light on those of a previous study that examined the notion that peer learning serves as the basis of SBL (Levin and Flavin, 2020). In the process of peer learning, simulation participants are exposed to a variety of behaviours and opinions and thus expand their view of the simulated situation. The aspect of "otherness" is

also related to the claim that the process of selecting among applicants to a teacher-education programme should consider the population's differential achievements (Heinz, 2013) and cultural diversity (Al Hashmi and Klassen, 2019). Also related to the otherness aspect are the findings of a study on the use of simulation in medicine, which discovered that the simulation experience enhanced the future physicians' communication skills and their ability to empathise with future patients (Kopel *et al.*, 2019). This finding is very significant to the field of education, given that one of the major issues addressed in the course of teacher-education is the teacher's relationship with the students. Thus, the SBS process may serve as a predictor variable, although further studies are needed to examine and establish this claim.

Cognitive–professional theme: formulating a preprofessional perception

As mentioned, the process of selecting among applicants has implications for improving the quality and the image of the teaching profession. SBS is to some extent a way of branding the field of education; however, this is only part of its significance, as demonstrated by the findings of the current study, which have shown that following their participation in the simulation activity, the applicants were able to formulate their own perception of the teaching profession and acquire insights regarding the challenges involved. In this context, two other studies on SBS should be mentioned. Callinan and Robertson (2000) described the characteristics of SBS and claimed that the simulation provides applicants a peek into the essence of the target profession. The study of Gardner *et al.* (2016) found that the SBS process enables participants to gain insights into the profession which they intend to study. Thus, these and the current findings suggest that SBS provides a preview of the teaching profession and helps foster applicants' first conceptualisation of the profession. Formulating a preprofessional identity was found to have a significant effect on the academic success of the candidates (Jackson, 2017).

Emotional–personal theme: looking inward

The current study presents a novel revelation in this field, by demonstrating that SBS creates a process of self-selection among applicants, enabling them to determine on their own whether they are suited to work in a specific field. The SBS process guides the applicant to look inward and conduct a self-examination, which includes three components, as revealed in the participants' reports: directing their reflections inward, examining their self-efficacy and self-confidence and reviewing their motivation to pursue this course of studies. The emotional–personal theme of the SBS can be related to a study that compared applicants assessed using the traditional and the SBS methods. The findings indicated that the group assessed using the SBS method was more involved in the assessment process, more motivated to participate and more eager to prove themselves as worthy candidates for the program (Gardner *et al.*, 2016). This may be explained by the fact that the simulation constitutes a "realistic preview," which helps not only the decision-makers but also the applicants themselves assess their suitability for the programme (Gardner *et al.*, 2016). It is important to note the added value of SBS compared to the SJT method, for example. Although both were designed to assess applicants' procedural knowledge (Klassen *et al.*, 2020), they differ in terms of candidates' experiential involvement; SBS emphasizes this involvement more prominently. In some cases, applicants may reassess their suitability to the field of study in general, or, as in this case, the process may help them determine their suitability to a particular subfield of the profession. Finally, the finding that the SBS process strengthens applicants' desire to study and become teachers is significant to their developing a sense of commitment to the profession. This sense of duty is a basic condition

for working in the field of education and has been identified as a major criterion for selecting candidates to study in teacher-education programmes (Heinz, 2013).

Practical recommendations regarding the use of simulation-based selection in the field of education

As the current study implies and as a previous study has shown (Cocciantè *et al.*, 2016), it is vitally important to carefully plan how to run the SBS on the appointed days. From the perspective of the applicants, it is very important to explain in advance the procedures that will take place and what they will be required to do (Gardner *et al.*, 2016). Furthermore, the SBS is a day-long process that may be exhausting for the applicants; hence, it is important to structure the activities of the day in an optimal manner so that the applicants' selection experience is a positive one. Proper use of technology can help promote favourable applicant reactions (Bardach *et al.*, 2020; Patterson *et al.*, 2012). As regards the perspective of the faculty and staff running the selection, they should carefully review the contents, logistics and the human and fiscal capital required for the process, especially in cases in which it is an ongoing, rather than a one-time, process. Indeed, it should be emphasised that some of the anticipated difficulties of the SBS process are related to the need to secure sufficient funds and resources to develop, implement and assess the process (Cocciantè *et al.*, 2016; Gardner *et al.*, 2016).

Implications and limitations

The study's findings have several implications for the quality assurance of the selection process in the field of teacher education as well as for the practice and improvement of the SBS method. The study's findings can serve as a foundation for further studies that wish to consider the applicants' perspective, in the effort to design a better and more effective selection process. It is important to examine the efficacy of the SBS process over the long term, by reviewing preservice teachers' performance at several time points throughout the teacher-education programme. Given the high percentage of dropouts among teacher-education-programme graduates, which was found to be related to their difficulty in formulating an adaptive professional identity (Shaz-Oppeneheimer *et al.*, 2011), future studies could examine the whether and how a series of simulation scenarios experienced in the course of the teacher-education programme helps candidates conceptualise their professional identity as teachers and substantiates their sense of professional self-efficacy. Furthermore, it is recommended to follow the graduates' integration into the field of teaching and analyse their perceptions of the relationship between their simulation experiences before and during the programme and their ability to cope as novice teachers. Finally, we propose that the use of the SBS method can be expanded to review candidates for various roles in the educational field, such as school principals and educational counsellors. To do so, the current outline would need to be adapted to suit the context of each role. For example, in the case of school principal candidates, the simulations would need to address aspects of systems management, systemic vision and the exercise of dialogical authority, and in the case of educational counsellors, simulations could depict situations that call for a display of empathy or inclusion.

As teacher training is undergoing changes and adaptation to the skills required in the 21st century (OECD, 2016), there is a significant change in the role of the teacher, and the emphasis is on being a facilitator and promoter of academic, social and emotional skills. In light of these changes, it is important to adapt the screening of teacher candidates accordingly. The study's findings underscore that the SBS method is a tool that will make it

possible to assimilate the desired change and identify suitable candidates for these important positions.

This study has a few limitations. First, there may be a possibility of response bias in participants' reflections. However, the effort invested in triangulating research analysis methodologies was intended to minimise this potential bias. Second, the composition of the sample consisted mainly of female participants. Nevertheless, regarding the gender imbalance in the field of education, we consider this a representative sample, and consequently, the transferability of the findings may still be assumed.

Conclusion

This study examined the use of SBS in teacher-education programmes from the perspective of the programme applicants. No prior examination of the issue from the perspective of teacher-education applicants had been undertaken thus far. Thus, the current study contributes to the existing pool of research literature on the use of SBS in the field of education, specifically, by revealing the three themes which the applicants considered valuable aspects of the SBS process, and by formulating practical guidelines for using SBS to identify promising teacher-education candidates. Given that previous research has demonstrated the need to rethink the traditional selection methods in the field, the current study's findings underscore the value of the SBS in the field of education, to enhance quality evaluation of applicants to teacher-education programmes.

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