EDUCATIONAL RESEARCH
https://doi.org/10.1080/00131881.2021.1936111

OPEN ACCESS

The assessment of emotional intelligence in social care and healthcare student selection: a qualitative descriptive study

Anne Pienimaa[a], Kirsi Talman[a] and Elina Haavisto[a,b]

[a]Department of Nursing Science, University of Turku, Turku, Finland; [b]Department of Nursing Science, Hospital District of Satakunta, University of Turku, Turku, Finland

ABSTRACT

Background: Effective student selection methods are needed to identify applicants who are expected to complete their studies and succeed professionally. The assessment of emotional intelligence has recently been identified as an important element of student selection for nursing studies.

Purpose: This small-scale study, conducted in Finland, sought to capture the content of emotional intelligence that is considered relevant to social care and healthcare student selection from the perspectives of social care and healthcare educators and professionals.

Methods: Five semi-structured focus group interviews (n = 30) were conducted with the educators and professionals. The data were analysed qualitatively using both deductive and inductive content analyses.

Findings: The analysis of the data identified participants' perspectives on: perception of emotions, understanding emotions, accepting emotions, emotional management, emotional expression, utilising emotions and emotional awareness in social contexts. The participating educators and professionals indicated that applicants should demonstrate basic abilities across all these aspects of emotional intelligence in order to cope with the demands of social care and healthcare studies.

Conclusions: Findings support the notion of the comprehensive assessment of emotional intelligence in student selection contexts. By ascertaining whether students have adequate basic emotional intelligence abilities, the risk of emotional exhaustion during clinical practice could be reduced; higher education institutions may better be able to select applicants who are likely to complete their studies and who are willing and able to work as social care and healthcare professionals.

ARTICLE HISTORY
Received 27 May 2020
Accepted 25 May 2021

KEYWORDS
Social care and healthcare education; emotional intelligence; student selection; focus group interview; higher education; assessment; emotional competence

Introduction

Institutions offering social care and healthcare education must select students who have the necessary abilities to complete their studies and succeed in the profession. The assessment of emotional intelligence (EI) has recently been identified as an important part of student selection for nursing (Haavisto et al. 2019). EI is reported to have a positive impact on healthcare students' overall academic performance (Chew, Zain, and Hassan 2013; Brown,

CONTACT Anne Pienimaa anne.m.pienimaa@utu.fi

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Williams, and Etherington 2016; Sharon and Grinberg 2018) and especially on their clinical performance (Rankin 2013; Humphrey-Murto et al. 2014; Abdel-Fatah et al. 2016). Having EI seems to buffer stress, reduce anxiety and improve students' nursing performance in clinical practice (Lewis, Neville, and Ashkanasy 2017), suggesting that these skills may be essential for coping in these emotionally challenging environments (Bulmer Smith, Profetto-Mcgrath, and Cummings 2009; Michelangelo 2015; Lewis, Neville, and Ashkanasy 2017). Interestingly, one recent study reported that nursing applicants differ in terms of EI (Talman et al. 2019). In general, emotional exhaustion, high emotional demands and work-related stress are known issues in social care and healthcare work, and all these factors seem to contribute to the intent to leave the profession (Kim and Stoner 2008; Clendon and Walker 2012; Laschinger 2012). It is possible, therefore, that there might be an increased risk of emotional exhaustion among applicants with low EI. This suggests that it is important to investigate EI assessment in the context of social care and healthcare student selection.

Background

Defining emotional intelligence

A full conceptual discussion of EI is out of this paper's scope. However, it is important to recognise that EI is a complex construct; in the literature, consensus for a single definition and interpretation of EI is still lacking. EI can be defined as a set of skills including the appraisal, expression and regulation of emotions, as well as the ability to use feelings to motivate, plan and achieve things in one's life (Salovey and Mayer 1990). In the existing literature, the concept of EI includes constructs such as 'ability EI' (e.g. Salovey and Mayer 1990; Mayer, Salovey, and Caruso 2008), 'trait EI' (Petrides, Pita, and Kokkinaki 2007) and 'mixed EI' (Goleman 1995, 1998; Bar-On 2006). Broadly, ability EI refers to emotion-related cognitive skills and is typically assessed using general ability-type measures. Trait EI refers to emotion-related behavioural skills and self-perceived skills, which are typically assessed using personality-type self-report measures (Pérez, Petrides, and Furnham 2005). Mixed EI refers to both ability and trait constructs (Goleman 1995, 1998).

It is notable that there may be cultural differences in EI (Johnsen et al. 2012; Zhang and Cross 2011) even though there is, for example, evidence for intercultural continuity in recognising others' emotional expressions (Scherer, Clark-Polner, and Mortillaro 2011). Moreover, the question of whether EI is a stable feature or can be developed through appropriate education or training has provoked debate. Some studies have found that EI skills can be enhanced (Lee and Gu 2014; Foster et al. 2017; Salminen-Tuomaala 2020), while others have not found improvement in EI during education (Orak et al. 2016), or have found mixed results regarding the improvement of EI (i.e. EI has improved in some subscales but declined in others) (Shanta and Gargiulo 2014). Clearly, more research is needed in this complex area to investigate the construct of EI and determine the extent to which EI can be enhanced through education.

Assessing emotional intelligence in healthcare education contexts

In a noteworthy meta-analysis of EI studies, Michelangelo (2015) identified 25 distinct EI instruments. The purpose of the study was 'to evaluate whether emotional intelligence

(EI) training for nurses improves critical thinking and emotional competence enough to justify including EI in nursing curricula' (118). The analysis included 395 EI studies in total, and all studies reported a positive correlation with EI (ranging from weak to strong), with a moderate cumulative effect size of r = 0.3022 across studies. Of the included studies, 27 were related to nursing or nursing students; the remaining were from meta-analyses of the effect of EI in leadership, job retention and health. Michelangelo's (2015) review identified eight different EI traits and abilities common to the 27 EI studies of nursing and nursing students. Overall, Michelangelo (2015) concluded that there is 'evidence that EI training and education improve the CTS [critical thinking skills] and EC [emotional competency] of nursing students and nurses in eight traits and abilities' (122).

A recent systematic review by Pienimaa, Haavisto, and Talman (forthcoming) examined the content and psychometric properties of the EI instruments used in healthcare education. The review identified 18 relevant EI instruments, six of which were characterised as ability-based measures for the objective assessment of EI. The most widely used of these instruments, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), measures four main abilities: perceiving emotions, facilitating thought, understanding emotions and managing emotions (Mayer, Salovey, and Caruso 2002; Mayer et al. 2003). Other objective ability-based EI instruments include the Audiovisual Test of Emotional Intelligence (AVEI), the Geneva Emotional Competence Test (GECo), the Levels of Emotional Awareness Scale (LEAS), the Situational Test of Emotional Management (STEM) and the Situational Test of Emotional Understanding (STEU). AVEI is based on the perception of emotions and the recognition of facial expressions (Zysberg, Levy, and Zisberg 2011). GECo includes interpersonal emotion-related scenarios involving different working roles, such as clients and co-workers, and test-takers need to choose the most effective or appropriate action for a given scenario (Schlegel and Mortillaro 2019). STEM includes the assessment of emotional management – specifically, the ability to manage effectively emotional situations by choosing the most appropriate emotion-regulation strategies – in contrast with the STEU, which assesses emotional understanding – specifically, the ability to identify and understand the emotions that are most likely to occur in certain situations (Libbrecht et al. 2014). LEAS asks participants to describe their own and others' emotional responses to interpersonal situations (Lane et al. 1990).

Furthermore, in Pienimaa, Haavisto, and Talman's (forthcoming) review, two trait-based self-report instruments – the Trait Emotional Intelligence Questionnaire (TEIQue-SF) and Trait Meta Mood Scale (TMMS) – were identified, and the other ten instruments were mixed EI self-report measures. The most widely used mixed EI instruments in the review were different versions of Schutte's Emotional Intelligence Test/Scale (Assessing Emotions Scale (AES), The Schutte Emotional Intelligence Scale (SEIS), The Schutte Self-Report Emotional Intelligence Test (SSEIT) and Schutte Self-Report Inventory (SSRI)). Overall, according to the review, the most widely used mixed EI instruments were the Emotional Competence Inventory (ECI) and the Emotional Quotient Inventory (EQ-i) (Muyia 2009), which were also presented in the review. These instruments assess EI content that includes intrapersonal skills, interpersonal skills, the ability to understand emotions, adaptability, stress management skills, self-control, motivation, self-awareness and general mood (Boyatzis and Goleman 2005; Bar-On 1997; Bar-On 2006). These instruments have been used to evaluate the impact of EI on study success among healthcare students (Michelangelo 2015; Pienimaa, Haavisto, and Talman forthcoming).

Research in the provision of training in EI is clearly vital in the context of student development within social care and healthcare education. However, we suggest that of crucial importance, too, is researching the role of EI assessment in the process of *selecting* potential students before they embark upon social care and healthcare courses. Although EI assessment has been identified as an important element of student selection in nursing (Haavisto et al. 2019), there is insufficient previous research on the issue in this context (Talman et al. 2019). In general, research on social care and healthcare student selection and related matters has focused primarily on the assessment of academic skills, such as literacy, mathematics and problem-solving (Hughes 2002; Levinger and Segev 2016; Talman et al. 2018). The current study, then, offers a contribution to research efforts by investigating EI assessment in the context of social care and healthcare student selection.

Purpose

Against this backdrop, the study reported in this article sought to capture the content of EI that is considered relevant to social care and healthcare student selection, from the perspectives of educators and professionals. Specifically, the following research question was investigated: *What EI content should be assessed when selecting social care and health care students?*

Methods

A descriptive qualitative study design was selected to explore social care and healthcare educators' and professionals' perceptions of the assessment of EI in the student selection process.

Ethical considerations

The study followed the ethical principles specified by the National Advisory Board on Research Ethics (Finnish Advisory Board on Research Integrity 2012). Permission to undertake the study was obtained from the institutions involved, and ethical approval was obtained from the ethics committee of the higher education institution. All focus group participants were informed both orally and in writing about the research purpose, voluntary participation, confidentiality, anonymity of the study and their right to withdraw from the study and self-terminate participation at any time during the research without giving a reason. Written information about the study was provided to the participants approximately 2 weeks before the interviews. All the participants consented to being interviewed and audio recorded. The interview data were anonymised, and any names mentioned during the interview were removed. Anonymised data were used in the data analysis to enhance the confidentiality of the study.

Data collection

Because EI is a multifaceted concept (Pérez, Petrides, and Furnham 2005), the focus group interview was chosen as an appropriate method of data collection, as group interviews could be expected to provide richer data than an individual approach (Polit and Beck

2012; Doody, Slevin, and Taggart 2013). Five focus-group interviews (n = 30) were conducted during the spring and fall of 2019 in Finland. Three groups (n = 17) comprised social care and healthcare educators: group 1 was made up of six nursing educators; group 2 consisted of six social work educators and group 3 composed of five other healthcare educators. The other two groups (n = 13) involved social care and healthcare professionals who worked in clinical settings and were composed, respectively, of seven clinical professionals who worked in specialised health care and six clinical professionals who worked in primary health care.

Purposive sampling was used to ensure that the sample included various social care and healthcare professionals and educators. The major social care and healthcare professions were identified based on labour and educational statistics (Finnish Institute of Health and Welfare 2018; Vipunen 2018). To ensure appropriate geographical coverage, social care and healthcare educators were recruited via education managers at four universities of applied sciences. These institutions were chosen because all had participated in the Reforming Student Selection in Nursing Education Project (Haavisto et al. 2019) and had, therefore, used EI evaluation as an element of nursing student selection. Clinical professionals were recruited through nurse managers from both the country's biggest hospital district and its primary health-care unit, which serves a population of one million. Most of the participants were women (n = 26) and had a higher education degree (n = 23). In Finland, social care and healthcare professionals and educators are mainly females (Kristina et al. 2019; Finnish Institute for Health and Welfare 2018). Furthermore, social care and healthcare educators in universities of applied science are required to have a higher education degree (Ministry of Education and Culture 2014a) and professions such as registered nurse or social worker require bachelor level degree (Ministry of Education and Culture 2014b). All participants were Finnish. The social care and healthcare educators were mainly lecturers, whilst the social care and healthcare professionals were mainly social workers and nurses. The mean age was approximately 47 years; average work experience in their current position was five and a half years (range: less than 1 year to 24 years); and work experience in social and healthcare averaged approximately 14 years (range: more than 2 years to 38 years). Almost half of the clinical workers had supervised between 1 and 13 students during the previous year. All the educators had some experience of the entrance examination process; most had previously participated in organising and evaluating entrance examinations, and around three-quarters had participated in the development of entrance examinations.

Based on the results of the aforementioned systematic review (Pienimaa, Haavisto, and Talman forthcoming), the semi-structured group interviews were guided by six predetermined themes: perception of emotions, understanding emotions, emotional management, emotional expression, utilising emotions and emotional awareness in social contexts. For each theme, the interview questions were: *How would you define this theme*? and *What EI content should be assessed when selecting social care and healthcare students?* The interviews varied in duration from 80 to 87 minutes and, for the participants' convenience, took place in meeting rooms at the participating institutions. The focus group interviews were conducted mainly by one researcher. All interviews were audio-recorded, and the participants' background information was collected. The interviews were conducted and analysed in Finnish. The main results of the analysis (categories/subcategories and the direct quotations selected for the article) were translated into

English for the purposes of reporting the study. The translation of the data quotations into English was carried out by the authors; translations were proofread by a professional editor.

Data analysis

Content analysis is an appropriate and widely used technique for qualitative studies of opinions, perceptions and attitudes. For the purposes of this study, the data were analysed both deductively and inductively (Graneheim and Lundman 2004). First, the interview recordings were transcribed verbatim, omitting irrelevant vocalisations. To gain a full understanding of the data, the researchers listened to the recordings and read the transcripts several times (Polit and Beck 2012). In the second stage, the six interview themes were used as a category framework for deductive content analysis (Graneheim, Lindgren, and Lundman 2017). In the third stage, meaning units (words, sentences or paragraphs) were identified from the transcripts, and a number code was assigned to each unit to identify the original source. These units were condensed to interpret the underlying meaning of the original text (Graneheim and Lundman 2004) (see Table 1). After assigning the condensed meaning units to the six themes, an inductive content analysis of each theme was performed to ensure that nothing of significance was missed. The units were then organised into similarity-based subcategories within the themes, and whenever units and subcategories did not fit the deductive structure, a new category was created (Graneheim, Lindgren, and Lundman 2017). To enhance the trustworthiness of the results, the process was documented, discussed and agreed upon within the research group at each stage of the analysis (Elo et al. 2014). The data analysis and data interpretation were conducted by the three authors of this study.

Findings

Overall, the participants felt that social care and healthcare applicants should have basic abilities in all aspects of EI, and especially in recognising, understanding and expressing emotions. They also noted the importance of recognising applicants who may have difficulties in this regard, such as people with alexithymia. Along with the six categories from the category framework (i.e. perception of emotions, understanding emotions, emotional management, emotional expression, utilising emotions and emotional awareness in social contexts), one additional category emerged: accepting emotions. The seven categories are outlined in Table 2. In total, the analysis disclosed 20 subcategories of EI.

In the subsections that follow, the findings from each category are presented in detail, to indicate participants' perceptions as to which aspects of EI should be assessed in student selection. Where relevant, to illustrate key themes and points, anonymised, translated quotations from the focus group interviews have been included.

Perception of emotions

The participants identified three subcategories of *perception of emotions* which, they felt, should be assessed in the student selection. These were: perception of own emotions, perception of others' emotions and self-awareness (Table 2). *Perception of own emotions*

Table 1. Example of the analytical process.

Meaning unit (original text)	Condensed meaning unit – description close to the original text	Condensed meaning unit – interpretation of the underlying meaning	Sub-category	Category
'In the background, there may be problems of a kind that you don't recognise when face-to-face. Secondly, one may not recognise from the tone of voice, for example, a human with hearing problems'.	Problems in recognising emotions from faces or from tone of voice	Problems in recognising emotions from faces; problems in recognising emotions from tone of voice	Perception of others' emotions	Perception of emotion
'[As to] recognising your own emotions, I think it would be important that the entrance examination includes a task – for example, a video – where you must try to recognise your own emotions – what it awakens in you'.	Entrance examination should have a task where you try to recognise your own emotions	Recognising your own emotions	Perception of own emotions	
'In all this emotional work, I would start with how well I know myself . . . I think that how well a person knows himself is something that should really be highlighted'.	How well a person knows himself should be highlighted	Knowing myself	Self-awareness	

Table 2. Categories and sub-categories of EI identified by the analysis.

Category	Sub-category
Perception of emotions	Perception of own emotions
	Perception of others' emotions
	Self-awareness
Understanding emotions	Understanding own emotions
	Understanding others' emotions
	Understanding the meaning of emotions
Accepting emotions	Confronting emotions
	Processing emotions
	Accepting own emotions
	Accepting emotions of others
Emotional management	Managing own emotions
	Emotional adaptability
Emotional expression	Non-verbal emotional expression
	Verbal emotional expression
Utilising emotions	Using emotions for own purposes
	Using emotions for others' purposes
Emotional awareness in social contexts	Social self-awareness
	Situational awareness
	Ability to consider others
	Ability to collaborate with others

comprised recognition of different emotions in oneself – that is, recognising the emotions that certain situations – or other people – might provoke in oneself and recognising one's own negative emotions. This also included the ability to differentiate and name emotions.

The ability to perceive one's own emotions was regarded as a prerequisite for recognising and understanding others' feelings. As one participant indicated:

> Recognising one's own emotions … I think everything starts from there. You can't really recognise others' emotions until you know yourself well enough to recognise your own emotions.

The participants also viewed *perception of others' emotions* as an important ability; further, they emphasised the recognition of non-verbally transmitted emotions. As one participant explained, 'We have patients who simply can't express themselves verbally; then, you have to recognise the patients' emotions in another way'. *Self-awareness* was understood to refer to how well one knows oneself and one's personality, as well as how aware one is of oneself and one's actions. The participants referred to the importance of having a realistic image of oneself and one's abilities. Healthy self-confidence was also considered a component of self-awareness; however, participants emphasised the need for humility regarding oneself, one's abilities and one's learning needs, with one commenting '[a] certain kind of humility … Although I have reasonably lengthy work experience, I have to be humble in myself because I don't know everything, and I must accept that'.

Understanding emotions

The category of *understanding emotions* included three subcategories that, according to the participants, needed to be assessed in the student selection: understanding own emotions, understanding others' emotions and understanding the meaning of emotions (see Table 2). *Understanding own emotions* included understanding the reasons underlying one's emotions – i.e. why one might be feeling in a certain way and what kinds of situations or other factors give rise to emotions such as happiness, anger or sadness. Understanding one's own emotions was seen to involve understanding one's own emotional reactions. As one participant explained, it involved 'where this comes from, why I feel this way, what things prompt this emotion in me … understanding where this emotion originates'. *Understanding others' emotions* included understanding the factors and reasons behind them, understanding the emotional reactions of others and understanding that all emotions must be permitted and accepted. Understanding of others' emotions was, according to one participant, 'the ability to understand how another is feeling … what things will evoke in another human being'. The participants also emphasised the need to be able to *understand the meaning of emotions* in one's own and others' actions, behaviour and interactions, as well as their importance in social care and healthcare. The participants referred to applicants' values, especially when appraising emotions; one commented, for example, that 'applicants should understand how important those emotions are in this kind of work'.

Accepting emotions

As explained above, inductive content analysis led to the emergence of a new category: *accepting emotions*. This included four subcategories that the participants felt should be assessed in student selection: confronting emotions, processing emotions, accepting own emotions and accepting emotions of others (see Table 2). Specifically, *confronting*

emotions included confronting one's own and others' emotions, as well as tolerating emotions. The participants indicated that the acceptance and tolerance of negative emotions and emotionally difficult situations, although challenging, were especially important. As one participant reflected, 'Accepting starts when you can also accept those hidden or open aggressions in yourself – whatever they are – while allowing yourself to accept those emotions'.

According to the participants, *processing emotions* included processing one's own emotions, processing others' emotions with them and developing practices to process emotions. Processing emotions was thought to be essential for functioning, including the ability to process negative emotions, such as aggression. As one participant observed, 'I think confronting both one's own and others' aggression is really essential in this [line of] work – that is, how you can confront, process, bear, and limit it'. The participants indicated that they perceived processing emotional reactions after failure or relapse to be crucial: conversation was the means for this that was mentioned most frequently in this regard. The participants also noted that suppressing, escaping or isolating were not healthy ways of confronting and processing emotions. They emphasised that, sometimes, one needs to set one's emotions aside to enable oneself to function properly.

Accepting own emotions was considered to be the basis for managing these emotions. Amongst participants, the need to be honest about one's own emotions and to accept negative emotions was emphasised; as one participant reflected, 'If I don't accept all of life's emotions ... this turns into hidden aggression. Somehow accepting all emotions as part of oneself is the basis for managing those emotions'. The fourth subcategory, *accepting emotions of others*, was regarded as involving the acceptance of others' feelings, knowing when to set limits, and having the courage to defend them; in other words, one does not need to accept all the emotional reactions of others. As one participant noted:

> Sometimes, behaviour is really inappropriate, and it needs to be said directly that this is not an appropriate way to behave and that this does not feel good. I think everyone has a right to say this without becoming agitated.

Emotional management

Our analysis identified that there were two subcategories of *emotional management* that the participants felt should be assessed in student selection: managing own emotions and emotional adaptability (Table 2). The participants expressed the view that emotions could not be managed unless they were first recognised and understood. Firstly, *managing own emotions* was understood by the participants as the ability to control one's own emotions, emotional reactions and expressions. The participants felt that this ability was especially important in complicated situations in which another person is frustrated or angry. They discussed how managing one's own emotions involves the ability to control those emotions, so that emotion does not govern one's actions and decisions. They also felt that it meant not allowing someone else's emotions to transfer to you. One participant expressed it in this way: 'emotions adhere, so I think it is important that you understand your own emotion and the client's emotion and that you don't take on the client's emotion – for example, anger'.

Emotional adaptability was understood by participants as flexibility in problem-solving and the ability to come up with different solutions in a given situation. The participants also suggested that emotional adaptability included elements such as mentalisation, resilience, optimism, tolerance of stress and the ability to anticipate emotional situations and consequences of actions. It was considered essential to link emotions and cognition, using both emotion and logical reasoning to solve problems and being able to recognise whether to depend more on logic or emotion when making decisions. As one participant indicated, 'It's a matter of combining logic and emotions in different situations . . . at work, it is to be hoped that logic will lead the way'.

Emotional expression

Emotional expression included two subcategories: non-verbal and verbal emotional expressions. The participants indicated their belief that these should be assessed in student selection. They observed that both non-verbal and verbal emotional expressions are important (Table 2). *Non-verbal emotional expression* referred primarily to body language: posture, position and appearance. Touch was also considered an important element of non-verbal emotional expression. As one participant explained, '[We] express emotions all the time through how we touch, which I think is very important. Sometimes, it might be hard to touch another person'. The subcategory of *verbal emotional expression* included the expression of one's own emotions in words or text, as well as the verbalisation of another person's emotions to indicate that he or she has been understood. In the words of one of the participants, 'You should verbalise the client's emotion to indicate that you have understood'.

Utilising emotions

The analysis indicated that this category should be made up of two subcategories that participants believed should be assessed in student selection: namely, using emotions for own purposes and using emotions for others' purposes (Table 2). The participants indicated that they thought the utilisation of emotions involved the ability to recognise, understand, manage and express these emotions. This was described as a continuum by one of the participants:

> (I see these as a continuum;) . . . when you recognise and then understand, you can express and name and somehow connect it to action. Then, management develops and, from that, utilization.

It was evident from the analysis that *using emotions for own purposes* included positive uses, such as facilitating the appropriate atmosphere. However, as one participant indicated, it also included negative uses; 'On the other hand, crying can be exploited. When someone understands that by crying now, I will get something, the other person gets confused when I'm crying'. *Using emotions for others' purposes* was considered to include affecting others' emotional states, managing another person's emotions to achieve a goal, and using one's own emotional state to change the emotional atmosphere and for emotional transference. As one participant reflected, '[E]motions are transmitted . . . If you are in a good mood and you let it show to the client, the client is also instantly in a better mood'.

The use of emotions for motivation and empowerment was also mentioned by participants. As one remarked, '[W]hen in a conversation, a client brings up success, you can use that to motivate and set further goals. Just that good positive feeling can motivate further'. The participants emphasised that while social care and healthcare applicants might not yet have the ability to utilise emotions professionally, they should, nonetheless, be able to recognise the *potential* of this approach in a professional context. As one participant pointed out:

> [It's important] to assess whether the applicant realises that a registered nurse must be able to understand feelings. It may be that he or she does not yet have this ability but understands that, to enter this profession, he or she has to do this kind of thing.

Emotional awareness in social contexts

This category comprised four subcategories that, according to participants, should be assessed in student selection: social self-awareness, situational awareness, ability to consider others and ability to collaborate with others (see Table 2). The participants noted that emotions and EI are always linked to contexts and that social situations always involve emotions. It was apparent from the analysis that *social self-awareness* was characterised as how well a person knows their own social status and personality, as well as their ability and willingness to engage with other people, including in social situations. Social self-awareness was also seen to involve an understanding of what constitutes acceptable behaviour in social situations. It was described by one participant as follows:

> [W]hat is the applicant's awareness or perception of their own social image? [That is,] what kind of person they are and how they behave in social situations.

The participants expressed the view that knowing their social personality and whether they like being with others can give applicants a sense of whether social care and healthcare work are right for them. This was expressed by one participant at some length:

> If, for example, the applicant is someone who has few social contacts and a limited social life, selectors should be aware that there might be similar conflicts regarding their future profession. This person might not be suitable for the profession or might be more likely to leave if their own experience and perception are totally different from what is needed for this kind of work.

Situational awareness was identified as the ability to sense the social situation and others' emotions and to modify one's own behaviour accordingly. This was considered to include the ability to recognise what kinds of emotion and emotional expression would be acceptable in different situations, and to manage one's emotions accordingly. The participants referred repeatedly to intuition and the importance of a sense of context in recognising, understanding and managing emotions. In particular, emotional management was seen to be linked to social context. As one participant indicated, 'Emotional management is the management of social situations. There is no work situation in our field that doesn't involve social interaction'.

Ability to consider others was seen to include empathy, humanity and a genuine willingness to be present. It was also regarded as involving the ability to place oneself in another's position and show compassion, especially in situations in which tough decisions

that might not be favourable to others need to be made. Empathy was emphasised. As one participant expressed it: ‘You need [some] kind of empathy to make tough decisions . . . you can still show empathy for the client’s life and situation’.

There was also some discussion of the need for a certain level of altruism; it was pointed out that ‘the willingness to be with human beings and the desire to do good that we have already talked about requires some degree of altruism’. The participants observed that social care and healthcare are a service-oriented profession, and professionals are supporting the needs of patients and clients, with one reflecting that ‘[It is] really important to realise that in this work, we are here for other people’. Further, the *ability to collaborate with others* was seen to include interpersonal, teamwork and interaction skills, including the ability to listen to others, give them space, engage in dialogue and letting others talk without interrupting them. The ability to recognise and understand different roles, teams and societies, as well as how to function appropriately within them, was also mentioned.

Discussion

This small-scale, in-depth study sought to identify the EI content of a purposive sample of social care and healthcare educators and professionals considered relevant for student selection. The analysis identified seven categories of EI that, according to the educators and professionals, should be assessed during student selection: perception of emotions, understanding emotions, accepting emotions, emotional management, emotional expression, utilising emotions and emotional awareness in social contexts. All but one of the categories were from the category framework used in the analysis, and therefore resonate with the existing literature (Pienimaa, Haavisto, and Talman forthcoming; Bar-On 1997; Schutte et al. 1998; Petrides and Furnham 2000; Mayer, Salovey, and Caruso 2002; Boyatzis and Goleman 2005). Two categories (perception of emotions and emotional management) are referred to in most of the existing instruments (e.g. MSCEIT, ECI, EQ-i, TeiQue-SF, GECo and versions of Schutte’s Emotional Intelligence Test), which suggests that these two categories may form the basis for other EI abilities. As all interactions involve emotions, emotional management can be considered as essential for successful communication. However, existing instruments focus less on emotional expression, utilising emotions and emotional awareness in social contexts (Pienimaa, Haavisto, and Talman forthcoming). This may indicate that the use of traditional instruments to measure these categories is more challenging, for example, in situations in which it may not be possible to use observation or video techniques. The new category that emerged in our analysis was *accepting emotions*. As indicated above, it is interesting to note that this category is not in the predetermined category framework that we used (Pienimaa, Haavisto, and Talman forthcoming). It seems important that this additional category should be considered and investigated further, in larger studies, as it is likely that the emotional demands of social care and healthcare professionals prompt an emphasis on emotional acceptance. As this work always involves emotions, the emotional burden is likely to be excessive unless the emotions are confronted, processed and accepted.

From previous research, it appears that EI skills can be enhanced at least to a certain extent through education (Lee and Gu 2014; Foster et al. 2017; Salminen-Tuomaala 2020). Of course, this complex area is contextualised by wider debates about how far various

aspects of EI can be learned: these issues are acknowledged but are beyond the scope of the current investigation. In the specific setting of social care and healthcare education that is our focus, it seems that some level of EI skills is required at the beginning of the studies, in order for students to cope with the emotional load encountered in clinical practice (Lewis, Neville, and Ashkanasy 2017), since social care and healthcare students have to engage with these challenging environments early on in their studies. A possible implication of this in the student selection context is that unsuccessful applicants may need a little bit more time to mature and to enhance their EI abilities, in order to be successful later.

Research suggests that the total EI score may be an especially effective predictor of study success (Rankin 2013; Humphrey-Murto et al. 2014; Brown, Williams, and Etherington 2016; Sharon and Grinberg 2018). Our small study, providing insight into the perspectives of social care and healthcare professionals, certainly lends support to the idea that a comprehensive assessment of EI (i.e. using multiple categories) would be of use in selecting prospective students. To ensure the fairness in any selection process, assessment methods must be valid, reliable and objective (Talman et al. 2019). Therefore, we suggest that an important step for future research would be the development of a robust instrument for the assessment of EI for use specifically in social care and healthcare student selection contexts.

Limitations and strengths of the study

The study reported in this paper has a number of limitations. First, because of scheduling issues, only two of the five focus groups had two moderators, which may have influenced the collection of data. Nevertheless, the data from all the focus group interviews were rich and extensive, indicating that the participants actively engaged and that the moderator(s) did not restrict discussion. Additionally, it must be borne in mind that particularly because the concept of EI is so complex and multifaceted, participants may not have interpreted the topic or the interview questions in the same way. This might have affected how the participants were able to describe the content of EI in the student selection context. Nonetheless, the process of qualitative analysis was robust, as it was documented, discussed and agreed upon within the research group (as described in the Methods section).

This study is a small-scale investigation producing qualitative insights: its contribution lies in the contextualised, in-depth analysis and interpretation of rich data. Due to the small sample size and nature of the study, generalisation is not intended. Furthermore, it must be recognised that EI is a social and cultural construct. In this study, findings are therefore constrained by this. The complex relationships between EI and culture should be further investigated in larger research studies, as part of the endeavour to better understand how the student selection process in social care and healthcare may be supported.

Conclusions

The findings from our small-scale, qualitative study lend support to the notion of the comprehensive assessment of EI in social care and healthcare student selection contexts. Our analysis of the social care and healthcare educators' and professionals' perspectives

suggested that several important aspects of EI should be assessed, including the new category that emerged – that is, the acceptance of emotions. By ensuring that the selected students have adequate EI abilities, it may be possible to reduce the risk of emotional exhaustion during clinical practice. If higher education institutions become better able to select applicants who are likely to complete their studies and who are willing and able to work as social care and healthcare professionals, this would be of benefit to the students themselves, the institutions and, ultimately, the provision of health and care services in the community.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Anne Pienimaa http://orcid.org/0000-0003-0857-5776
Kirsi Talman http://orcid.org/0000-0002-2773-9361
Elina Haavisto http://orcid.org/0000-0002-9747-1428

References

Abdel-Fatah, I., W. T. I. Elgzar, M. R. Elsayed, and R. M. Salem. 2016. "Relationship between Nursing Students' Emotional Intelligence and Their Clinical Performance during Obstetrics and Gynaecologic Nursing Practical Training." *American Journal of Nursing Science* 5: 240–250. doi:10.11648/j.ajns.20160506.12.

Bar-On, R. 1997. *The Emotional Quotient Inventory (Eq-i): A Test of Emotional Intelligence*. 1st ed. Toronto: Multi-Health Systems.

Bar-On, R. 2006. "The Bar-On Model of Emotional-Social Intelligence (ESI)." *Psicothema* 18: 13–25.

Boyatzis, R. E., and D. Goleman. 2005. *Emotional Intelligence Inventory*. London: Hay Group.

Brown, T., B. Williams, and J. Etherington. 2016. "Emotional Intelligence and Personality Traits as Predictors of Occupational Therapy Students' Practice Performance: A Cross Sectional Study." *Occupational Therapy International* 23: 412–424. doi:10.1002/oti.1443.

Bulmer Smith, K., J. Profetto-Mcgrath, and G. G. Cummings. 2009. "Emotional Intelligence and Nursing: An Integrative Literature Review." *International Journal of Nursing Studies* 46: 1624–1636. doi:10.1016/j.ijnurstu.2009.05.024.

Chew, B. H., A. M. Zain, and F. Hassan. 2013. "Emotional Intelligence and Academic Performance in First and Final Year Medical Students: A Cross-Sectional Study." *BMC Medical Education* 13. Accessed 30 May 2018. http://www.biomedcentral.com/1472-6920/13/44

Clendon, J., and L. Walker. 2012. "'Being Young': A Qualitative Study of Younger Nurses' Experiences in the Workplace." *International Nursing Review* 59 (4): 555–561. doi:10.1111/j.1466-7657.2012.01005.x.

Doody, O., E. Slevin, and L. Taggart. 2013. "Focus Group Interviews in Nursing Research: Part 1." *British Journal of Nursing* 22 (1): 16–19. doi:10.12968/bjon.2013.22.1.16.

Elo, S., M. Kääriäinen, O. Kanste, T. Pölkki, K. Utriainen, and H. Kyngäs. 2014. "Qualitative Content Analysis: A Focus on Trustworthiness." *SAGE Open*, no. January–March: 1–10. doi:10.1177/2158244014522633.

Finnish Advisory Board on Research Integrity (TENK). 2012. *Responsible Conduct of Research and Procedures for Handling Allegations of Misconduct in Finland*. Helsinki. Accessed 26 November 2019. http://www.tenk.fi/sites/tenk.fi/files/HTK_ohje_2012.pdf.%20

Finnish Institute of Health and Welfare. 2018. “Terveys- Ja Sosiaalipalvelujen Henkilöstö 2014.” THL tilastoraportti 1/2018. Accessed 3 April 2019. http://www.julkari.fi/bitstream/handle/10024/135915/TR_01_18.pdf?sequence=1&isAllowed=y .

Foster, K., J. Fethney, H. McKenzie, M. Fisher, E. Harkness, and D. Kozlowski. 2017. “Emotional Intelligence Increases over Time: A Longitudinal Study of Australian Pre-registration Nursing Students.” *Nurse Education Today* 55: 65–70. doi:10.1016/j.nedt.2017.05.008.

Goleman, D. 1995. *Emotional Intelligence. Why It Can Matter More Than IQ*. New York: Bantam Books.

Goleman, D. 1998. *Working with Emotional Intelligence*. New York: Bantam Books.

Graneheim, U. H., B.-M. Lindgren, and B. Lundman. 2017. “Methodological Challenges in Qualitative Content Analysis: A Discussion Paper.” *Nurse Education Today* 56: 29–34. doi:10.1016/j.nedt.2017.06.002.

Graneheim, U. H., and B. Lundman. 2004. “Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness.” *Nurse Education Today* 24: 105–112. doi:10.1016/j.nedt.2003.10.001.

Haavisto, E., M. Hupli, N. Hahtela, A. Heikkilä, P. Huovila, E.-L. Moisio, L. Yli-Koivisto, and K. Talman. 2019. “Structure of a New Entrance Exam to Select Undergraduate Nursing Student.” *International Journal of Nursing Education Scholarship* 16 (1): 1–15. doi:10.1515/ijnes-2018-0008.

Hughes, P. 2002. “Can We Improve on How We Select Medical Students?” *Journal of the Royal Society of Medicine* 95: 18–22. doi:10.1177/014107680209500106.

Humphrey-Murto, S., J. J. Leddy, T. J. Wood, D. Puddester, and G. Moineau. 2014. “Does Emotional Intelligence at Medical School Predict Future Academic Performance?.” *Academic Medicine* 89: 638–643. doi:10.1097/ACM.0000000000000165.

Johnsen, B. H., P. Meeùs, J. Meling, T. Rogde, J. Eid, R. Esepevik, O. K. Olsen, and J. Sommerfelt-Pettersen. 2012. “Cultural Differences in Emotional Intelligence among Top Officers on Board Merchant Ships.” *International Maritime Health* 63 (2): 90–95.

Kim, H., and M. Stoner. 2008. “Burnout and Turnover Intention among Social Workers: Effects of Role Stress, Job Autonomy and Social Support.” *Administration in Social Work* 32 (3): 5–25. doi:10.1080/03643100801922357.

Kristina, M., A.-M. Tuomikoski, T. Sjögren, M. Koivula, M. Koskimäki, M.-L. Lähteenmäki, H. Mäki-Hakola, et al. 2019. “Development and Testing of an Instrument (Hesoeduco) for Health and Social Care Educators’ Competence in Professional Education.” *Nurse Education Today* 84. Advance online publication. doi:10.1016/j.nedt.2019.104239.

Lane, R. D., D. M. Quinlan, G. E. Schwartz, P. A. Walker, and S. B. Zeitlin. 1990. “The Levels of Emotional Awareness Scale: A Cognitive-Developmental Measure of Emotion.” *Journal of Personality Assessment* 55: 124–134. doi:10.1080/00223891.1990.9674052.

Laschinger, H. K. 2012. “Job and Career Satisfaction and Turnover Intentions of Newly Graduated Nurses.” *Journal of Nursing Management* 20 (4): 472–484. doi:10.1111/j.1365-2834.2011.01293.x.

Lee, O. S., and M. O. Gu. 2014. “Development and Effects of Emotional Intelligence Program for Undergraduate Nursing Students: Mixed Methods Research.” *Journal of Korean Academy of Nursing* 44 (6): 682–696. doi:10.4040/jkan.2014.44.6.682.

Levinger, M., and E. Segev. 2016. “Admission and Completion of Social Work Programs: Who Drops Out and Who Finishes?.” *Journal of Social Work* 18 (1): 23–45. doi:10.1177/1468017316651998.

Lewis, G. M., C. Neville, and N. M. Ashkanasy. 2017. “Emotional Intelligence and Affective Events in Nurse Education: A Narrative Review.” *Nurse Education Today* 53: 34–40. doi:10.1016/j.nedt.2017.04.001.

Libbrecht, N., F. Lievens, B. Carette, and S. Côte. 2014. “Emotional Intelligence Predicts Success in Medical School.” *Emotion* 14 (1): 64–73. doi:10.1037/a0034392.

Mayer, J. D., P. Salovey, and D. R. Caruso. 2002. *The Mayer, Salovey, and Caruso Emotional Intelligence Test: Technical Manual*. 1st ed. Toronto: Multi-Health Systems.

Mayer, J. D., P. Salovey, and D. R. Caruso. 2008. “Emotional Intelligence: New Ability or Eclectic Traits?.” *American Psychologist* 63 (6): 503–517. doi:10.1037/0003-066x.63.6.503.

Mayer, J. D., P. Salovey, D. R. Caruso, and G. Sitarenios. 2003. “Measuring Emotional Intelligence with the MSCEIT V2.0.” *Emotion* 3: 97–105. doi:10.1037/1528-3542.3.1.97.

Michelangelo, L. 2015. “The Overall Impact of Emotional Intelligence on Nursing Students and Nursing.” *Asia-Pacific Journal of Oncology Nursing* 2: 118–124. doi:10.4103/2347-5625.157596.

Ministry of Education and Culture. 2014a. “University of Applied Sciences Act 2014/932. 2014.” Finland. Accessed 18 May 2021. https://www.finlex.fi/en/laki/kaannokset/2014/en20140932_20160563.pdf

Ministry of Education and Culture. 2014b. “Valtioneuvoston Asetus Ammattikorkeakouluista 2014/1129.” Finland. Accessed 18 May 2021. https://www.finlex.fi/fi/laki/ajantasa/2014/20141129

Muyia, M. 2009. “Approaches to and Instruments for Measuring Emotional Intelligence: A Review of Selected Literature.” *Advances in Developing Human Resources* 11 (6): 690–702. doi:10.1177/1523422309360843.

Orak, R. J., M. A. Farahani, F. G. Kelishami, N. Seyedfatemi, S. Banihashemi, and F. Havaei. 2016. “Investigating the Effect of Emotional Intelligence Education on Baccalaureate Nursing Students’ Emotional Intelligence Scores.” *Nurse Education in Practice* 20: 64–69. doi:10.1016/j.nepr.2016.05.007.

Pérez, J. C., K. V. Petrides, and A. Furnham. 2005. “Measuring Trait Emotional Intelligence.” In *Emotional Intelligence: An International Handbook*, edited by R. Schulze and R. D. Roberts, 181–201. Ashland, OH: Hogrefe & Huber.

Petrides, K., R. Pita, and F. Kokkinaki. 2007. “The Location of Trait Emotional Intelligence in Personality Factor Space.” *British Journal of Psychology* 98: 273–289. doi:10.1348/000712606X120618.

Petrides, K. V., and A. Furnham. 2000. “On the Dimensional Structure of Emotional Intelligence.” *Personality and Individual Differences* 29: 313–320. doi:10.1016/S0191-8869(99)00195-6.

Pienimaa, A., E. Haavisto, and K. Talman. forthcoming. “Emotional Intelligence Instruments Used in Healthcare Education: A Systematic Review.” *Journal of Nursing Education*. Accepted for publication.

Polit, D. F., and C. T. Beck. 2012. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. Philadelphia: Wolters Kluwer Health/ Lippincott,Williams & Wilkins.

Rankin, B. 2013. “Emotional Intelligence: Enhancing Values-Based Practice and Compassionate Care in Nursing.” *Journal of Advanced Nursing* 69: 2717–2725. doi:10.1111/jan.12161.

Salminen-Tuomaala, M. H. 2020. “Developing Emotional Intelligence and Situational Awareness through Simulation Coaching.” *Clinical Nursing Studies* 8 (2): 13–20. doi:10.5430/cns.v8n2p13.

Salovey, P., and J. D. Mayer. 1990. “Emotional Intelligence.” *Imagination, Cognition, and Personality* 9 (3): 185–211. doi:10.2190/DUGG-P24E-52WK-6CDG.

Scherer, K. R., E. Clark-Polner, and M. Mortillaro. 2011. “In the Eye of the Beholder? Universality and Cultural Specificity in the Expression and Perception of Emotion.” *International Journal of Psychology* 46 (6): 401–435. doi:10.1080/00207594.2011.626049.

Schlegel, K., and M. Mortillaro. 2019. “The Geneva Emotional Competence Test (Geco): An Ability Measure of Workplace Emotional Intelligence.” *Journal of Applied Psychology* 104 (4): 559–580. doi:10.1037/apl0000365.

Schutte, N. S., J. M. Malouff, L. E. Hall, D. J. Haggerty, J. T. Cooper, C. J. Golden, and L. Dornheim. 1998. “Development and Validation of a Measure of Emotional Intelligence.” *Personality and Individual Differences* 25: 167–177. doi:10.1016/S0191-8869(98)00001-4.

Shanta, L., and L. Gargiulo. 2014. “A Study of the Influence of Nursing Education on Development of Emotional Intelligence.” *Journal of Professional Nursing* 30 (6): 511–520. doi:10.1016/j.profnurs.2014.06.005.

Sharon, D., and K. Grinberg. 2018. “Does the Level of Emotional Intelligence Affect the Degree of Success in Nursing Studies?.” *Nurse Education Today* 64: 21–26. doi:10.1016/j.nedt.2018.01.030.

Talman, K., M. Hupli, P. Puukka, H. Leino-Kilpi, and E. Haavisto. 2018. “The Predictive Value of Two on Site Selection Methods of Undergraduate Nursing Students: A Cohort Study.” *Journal of Nursing Education and Practice* 8 (7): 12–21. doi:10.5430/jnep.v8n7p12.

Talman, K., M. Hupli, R. Rankin, J. Engblom, and E. Haavisto. 2019. “Emotional Intelligence of Nursing Applicants and Factors Related to It: A Cross-Sectional Study.” *Nurse Education Today* 85. Advance online publication. doi:10.1016/j.nedt.2019.104271.

Vipunen—Education Statistics Finland. 2018. Accessed 30 April 2019. https://vipunen.fi/en-gb/_layouts/15/xlviewer.aspx?id=/en-gb/Reports/Haku-%20ja%20valintatiedot%20-%20korkeakoulu%20-%20amk%20-%20koulutusala_EN.xlsb

Zhang, M., and S. E. Cross. 2011. "Emotions in Memories of Success and Failure: A Cultural Perspective." *Emotion* 11 (4): 866–880. doi:10.1037/a0024025.

Zysberg, L., A. Levy, and A. Zisberg. 2011. "Emotional Intelligence in Applicant Selection for Care-Related Academic Programs." *Journal of Psychoeducational Assessment* 29: 27–38. doi:10.1177/0734282910365059.