

# Emotional Intelligence Using Ability Model in Context of Nursing and its Impact on End-Stage Renal Disease Patients: A Narrative Review

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## ABSTRACT

**Background:** Emotional intelligence (EI) using an ability model that contributes to the precise appraisal and emotional expression by oneself and also for others. Regulation of emotion in an effective way enhances motivation, planning and gaining achievement for one's life.

**Objective:** The present review aimed to provide comprehensive information on the ability or branch model of EI in the context of nursing and its impact on chronic disease patients which focuses on haemodialysis patient's decisions on their treatment.

**Methods:** To complete this review, relevant literature was collected from several scientific databases including Science Direct, Google Scholar, Scopus and PubMed. After the complete screening, the obtained information has been summarized and included in the present review.

**Results:** The detailed information about the concept of EI in the context of nursing, EI for end-stage renal disease (ESRD) patients and strength of ability model were discussed. The ability model and components using Meyer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) were also highlighted in this review.

**Conclusions:** EI is needed to handle situations where emotions are an important role apart from other domains in life which include physical and mental wellbeing. The treatment decision needs an emotional approach that can lead patients with chronic illness to have better decisions to increase their quality of life.

**Key Words:** Emotional intelligence, Ability model, Patient-nurse therapeutic relationship, Quality of life, Chronic kidney failure, End stage renal disease

## INTRODUCTION

A person's ability to express and control their own emotion is essential, but so is their own ability to understand, interpret and respond to the emotions of others. Psychologists refer to this ability as emotional intelligence (EI), and some experts even suggest that this can be more important than intelligence quotient (IQ) in the overall success of a person. An ability to perceive can also be referred to as EI, control and overcome emotions. Some studies suggest that EI can be adopted, learned and fortified, while some entitled it as an inborn characteristic. One of the leading researchers on EI had defined as it is an ability to monitor own feelings and emotions.<sup>1</sup> It has been a guide to discriminate among them and the information's is used for thinking and action. EI has an empirical effect on different aspects of our lives and thus

EI has become an important mantra for present-day organizations. Problem-solving for an individual has been classified into four areas of branches.<sup>2</sup> They have divided the mind into three different components known as cognitive which is knowledge, affective which is to rationalize and motivation for self and others.

Excitement is a short, severe and general reaction of an organism to an unexpected emotional state. Some of the problems in the field of EI are an integral part of the life of an individual and play an important role in our actions and understanding our and others' enthusiasm, managing momentary impulses, sympathising with others, and using excitement in thought and understanding. EI is an issue that can direct someone's life and make him/her better adapt to a new situation. Features of EI are completely consistent

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with the nursing profession. The nurse's job requires them to learn self-knowledge, interpersonal and intrapersonal skills, control of enthusiasm, and the extension of sympathy and therapeutic relationships between patients and nurses. In their interactions with colleagues and patients, nurses use the functionality of EI. EI offers a conceptual framework for understanding how effectively individuals identify, process and regulate emotions in themselves and others.<sup>3</sup> EI has been hypothesized to have a protective effect on individuals facing health challenges through mechanisms related to stress processing and regulation.<sup>4</sup> According to Mayer and Salovey<sup>4</sup>, EI leads to someone's ability to perceive, express, understand, use and manage emotion for own self and others. Based on the literature we have found that a person's EI is high if they can able to understand and control their emotions. Therefore, the present review aimed to provide comprehensive information on ability or branch model of EI in context of nursing and the effect for end-stage renal disease (ESRD) patients which focus on haemodialysis patient's decision on their treatment.

## METHODS

To complete this review, relevant literature was collected from several scientific databases including ScienceDirect, Google Scholar, Scopus and PubMed. The categories of keywords used for searching are "Emotional Intelligence" AND "Ability Model" OR "Context of Nursing" OR "Renal Disease Patients" OR "Quality of Life" OR "Chronic Kidney Failure". After the complete screening, the obtained information has been summarized and included in the present review.

## RESULTS

### I. Attributes of Emotional Intelligence

EI research first appeared in academic articles that began in the early 1990s. The theory had gained substantial popularity by the mid-decade and powerful claims were made about its importance in predicting performance. Until now, many investigators have thought of EI in much the same way, and there is a much greater understanding of what EI is, how it can be measured, and what is expected than there was even a decade ago. Although the word EI is used alternately, it is more likely to refer to a set of different positive characteristics and abilities, not all related to emotions, intelligence or their intersection.<sup>5</sup>

Through the field of cognition and affect, the study of EI developed, looking at how emotion influenced thought. Emotion was originally believed to have a negative effect, which can also be considered to be adaptive to thought

and to balance each other.<sup>6</sup> Mayer and Salovey have developed their first theory of EI, which was popularized by Goleman.<sup>7</sup> Goleman also suggested that EI was central to the success of life. Since then, multiple hypotheses have arisen of contradictory viewpoints, and consequently, measured differently.

### II. Concept of EI

According to Bar-on<sup>8</sup>, EI is not a new concept and it is becoming notifiable and very much useful in the context of psychology. It is present from the Vedic times. Numbers of texts are available in these about it. In the modern concept, Alfred Binet who was one of the pioneers of intelligence tests believed that general intelligence might not be the only factor important for social intelligence whereas EI also can be viewed as a subset of social intelligence that has been explained by many psychologists.<sup>9</sup> EI has been discussed in the work of various psychologists and other workers in this field like in Howard Gardener's theory of multiple intelligences and the association can be seen between EI and interpersonal intelligence and intrapersonal intelligence.<sup>10</sup>

Though, EI was established by Salovey & Mayer<sup>1</sup>, and in 1995 by Goleman has published a book on EI.<sup>11</sup> Since then the practice of EI is widely known. Goleman<sup>11</sup> further elaborated the concept of EI and divided it into five basic emotional and social competencies-self-awareness, self-regulation, motivation, empathy and social skills. In General, the models of EI have classified it as individual intelligence and social intelligence. Salovey and Mayer<sup>1</sup> revealed EI as understanding and also managing owns and others emotions. EI can be divided into five attributes namely current environment for example daily life hassle and stressful situations, emotional literacy for example self-awareness, emotional awareness, emotional expression and emotional awareness of others.

Other than that the EI competencies such as intentionality, creativity, resilience, interpersonal connections and constructive discontent, EI values and attitudes that include a person's outlook, compassion, intuition, trust radius, personal power and integrated EI outcomes such as general health, quality of life, relationship quotient and optimal performance. EI is also referred as "an array of non-cognitive capabilities, competencies and skills which influence one's ability to succeed in coping with environmental demands and pressures", it can be improved by training and lack of which can lead to emotional problems and failure.<sup>12</sup>

### III. Emotional Intelligence in the Context of Nursing

As stated by Petrides<sup>13</sup>, research for EI in nursing could be more effective if it is well developed and well utilized for the conceptual peculiarity of EI model were adopted and applied in nursing research. Ability EI is considered a cognitive ability

related to judgemental and problem-solving in the domain of emotion.<sup>14</sup> Researchers need to study not only the structural characteristics of nurses such as education and staffing levels but also the interpersonal and extra-personal characteristics because of the nature of the nurse-patient relationship. This will offer a fuller understanding of the influence that nurses have on patient outcomes such that strategies might be developed to improve patients care and their quality of life.

The first element of self-compassion, common humanity, refers to the shared human experience. The stressful situation is experienced by every human. Mostly this occurs due to the external factors, such as culture, genetics, and environmental conditions impact behaviours and relationships with others. The integral recognition of our common humanity by a person and the ability to recognize the external factors that make us unique can enable us to be non-judgmental and understanding. Self-kindness requires self-understanding when we are struggling or feeling inadequate without being self-critical. When one accepts painful experiences with self-kindness, one is more apt to experience that pain calmly and rationally, rather than with anger and frustration. The third element of self-compassion is mindfulness, a mental state whereby one can observe feelings and events without exaggerating, denying or suppressing them. Mindfulness allows for a larger perspective on the situation. Being attentive implies a balanced approach to negative emotions.

Well-being, self-control, emotionality and sociability are four factors that are important in EI. The factor self-control contains the components of emotion regulation, stress management and low impulsiveness. Another of the four factors, emotionality involves emotional awareness of self and others, communication of emotion, abilities in relationships and empathy. People who perceive themselves as emotionally high performers can be clearer about their own emotions and communication. They can take another's perspective and might have more fulfilling relationships. The last element, social abilities, the ability to manage emotions and assertiveness.

#### IV. Emotional Intelligence for ESRD Patients

Haemodialysis is a life-sustaining procedure for ESRD patients, although this procedure is needed to sustain a patient's life an accepted consequence of haemodialysis. The mental and social health of haemodialysis patients depends on the amount of stress and mental pressure whereby emotionally they have disturbance and can lead to isolating self.<sup>15</sup> Chronic kidney failure (CKF) patients are treated according to the illness, however, their mental and social wellbeing affect them which can affect their quality of life.<sup>16</sup>

While haemodialysis increases the life span of patients, it affects all aspects of natural life and creates many problems for the patient, including hypotension, nausea and vomiting,

sweating, seizures and air embolism which may cause entry of air into the patient's vascular systems. Other complications of haemodialysis include restlessness, lack of control over the treatment process, limited activity due to changes in diet, sleep disturbances, changes in body image, inability to communicate with friends and family, mood changes, loss of social security, creating dependence on others changes, and change in the quality of life.<sup>17</sup>

People with chronic diseases may experience more problems including low self-esteem, emotional and behavioural problems that CKF is not an exception in this regard. The incidence of CKF and treatment procedures, including haemodialysis, can create some complications for the patient. Eventually leading to lifestyle changes, health status and is the role in society and changes in quality of life.<sup>18</sup> Mental and social health of haemodialysis patients depends largely on the amount of stress which cause them to have poor mental status and mental problems and social isolation. CKF patients are treated to provide for their health, while several physicals, mental and social stressors affect them overshadowing the quality of life for dialysis patients. Therefore, studying the concept of quality of life haemodialysis patients by a nurse is a very important issue.<sup>19</sup> In contrast with other healthcare workers, nurses are the caregivers in hospitals who appear to stand out. To ensure an ideal atmosphere for the well-being of their patients, they are constantly on the front lines of the battle.

#### V. Emotional Intelligence Using Ability Model

The most initial model was formed by Salovey and Mayer.<sup>1</sup> Their initial conception presented EI as a complex construct consisting of three abilities namely 1) The identification and expression of emotions 2) The regulation of emotions 3) The Application of emotional information to thinking and action 3) The Application of emotional information to thinking and action. It included only cognitive abilities associated with the processing of emotional information. Daniel Goleman popularized this concept in 1997, through his book and the attention to Corporate America was turned towards EI.

It has been described by Mayer and Salovey<sup>2</sup>, that perception, appraisal and emotional expression through dimension as a person's ability to recognise and differentiate emotion in oneself and others. This process takes place in a person's feelings, body arousal and thoughts. Once a person experiences emotions, they will consequently the emotions can be captured and recognized. With that, a person can distinguish between a real and inaccurate expression of feelings, as well as differentiate between the honest and dishonest expression of feeling. Intelligence can also be referred to as an ability by giving a situation to a person to solve and from there we evaluate the result patterns of correct answers.<sup>19</sup> It can be seen that the models of EI are based on different conceptualizations and hence lead to an interesting mixture

of confusions and controversies regarding the best model, which represent EI.

The ability model views EI as a traditional intelligence, made up of a set of specific, interrelated abilities. This model states that emotions are evolved signal systems and each emotion conveys a specific meaning. For example, fear conveys the meaning that one is under attack and will need to escape.<sup>2</sup> The ability model also states that EI can be learned and it develops with age. According to the ability model, EI can be divided into four branches, which are explained below. The ability to perceive emotions involves non-verbal expression through face, voice and other communication channels and perception of emotions, and the capacity to recognize emotions in other's faces and postural expressions.

Ability to use emotion to facilitate thought deals with the ability of emotions to assist in thinking. Part of intelligence involves the ability to build a knowledge base of previous emotional experiences, from which we can draw information for thinking. An individual can use their own emotion in reasoning, critical thinking, problem-solving and interpersonal communication.<sup>2</sup> A person's judgmental and intense emotion will help in rationalizing and also for the memory process. Therefore, an emotionally intelligent person can make decisions that can be useful in their critical condition. Understanding emotions of own self and others involve the capacity to analyse emotions, appreciate their probable trends over time and understand their outcomes. A difference between emotion and identifying it can be referred to as understanding emotions. A feeling of pleasure is a feeling of being happy and satisfied whereas a feeling gloomy can make a person shed tears of sadness.

Managing emotions is the ability to regulate emotions, according to an individual's environment, self-awareness and social awareness. For example, to control anger, we ask someone to count from 1 to 10, before reacting.<sup>2</sup> This is to enhance a person to have cognitive and emotional growth of an individual. A relevant thinking process will guide the thinking process to plan. If a person has effective regulation of emotion, they can tend to accept the feeling of pleasant and unpleasant. The four branch model uses the Meyer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) to measure EI. The MSCEIT is the most recent version and measures the four branches in eight tasks (two in each branch). MSCEIT uses both expert and consensus scoring approaches and is available commercially with Multi-Health Systems, Canada.

Human intelligence is among the most frequently studied construct in the field of individual differences. The theoretical foundation is empirically demonstrated in the use of

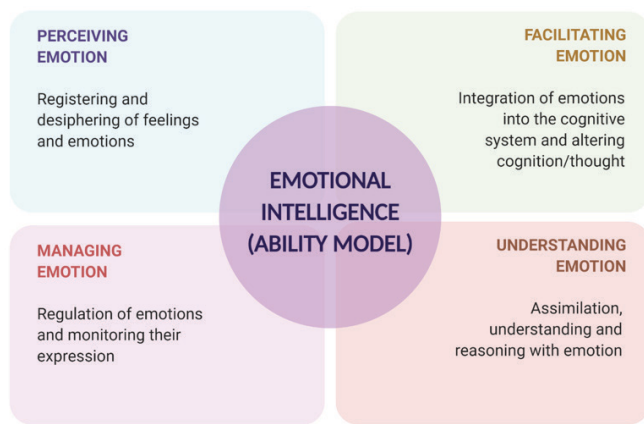
cognitive ability tests.<sup>20</sup> However, some researchers argue that IQ is a rather narrow concept. Therefore, cognitive intelligence is a potential predictor of educational and professional success, it is nonetheless an imperfect predictor of successful functioning that relies not simply on cognitive intelligence but rather on the relatively new construct of EI. Historically, at least part of this suggestion may be traced to Goleman.<sup>11</sup> He has viewed that EI is much more important than cognitive intelligence and personality. These models can be classified into two fairly distinct groups that is ability models and mixed models.

Except for Mayer & Salovey's ability model, existing conceptualizations of EI are mixed, and so expand the meaning of this construct by explicitly incorporating a wide range of personality characteristics. However, ability versus mixed models of EI not only vary considerably regarding the scope of conceptualizations but also concerning the proposed instruments used to measure EI. Mayer and Salovey,<sup>2</sup> presented their revised and refined conceptualization of EI that strictly constrain EI to the mental ability concept and separates it from classical social-emotional personality traits. EI as a collection of emotional abilities can be divided into four classes or branches. The best model of EI is the ability model whereby it follows a very common definition known as managing emotion of own self and others.<sup>21</sup>

Mayer et al.<sup>22</sup> claimed that only psychometric performance tests of the proposed emotion-related abilities, enabling discrimination between correct and incorrect responses, can demonstrate and prove the existence of EI. Mayer has developed the Multifactor Emotional Intelligence Scale (MEIS) that consists of 12 performance tasks designed to measure the four branches. Hence, Robert et al. have revealed that MEIS had problem-related to measurement and scoring. To resolve some of the problems, and as well to improve the psychometric qualities of the MEIS, Mayer and colleagues developed the MSCEIT. Mayer and Salovey<sup>2</sup>, has argued that EI is based on the ability of a person and not a trait which has been supported by Goleman<sup>11</sup>, in which it will increase by age and teaching a person. The instrument used to assess EI by Mayer and Salovey is the best can be used to differentiate ability.<sup>23</sup>

Figure 1 indicates the branches of the ability model of EI. The four branches that are explained are used in the context of mental abilities, and the EI area, some research focuses on specific abilities related to emotional intelligence, and other research examines many abilities together. Specific ability models examine a particular realm of EI in depth. The integrative approach to EI can provide a reasonable first overview of an area because it draws together examples of the specific areas that make up reasoning about emotions and emotional information (Figure 1).





**Figure 1:** Ability Model of Emotional Intelligence.

## VI. Strength of Ability Model

In the course of the last two decades, EI researchers have developed three major models and they are the ability, mixed and trait EI models. The main difference in these three categories is whether the author's model perceives their EI as an innate human trait or competence that can be systematically developed over time. Thus, measuring EI differs per model varying from strict ability testing with right and wrong answers to subjective self-report types of measurement. Ability models regard EI as a pure form of mental ability and thus a pure intelligence.

In contrast, mixed models of EI combine mental ability with personality characteristics such as optimism and well-being. Wherein, trait models of EI refer to an individual's self-perceptions of their emotional abilities. The ability model of EI is proposed by John Mayer and Peter Salovey.<sup>6</sup> John Mayer and Peter Salovey first coined the term "emotional intelligence" in 1990 and have continued to research the significance of the constructs.<sup>6</sup> Their pure theory of EI integrates key ideas from the field of intelligence and emotion. They further, mentioned that EI is based on a model of intelligence. It implies that EI consists of two areas: the ability to perceive, react and manipulate emotional information without necessarily knowing it, and the ability to understand and control emotions without necessarily perceiving feelings well or experiencing them entirely. He had developed four branches for this model that has been discussed earlier.<sup>6</sup> Conception of EI strives to define EI within standard criteria for new intelligence. Therefore, the ability-based model views emotions as a useful source of information that helps one to work in the social environment.

The measurement of Mayer & Salovey's model of EI is the MSCEIT which was formed on a sample of 5000 men and women. It has been designed for individuals 17 years of age or older and aims to measure the four abilities outlined in Salovey & Meyer's model of EI with 141 items. Each ability that is the perception, facilitation of thought, understand-

ing and regulation of emotions is measured by using specific tasks. Perception of emotions is measured by rating the extend type of emotion expressed on different types of pictures. Thinking facilitation is calculated by basing individuals to draw comparisons, such as light, colour and temperature, as well as emotions and feelings, between emotions and physical sensations. Understanding is assessed by asking the subject to explain how emotions can blend from other emotions, such as how emotions, such as anger and rage, can shift from one to another. Regulation of emotions is measured by people having chosen effective self and other management techniques.

## DISCUSSION

A new concept that fascinates the world of academia, business and health care is known as Emotional Intelligence. While their appeal seems almost intuitive, people have only started to appreciate the relevance of this concept by understanding the very nature of relationships and our effectiveness in working with others. A study stated that many different ways can be used to conceptualize the ability and the most significant is facial expression.<sup>24</sup> Some individuals have argued that when making decisions and taking actions, emotions are just as important as rational, intellectual thought. In the nursing profession emotions are useful when facing life-and-death decisions, all data, including data obtained from emotions, can be considered critical. Improving in decision making and problem-solving is one reason for identifying EI as a feature of effective nursing performance.

Many other explanations have been identified why EI can be linked to a successful performance.<sup>25, 27</sup> One such reason is that emotions are essential to creating and maintaining a caring environment.<sup>28</sup> The nurse's ability to establish a rapport with patients, manage their own emotions, and empathize with the patient is essential to providing quality care. Improving EI skills can help nurses deal with the healthcare environment's emotional demands, which can be stressful and exhausting and potentially lead to burnout. Whitley-Hunter,<sup>29</sup> revealed the relationship between EI and nursing performance in clinical staff nurses and reported that there is a significant correlation between these two variables in 27 clinical staff nurses in the United States. However, the relationship between EI and nursing performance has not been established in undergraduate and graduate nursing students.

Many researchers understand that EI awareness is a key factor.<sup>30</sup> A lack of self-awareness of one's emotional relationships and friendships.<sup>11</sup> EI can also be understood and interpreted as the ability to combine emotion with intellect and use emotions as a tool for problem-solving and decision making that allows someone to fulfil life from both an empirical and a theoretical perspective EI is an important topic of

relevance to nursing. The increasing frequency of published empirical studies the growing interest in this area of research around the world. In 2000, the number of EI related articles published began to rise, with a major peak in 2004.

The findings of EI enhance several aspects of professional nursing importance. The true viewpoint in nursing is linked to basic human needs about wellbeing and suffering experiences. Nurses need to have emotional emphatic and understand the insecurity of patients while at the same time being able to contrast between their own needs of the patient and prevent isolating themselves from the way they think and behave as a professional nurse. The ability to emphasize and communicate productively is a major requirement in nursing, as it emphasizes human relationships while non-verbal communication may reveal a lifetime of emotions. EI plays a meaningful role in both the perception of the moral dimension and insensitivity in clinical practice.

EI may also have consequences in nursing for the advancement of wellbeing and the quality of working life. EI has the potential to enable nurses to cope better with stressful situations and therefore contribute positively to the maintenance of physical and mental health together with career pathways. Positive emotional wellbeing seems to be affected by one's ability to actively control feelings and build impulses that are aligned with core values or personal beliefs. Several EI research studies have shown proof of a strong correlation between measured EI and efficient leadership results in many professional disciplines, including nursing. There are empirical findings within the nursing discipline that provide proof of the value of EI as a characteristic for nurse leaders. In one Meta-Analysis performed, EI performance research studies revealed a constructive correlation between EI and measures of performance. In times of transition, these results include leader performance, retention, positive fiscal results, customer loyalty, and organisational resilience.

In nursing, these findings are particularly important as the whole health care sector is entering a time of dramatic change. Evidence also shows that EI has a positive relationship with the development of leadership in small groups. In addition, there is evidence that in both nurse leaders and leaders in other careers, peer coaching techniques can be effective in improving EI. In nursing, EI capacity has an important position, where compassion and care are two pillars of the profession. Nurses must be able to recognize, use, control, and appreciate feelings not only in themselves but also concerning others, to provide compassionate treatment. EI capacity to think in lectures is not to be considered and must be improved by active listening, interaction and involvement.

A handful of methods for improving EI skills are supported by studies. Most of the study incorporates EI and leadership development together; the use of coaching is also included in other studies. One of the first studies examining EI de-

velopment showed that, relative to a group that received no training or education, EI scores increased with education and training in small groups. The study also showed that, six months after the intervention, improved EI scores continued to increase. Some recent evidence is also available to support the use of peer coaching to improve EI. This study showed that the participants strengthened their understanding and knowledge of their EI skills by using peer coaching.

Emotion has historically been seen as an obstacle to rational thinking and professionalism, generating the impression that emotions should be regulated. However, EI can be termed as a motivating factor as well.<sup>31</sup> At present, theorists and researchers generally describe many models of EI as general intelligence, a set of mental skills related to accurate EI process, a set of mental skills that relate to accurate processing of emotion-relevant intelligence.<sup>6</sup>

A few previous studies have been discussed the importance of emotional states on physical health.<sup>32</sup> Negative emotional conditions were believed to be correlated with unhealthy patterns of physiology functioning, whereas positive emotional conditions were associated with healthier patterns of cardiovascular activity and immune system response.<sup>33</sup>

Individuals who can control emotional states are healthier because they can recognise and assess emotional states correctly can know the appropriate time and purpose to communicate their emotions and can regulate their mood states effectively.<sup>32</sup> According to Taylor<sup>34</sup>, people with high EI levels can better deal with life's difficulties and have the ability to control feelings that are both good for psychological and physical health. In addition, it was also reported that EI individuals would be healthier than those with lower EI, who can express, understand, and control feelings, and who can cope with stress.<sup>35</sup>

In addition, EI was found to be positively associated with certain psychological well-being measures that included life satisfaction and happiness, but negatively correlated with depression, stress and loneliness.<sup>36</sup> EI was thought to be a dynamic construct that involved emotion, personal and social skills as part of self-assessment of emotion on oneself and another, establishing and sustaining relationships with others, ability to convey emotion, regulation of emotions, self-control, and solving effective problems.<sup>37</sup>

## CONCLUSIONS

The ability model suggested that EI can be referred to as operationalized also as the mental ability by using the MSCEIT which is a reliable measurement tool that can predict significant psychological and behavioural outcomes. Chronic illness patients such as CKF and ESRD patients that having depression and relationship problems can be assessed for EI

for further management. The treatment decision will need an emotional approach that can lead those patients with chronic illness to have a better decision to increase their quality of life. However, preliminary and more studies will be needed to test the validity of MSCEIT. Future research may reveal more on individuals with the level of EI and by using the MSCEIT the ability according to the branches need to be identified. EI is needed to handle situations where emotions are an important role apart from other domains in life which include physical and mental wellbeing.

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## Conflict of Interest

The authors declare that they have no known conflicts of interest.

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## Authors Contributions

K.S. conceived the idea, designed, collected the literature, interpreted the data, analyzed the data, drafted and revised the manuscript. All the authors have made noteworthy contributions to the study design, data collection, review and interpretation; have engaged in the drafting or revision of the article; have agreed to submit to the current journal; have given final approval of the version to be published; and have agreed to be responsible for all aspects of the work.

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