



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 27, 2022

**A new decade
for social changes**

www.techniumscience.com

ISSN 2668-7798



9 772668 779000

Emotional Intelligence & ICTs for Women and Equality

Chara Papoutsi^{1,2}, Irene Chaidi^{1,3}, Athanasios Drigas¹, Charalabos Skianis²,
Charalampos Karagiannidis³

¹Media Lab Mind-Brain R&D IIT, N.C.S.R. 'Demokritos', Athens, ²Information & Communication Systems Engineering Department, University of the Aegean, Samos,

³Department of Special Education, University of Thessaly, Volos

dr@iit.demokritos.gr¹, papoutsi.xara@yahoo.com^{1,2}, irhaidi@gmail.com^{1,3},
cskianis@aegean.gr², karagian@uth.gr³

Abstract. Gender equality is a fundamental human right and is essential for the existence of peaceful societies, with human resources that are fully utilized and sustainable development. Emotional Intelligence is not gender biased and it is an integral key to successful personal and working life. In (Drigas & Papoutsi, 2021) there was an attempt to construct a reliable and valid measurement instrument of emotional intelligence with 81 items, based on the theoretical nine-layer pyramid model of emotional intelligence. The sample was consisted of 520 teachers (129 males and 391 females) from primary and secondary school grade and the data was collected with the Nine Layer Pyramid Model Questionnaire for Emotional Intelligence. Among other results we examined gender differences in emotional intelligence. The results revealed some differences between the two genders on emotional intelligence with women scoring higher on overall emotional intelligence. This article also provides an overview of the prevailing emotional intelligence status of both sexes as it emerges through research, beliefs about emotions between women and men, and suggestions for avoiding stereotypes and proper interventions for raising emotional both men and women. Finally, a reference is made to technology in its various forms, including Information and Communication Technology (ICT), which is also associated with emotional intelligence and has great potential to empower women worldwide and promote gender equality

Keywords. Emotional Intelligence, Gender Differences, Women, Equality, ICTs, Social Stereotypes

1. Introduction

In recent years, most countries have shown a growing commitment to gender equality through supportive actions. Many studies have shown that gender is not an unchanging physical entity, but a product of social and cultural conditions that change over time. The content of the concept of gender is therefore also a social construction with a historical dimension and is constructed - reproduced through a grid of relations both between the sexes and within them. The role of both sexes and especially women, has changed rapidly in recent years in almost the entire developed and developing world.

Gender Equality was made part of international human rights law by the Universal Declaration of Human Rights, which was adopted by the UN General Assembly on 10

December 1948. According to this declaration it was recognized that “All human beings are born free and equal in dignity and rights” and that “everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion ... birth or other status.” (Galey, 1984; Reanda, 1981; Tinker, 1981; United Nations, n.d.). In 1979, the General Assembly adopted the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which is often described as an International Declaration of Rights for Women. In its 30 articles, the Convention explicitly defines discrimination against women and sets up an agenda for national action to end such discrimination (Assembly, 1979). In present Convention and more specifically in Article 5: “States Parties shall take all appropriate measures: (a) To modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes or on stereotyped roles for men and women” (United Nations, 1979).

Gender equality is at the very heart of human rights. UN Human Rights are committed to working with States, national human rights institutions (NHRIs), civil society, and other stakeholders worldwide to transform discriminatory social norms and harmful gender stereotypes into more equal social structures and power relations for all genders (Bachelet, 2021). In 2015, the General Assembly of the United Nations (UN) adopted 17 Sustainable Development Goals (SDGs) to mobilize a global effort to end poverty by 2030 (as a goal primarily attributed either to the economic, environmental or social system) (Barbier & Burgess, 2017). The fifth goal specializes in gender equality and the empowerment of women and girls (social system) (Barbier & Burgess, 2017; Nunes, Lee, & O'Riordan, 2016).

Gender norms and attitudes are often understood as particularly resistant to change (Kitterød & Nadim, 2020). The pursuit of gender equality is now widely endorsed as a central policy goal by governments and international organizations around the world (Inglehart & Norris, 2003). Of the various egalitarian movements that have campaigned for social change over the years (Squires, 2007) the women's movement is frequently viewed as one of the most successful. Researchers, psychologists and sociologists who deal with the concept of gender, distinguish between biological (sex) and social (gender) (Turner, 1999). The biological refers to the characteristics that one acquires at birth e.g., hormones, reproductive organs while gender refers to the social, cultural and psychological characteristics, stereotypes and roles that society defines for men and women.

Achieving gender equity is a complex subject that can't be summed up in just a few lines. But research is continuing to show that an element that affects how these gender issues are played out in the world is how male and female inner emotional competencies are interpreted and acted upon. This directly correlates to the emotional intelligence.

The concept of EI in recent years, has aroused lively interest in both the scientific and the general public. Some scientists and researchers in the general scientific field of Psychology, and in particular Organizational Psychology, believe that this concept can provide a satisfactory explanation as to what is responsible for the low performance of individuals, whether it is school performance or professional one, especially when their cognitive abilities are satisfactory (Ciarrochi, Forgas, & Mayer, 2006).

Emotional Intelligence can be defined as “A set of abilities and skills that a person must acquire gradually and hierarchically to find emotional self-fulfillment. It is the response to emotional stimuli, the recognition – expression of emotions, the full awareness and management of our own emotions but also the emotions of others, the social skills for better intrapersonal, interpersonal and working relationships, the empathy and compassion, the accurate

discrimination of emotions with the ultimate aim of the emotional development of our potential, self – actualization, transcendence and finally the unity of emotions because humans are part of a united world” (Drigas & Papoutsi, 2021). Emotional intelligence (EI) refers broadly to skills and/or abilities that enable awareness of the emotional states of oneself and others and the capacity to regulate or use emotions to positively affect role performance (Mattingly & Kraiger, 2019).

On the other hand, digitalization has radically changed most aspects of our lives in ways that create countless opportunities as well as new challenges. The empowerment of women in the field of technology and digital training is essential and will help to eliminate inequalities and promote equality between men and women (Carvalho, 2020; Pappas et al., 2017). According to Sharma (2003) ICTs can be “powerful tools for women to overcome discrimination, achieve full equality, well-being and participation in the decisions that determine their lives and the future of their communities ...”. Furthermore, emotional intelligence was found to have an effect on the information technology skills in terms of self-confident level in technological learning (Marzuki, Mustaffa, & Mat Saad, 2015). Increasing women's participation in the digital sector can have a significant impact on combating gender inequality, stereotypes and discrimination (Hilbert, 2011), including emotional disparities, and reinforcing them. Research has shown that although women believe that ICT skills are among the most crucial factors of success in the 21st century, however, they state that they feel underrepresented in the digital era (Pappas et al., 2018). UNESCO had published a toolkit to promote the inclusion of ICTs [94-98] for lifelong learning and strengthening social unity (Mohebi, 2019) and there are research showing that ICT tools and new technologies can develop EI (Papoutsi, Drigas, & Skianis, 2021).

A review of the literature on EI gives a clear idea of the significant differences between men and women in aspects related to the emotional world. Basically, male and females naturally differ on the basis of their physiological and biological characteristics. They also differ in various psychological attributes. Regarding emotional differences, these are considered as something natural, hereditary and innate, while in fact they are the result of gender roles (Kong, 2017), which have been assimilated from pre-school age.

2. Emotional Intelligence and gender differences – Results from literature review and causes

2.1. Literature Review

Gender affects all aspects of life including personal relationships, working relationships, practices and functions as a set of demands and standards of society. Any differences in emotional intelligence are attributed to gender stereotyped socialization, based on dominant, hierarchical gender patterns, gender segregation of roles occurring in the family, educational, or work environment (Hall and Mast, 2008; Lopes, Salovey, and Straus, 2003). From childhood where abilities are formed, the traditional distribution of roles, a very important part of the general socialization process, prepares boys and girls for different and evaluatively hierarchical roles (Delphy, 2008).

The existence of differences between the two sexes in terms of emotional intelligence has been the subject of several studies. This relationship is observed from childhood and continues into adulthood (Sanchez-Nunez et al., 2008). Research that has investigated this subject often presents conflicting results. There is research that shows that the two sexes do not differentiate in emotional intelligence (Shehzad & Mahmood, 2013), and others that demonstrate differences between men and women. In general, the differences that have been

observed between the two sexes are small and relate to certain sub-dimensions of emotional intelligence and refer mainly to research conducted with the method of self-reporting. There are several studies that find differences in perceived and objective emotional intelligence between the sexes (Petrides & Furnham, 2000). The difference between men and women in terms of EI is inconsistent in different parts of the world and in the different samples.

Mayer et al. (2000) who examined the emotional intelligence as an ability found that women are somewhat more capable of recognizing emotions, of understanding them, and of social adjustment. In studies conducted with the self-report method, women appeared to have better interpersonal skills, more empathy, social responsibility and better general EI (Christov-Moore et al., 2014; Das & Sahu, 2015; Doherty, Cronin, & Offiah, 2013; McIntyre, 2010; Tsaousis & Kazi, 2013;) while men have better intrapersonal skills (Bar-On et al., 2000; Nasir & Masrur, 2010; Petrides & Furnham, 2000; Sanchez-Nunez et al., 2008). As far as research is concerned men are also better at controlling impulsivity and regulating their emotions, more resilient to stress, adapting better to new situations, and being more optimistic and have more self-esteem (Bar-On, 2000; Bindu & Thomas, 2006; Tsaousis & Kazi, 2013).

In contrast, Grossman and Wood (1993) argue that there are no differences between the sexes in the self-expression of emotions, but in their intensity. In addition, Goleman (1998) argues that there are no gender differences in emotional intelligence.

The research of Meshkat and Nejati (2017) aimed to investigate whether students of different sexes in three universities in Iran have different levels of emotional intelligence. As a general conclusion, the researchers expressed that there is no significant difference in overall emotional intelligence. A small difference was found in the individual dimensions of emotional intelligence, where we see that women according to the findings are superior in emotional self-knowledge, management of interpersonal relationships, empathy and self-esteem, with the latter be a surprise for the researchers and suggested further investigation.

Kong (2017), using a sample consisted of 1160 Chinese individuals aged 13–40 years examined individual emotional differences using The Wong and Law Emotional Intelligence Scale (WLEIS). Relative to females, males had higher scores on self-emotion appraisals, use of emotion, and regulation of emotion. As far as TEI (Trait Emotional Intelligence) is concerned there are findings that show females scoring higher than males (Mikolajczak et al., 2007) while other findings show that men had higher TEI scores (Kong & Zhao, 2012).

Research by Cabello et al. (2016) took place in Spain and showed that emotional intelligence is related and influenced by gender. More specifically, it showed that women scored significantly higher than men in the MSCEIT (Mayer-Salovey-Caruso Emotional Intelligence Test) test, but also more specifically in the following manifestations: in perceiving emotions, in facilitative thinking, in understanding emotions and in managing them.

The research by Fernandez-Berrocal et al., (2012) took place in 559 people and aimed to investigate the relationship between emotional intelligence and gender in relation to age. Through the results they concluded that women have a higher index of emotional intelligence than men. Day and Carrol (2004) conducted a study of 246 people to see if performance was related to emotional intelligence, gender, and experience, and concluded that women excelled in overall emotional intelligence compared to men.

In Petrides, in the trait EI questionnaire's technical manual (2009), males scored more highly on Global EI and the factors of Self-Control (traits pertaining to the regulation of emotions and impulses) and Sociability (traits pertaining to the interpersonal utilization and management of emotions), with females scoring more highly on Emotionality (traits pertaining to the perception and expression of emotions). There are other studies that argue in favor of

these results in the international literature demonstrating males having higher level of EI as compared to females (Ajmal et al., 2017; Shahzad & Bagum, 2012). Ability EI appears to vary significantly with gender. While numerous studies of ability EI using such instruments as the MSCEIT have reported women to perform significantly better than men (Cabello et al., 2016; Farrelly & Austin, 2007; Joseph & Newman, 2010), the effect size of gender varies substantially. Some studies have reported small gender differences, while others have reported medium differences (Cabello & Fernández-Berrocal, 2015).

In terms of innate qualities, there do seem to be some gendered differences when it comes to experiencing empathy. A study in 2012 showed that women were more adept at recognizing and processing facial expressions, while men were better at recognizing behavior such as aggression and intimidation (Kret & De Gelder, 2012).

Furthermore, in more studies women are superior in decoding emotions and in emotion recognition tasks (Hall et al., 2000; Collignon et al., 2010) while there are others where no significant differences were noticed in emotional perception of target emotions (Fischer, Kret, & Broekens, 2018). Connolly et al., (2019) examined the issue of emotional intelligence between the two sexes, in the context of recognizing emotions. Initially, the research team asked men and women to rate a series of photographs, each of which contained a person expressing one of five key emotions (anger, disgust, fear, happiness, or sadness). Regarding the differences between the sexes, the researchers found that there was, for example, no clear advantage in accuracy on the part of women, as some assumed. However, there were some interesting clues: Women were significantly better at recognizing disgust and sadness while men were significantly better at recognizing happiness.

Studies carried out in Africa, East Asia (Singapore, China, and Japan), Europe, and the United States have also shown male overestimation and female underestimation of their EI (Szymanowicz & Furnham, 2013).

2.2. Causes for the differences in Emotional Intelligence

The differences that have been observed in the various dimensions of emotional intelligence, refer mainly to research conducted by the method of self-reporting.

According to Shaffer & Kipp (2013), the pattern of all genders is a value, a motivation or a set of behaviors that are more or less consistent with one or the other sex. Together, gender role models are a description of how men and women are expected to behave and reflect the stereotypes by which members of each gender are categorized. For example, the role of women as mothers is largely responsible for the patterns and stereotypes that have prevailed in many societies. In the other hand the role of men was focused more for financial comfort and security in the family. The stereotypical social perceptions of both sexes as well as the discrimination and inequalities that arise against women are not due solely to biological differences between the sexes. On the contrary, the perpetuation of a sociocultural phenomenon reproduces the stereotypical social perceptions of both sexes through the process of socialization of individuals.

A possible logical explanation for the differences between the two sexes is the way they are raised and socialized where girls are encouraged to perceive and express emotions more than boys. At the social level there are differences between the experiences, expectations and roles of boys and girls something that begins immediately after their birth (Neisser, 1996). Parents often behave differently in girls and boys in terms of a range of parameters of their socialization. This behavior includes gender differences in behavior and attitudes. Parents and other important people reinforce certain behaviors and discourage or disapprove others. Another possible explanation is that women are biologically oriented to better understand emotions

(Fernández-Berrocal et al., 2012; Mayer, 1999). Modern scientific research focuses on differences between men and women in the size or shape of particular nerve structures in the brain dedicated to emotional processing and cerebral processing of emotions (Baron-Cohen, 2002; Craig et al., 2009; Jaušovec & Jaušovec, 2005). Both boys and girls have incorporated in their self-perception the characteristics contained in the stereotype of their gender.

Gender acquires a symbolic function and is interpreted differently from culture to culture. This view of gender as a cultural construct could explain any differences in the emotional intelligence of women versus men, as they are categorized and raised as husbands, mothers, and take on specific roles within societies. Taking into account the influence of Foucault's thought (1989), gender is formed through a process of social practice and therefore is constantly subject to change depending on the social organization and the dominant discourses. This means that women's best relationship with the recognition and expression of emotions was built on a cultural basis and is largely related to gender ideology.

3. Materials and Methods

In the study of Drigas & Papoutsi (2021) the Nine Layer Pyramid Model Questionnaire of Emotional Intelligence was constructed to measure emotional intelligence and assess the possession of each level of the pyramid model through self-report. The questionnaire was based on the model of the emotional intelligence pyramid and all the questions are related to the nine levels (Drigas & Papoutsi, 2018). The nine layers of the pyramid are: Emotional Stimuli, Emotion Recognition, Perception-Expression of Emotions, Self-Awareness, Self-Management, Social-Awareness, Empathy, Discrimination of Emotions, Social Skills, Expertise in Emotions, Universality of Emotions, Self-Actualization, Transcendence and Emotional Unity. In the Pyramid Model of Emotional Intelligence, the concept of self-realization and self-fulfillment is at the highest levels as in the Maslow pyramid and is related to one's tendency to become actualized in what he is potentially and capable of (Maslow 1981; 1943). In the research there were six research hypotheses, one related to gender differences in emotional intelligence.

The research tool (Nine Layer Pyramid Model Questionnaire of Emotional Intelligence) was consisted of 81 questions measuring different layers of Emotional Intelligence pyramid model. Cronbach's Alpha were acceptable for all subscales except for Emotional Recognition where the results were borderline (Table 1). The sample was consisted of 520 participants, 129 males (24.8%) and 391 females (75.2%).

Table 1. Cronbach's Alpha for Emotional Intelligence subscales

Score	Cronbach's Alpha	N of Items
Emotional Stimuli	0.788	9
Emotion Recognition	0.637	9
Self-Awareness	0.776	9
Self-Management	0.700	9
Social-Awareness	0.853	9
Social Skills	0.835	9

Universality of Emotions	0.876	9
Transcendence	0.859	9
Emotional Unity	0.885	9
Emotional Intelligence	0.961	81

4. Results

As for the gender differences, a total of 10 T-tests were conducted that revealed 5 statistically significant results. The detailed T-test results and mean differences are presented in Table 2. Test results showed a significant effect of gender was upon Emotional Stimuli ($t(518) = -3.217, p = 0.001$), upon Emotional Recognition ($t(518) = -3.786, p < 0.001$) upon Universality of Emotions ($t(518) = -2.086, p = 0.038$), upon Transcendence ($t(518) = -2.017, p = 0.044$) and upon the totality of Emotional Intelligence ($t(518) = -1.996, p = 0.047$). For all the significant differences, female teachers always reported higher scores compared to males.

Table 2. P-values and mean differences of EI between male and female teachers

Mean differences	Males	Females	P-value (Gender)
Emotional Stimuli	3.93	4.09	0.001
Emotion Recognition	3.88	4.03	0.000
Self-Awareness	3.96	4.02	0.170
Self-Management	3.62	3.53	0.086
Social-Awareness	4.09	4.18	0.086
Social Skills	3.96	4.02	0.226
Universality of Emotions	4.26	4.37	0.038
Transcendence	4.05	4.19	0.044
Emotional Unity	4.13	4.19	0.278
Emotional Intelligence	3.99	4.07	0.047

5. Discussion

Emotional intelligence is a multifaceted concept. It has occupied and continues to occupy researchers to this day. One of the main reasons that makes it so interesting is the fact that it affects almost every human activity. Emotional intelligence is inextricably linked to the recognition and expression of both the emotions of the person and the people around and with the regulation of emotions, so that the person can adapt to various situations, but also with the use of emotions to resolve problems. It is also linked to the working environment and more specifically to work success, for which self-awareness, self-management, cognitive awareness and social relationship management play an important role. Emotional intelligence promotes

well-being and help people make the most of their positive emotions (Szczygiel & Mikolajczak, 2017).

The inductive statistics with Nine Layered Pyramid Model Questionnaire of Emotional Intelligence revealed some effects of gender upon levels of Emotional Intelligence. Females had higher scores on Emotional Stimuli, Self-Actualization and Transcendence. Moreover, females reported higher scores on Emotion Recognition, Self-Awareness, Social Awareness (which includes empathy), Social skills (interpersonal relationships) and in overall EI compared to males which is consistent with previous studies (Khan-Woehle, 2015; Meshkat & Nejati, 2017; Thompson & Voyer, 2014). Males reported higher scores in Self-Management which is also consistent with previous research (Khan-Woehle, 2015).

The State of the Art in emotional intelligence and gender differences shows that there are no generalized, substantial and huge differences between men and women, except for some differences in the individual dimensions of emotional intelligence (Shehzad & Nasir, 2013). Gender equality is directly related to our conscious views, our beliefs and subconscious prejudices about ourselves and others and how this is shaped within different cultures. Expectations about the behavior of men and women are integrated into personality by way of self-categorization and self-stereotyping (Wood and Eagly, 2012). The expectation is that gender equality leads to a convergence of life patterns and experiences, resulting in a convergence of personality between men and women (Connolly, Goossen, & Hjerm, 2020). One of the solutions on the path to gender equity is through mastering emotional intelligence. When we develop our emotional intelligence, we are more aware, more authentic and more connected to others. Each individual has a diversity of thoughts, experiences and opinions. What matters is first to understand our emotions, to have the ability to manage them, and then to become fully present and empathetic with others who may think and feel differently from us. Sticking gender labels on emotions is not the goal nor does it bring the desired individual and social results. What counts is respect for the emotional differences that arise through research and the effort to develop and enhance those emotional skills that women and men lack. EI can be increased through education (Mattingly & Kraiger, 2017), through metacognitive and metaemotional [99-102] training strategies and exercises (Drigas et Mitsea, 2021; Drigas, Papoutsis, & Skianis, 2021) and a well-designed way for both men and women in the school, academic and work environment will be an asset in their lives in all its forms.

Another approach is that for differences in emotional intelligence, the type of assessment tool used, whether self-reported or performance measures, also plays a role (Mokhlesi & Patil, 2018). Self-report EI instruments have been reported to be biased by gender stereotypes and profession-based expectations, with females generally considering other females to be higher in EI, with similar results for male-to-male stereotypes (Lopez-Zafra & Gartzia, 2014).

Overall, there is little consensus regarding the role of gender upon EI (McNulty et al., 2016). Self-perceptions of EI appear to differ from country to country with authors having found cultural differences based on EI between Western and Eastern cultures (Scott-Halsell, Saiprasert, & Yang, 2013). Some emotional abilities are universal across cultures whilst some others are more culture-specific (McNulty, 2016). This also influences self-perceptions (Fischer, Kret & Broekens, 2018). Thus, the self-perception that one is “low average” on EI may prevent certain individuals from practicing certain tasks that give accurate feedback on these skills. In turn, this would prevent these individuals from enhancing such skills. Worse, low expectations may lead to poor performance, thus providing self-fulfilling strategies of a

self-perpetuating behavioral pattern (Petrides & Furnham, 2000). That's why emotional intelligence training will always must take into account the culture to which it is addressed.

In general, women have higher emotional intelligence, as measured by psychometric tools. But where women are weaker, men prevail and vice versa. So, it may be time to reconsider our prejudices and understand that we complement each other and that is why it is good to recognize our weaknesses and our strong "emotional" skills in order to have inner balance and create well-balanced relationships.

In studies, what should be also considered are gender interactions with other variables that may affect emotional intelligence outcomes such as age, nationality, socioeconomic or educational level, implicit theories (Cabello & Fernández-Berrocal, 2015; Fernández-Berrocal et al., 2012). Therefore, more studies and research work are needed that jointly correlate these variables by gender and that deepen this research line. In addition, when examining gender differences, the possibility that differences arise from prejudice between men and women should be ruled out as much as possible (Kong, 2017). The social categories of women and men, girls and boys, change due to the changes that occur in the social worlds in which individuals live and act and which shape knowledge, roles and powers. According to Werherell (2005) no interpretation is sufficient if it does not include memories of the past and an understanding of gender experiences, as experienced by the subject and as internalized by it. Gender stereotypes work dynamically and make us see a reality of characteristics and qualities, whether they exist or not, in men and women and end up being the background of discrimination and inequality.

Equal participation of men and women in all areas of life is important for continuous development, as well as for maintaining peace and prosperity in society as a whole. A more equal attitude towards gender equality and the modernization or renewal of the once distinct roles of men and women, in addition to contributing significantly to the development of society, also protects its members from negative, undesirable experiences, thus enhancing quality life of all members.

The idea of gender equality also applies to the concepts of perceptions, emotions, stereotypes and opportunities. The digital world is becoming a little more human, with more emotion. The presence of women and their role in the new digital reality are considered particularly important. Ideas, emotional intelligence, decisions, vision and work through the perspective and approach of women can change the data and create other perspectives and dynamics. Women have both the technical skills and the necessary emotional intelligence to participate in the future of artificial intelligence. Emotional competencies and metacognition are basic soft skills for life (Badriawan, 2021; Drigas, & Mitsea, 2020), necessary for the complete and optimal development of the personality (physical, spiritual, moral, social, emotional). They are an integral part of cognitive development. In a world of high technology, we must use ICT tools to develop our emotional capacity (Gilar-Corbi et al., 2018). These tools also offer us the opportunity to teach and improve emotional intelligence to all stakeholders in both sexes and to enhance the emotional skills that are needed.

The principle of gender equality must permeate all educational policies and initiatives so that the results of these actions can be applied to the rest of social, economic and political life. Mainstreaming has been developed as a new strategy, which aims to promote a gender perspective that permeates all policies, programs and action plans to be developed (Commission of the European Communities, 1995). Gender mainstreaming causes all the dominant policies and strategies developed by the Member States to be inspired by the principle of gender equality with a holistic rather than a fragmented logic. It aims at the social differences between women

and men, which are socially constructed, change according to the season and differ greatly from one country to another and from one culture to another (European Commission, 2004). They aim to change attitudes and mentalities and to change the social life of men and women.

Strategic goals and actions need to be taken to remove barriers to changing socio-cultural patterns of gender behavior in order to eliminate prejudices and habits based on the idea of gender inferiority or superiority or the idea of gender stereotypes about the emotional field in this case in order to cultivate and enhance all the emotional skills that women and men need. The twelve areas of interest of the Beijing Platform for Action are the framework for all international gender equality policies in which commitments must be fulfilled by the European Union and its Member States (Women 1995; 2015). The strategy sets out policy objectives and actions to make significant progress towards a gender-equitable Europe by 2025. The goal is a Union in which women and men, girls and boys, in all their diversity, will be free to chart the path they choose in their lives, will have equal opportunities for development and will be able to participate equally and to take the lead in our society. One of the main goals is to challenge gender stereotypes (European Commission, n.d.). Investments in ICT programs that deconstruct negative emotional stereotypes, reinforce emotional capacities and develop soft skills are essential (Ucang & Limjap, 2021).

Petrides & Furnham (2003) argued that although emotional abilities begin to be built from early childhood, through experience and training they can be developed and changed as they are positively related to age. According to the above, it is necessary to teach emotional and social intelligence skills to both sexes, to implement intervention programs with ICT tools to aim at the development of an emotional intelligence away from stereotypes and prejudices. Such practices can help enrich the lives of both men and women and help them to live emotionally intelligent lives in their own way.

6. Conclusion

This study provides an insight about emotional intelligence, gender differences, women and equality. It is an attempt to show that even if there are emotional differences due to different personality traits, there must be respect, not highlight the differences between the two genders but train the skills that needed without bias. Moreover, ICT tools have the potential of making positive changes, develop emotional intelligence and reduce gender norms and over the emotional realm. Creating emotionally intelligent organisms also has an impact on society in general. Implementing emotional development programs in schools, universities, working environments seems to be really very important and timely. The harmonious coexistence of the two sexes presupposes the development of human self-knowledge and critical ability. In conclusion, if we wish to advance in our understanding of the mechanisms underlying EI functioning in individuals, as well as our understanding of how to develop EI, we need to start from valid and solid premises that allow research to go beyond social stereotypes and preconceived ideas.

References

- [1] Ajmal, S., Javed, S., & Javed, H. (2017). Gender differences in emotional intelligence among medical students. *International journal of business and social science*, 8(3), 205-207.
- [2] Assembly, U. G. (1979). Convention on the elimination of all forms of discrimination against women.)

- [3] Bachelet, M., (2021). Women's Human Rights and Gender Equality. Retrieved from: <https://www.ohchr.org/EN/Issues/Women/WRGS/Pages/WRGSIndex.aspx> (16/12/2021).
- [4] Badriawan, A. S. (2021). The Importance of Soft Skills Training to Improve the Quality of Political Party Cadres. *Technium Soc. Sci. J.*, 17, 424.
- [5] Barbier, E. B., & Burgess, J. C. (2017). The Sustainable Development Goals and the systems approach to sustainability. *Economics*, 11(1). Bar-On, R. (2000). Emotional and social intelligence: Insights from the Emotional Quotient Inventory.
- [6] Bar-On, R., Brown, J. M., Kirkcaldy, B. D., & Thome, E. P. (2000). Emotional expression and implications for occupational stress; an application of the Emotional Quotient Inventory (EQ-i). *Personality and individual differences*, 28(6), 1107-1118.
- [7] Baron-Cohen, S. (2002). The extreme male brain theory of autism. *Trends in cognitive sciences*, 6(6), 248-254.
- [8] Bindu, P., & Thomas, I. (2006). Gender differences in emotional intelligence. *Psychological studies-university of calicut*, 51(4), 261.
- [9] Cabello, R., & Fernández-Berrocal, P. (2015). Implicit theories and ability emotional intelligence. *Frontiers in Psychology*, 6, 700.
- [10] Cabello, R., Sorrel, M. A., Fernández-Pinto, I., Extremera, N., & Fernández-Berrocal, P. (2016). Age and gender differences in ability emotional intelligence in adults: A cross-sectional study. *Developmental psychology*, 52(9), 1486.
- [11] Carvalho, Maria da Graça. (2020). REPORT on closing the digital gender gap: women's participation in the digital economy (2019/2168(INI)). Committee on Women's Rights and Gender Equality. Retrieved from: https://www.europarl.europa.eu/doceo/document/A-9-2020-0232_EN.html (19/12/2021).
- [12] Christov-Moore, L., Simpson, E. A., Coudé, G., Grigaityte, K., Iacoboni, M., & Ferrari, P. F. (2014). Empathy: Gender effects in brain and behavior. *Neuroscience & biobehavioral reviews*, 46, 604-627.
- [13] Ciarrochi, J. E., Forgas, J., & Mayer, J. D. (2006). *Emotional intelligence in everyday life*. Psychology Press/Erlbaum (UK) Taylor & Francis.
- [14] Collignon, O., Girard, S., Gosselin, F., Saint-Amour, D., Lepore, F., & Lassonde, M. (2010). Women process multisensory emotion expressions more efficiently than men. *Neuropsychologia*, 48(1), 220-225.
- [15] Commission of the European Communities, *Communication from the Commission to the Council and the European Parliament on integrating gender issues in development cooperation*, COM (95) 423 final, Brussels, 1995.
- [16] Connolly, F. F., Goossen, M., & Hjern, M. (2020). Does gender equality cause gender differences in values? Reassessing the gender-equality-personality paradox. *Sex Roles*, 83(1), 101-113.
- [17] Connolly, H. L., Lefevre, C. E., Young, A. W., & Lewis, G. J. (2019). Sex differences in emotion recognition: Evidence for a small overall female superiority on facial disgust. *Emotion*, 19(3), 455.
- [18] Craig, A., Tran, Y., Hermens, G., Williams, L. M., Kemp, A., Morris, C., & Gordon, E. (2009). Psychological and neural correlates of emotional intelligence in a large sample of adult males and females. *Personality and Individual Differences*, 46(2), 111-115.

- [19] Das, R. P., & Sahu, T. L. (2015). Relationship between emotional intelligence and gender difference: An empirical study. *Prabandhan: Indian Journal of Management*, 8(9), 15-23.
- [20] Day, A. L., & Carroll, S. A. (2004). Using an ability-based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviours. *Personality and Individual differences*, 36(6), 1443-1458.
- [21] Delphy, C. (2008). *Classer, dominer. Qui sont “les autres”?* [Classify, dominate. Who are “the others”?]. Paris: La fabrique
- [22] Doherty, E. M., Cronin, P. A., & Offiah, G. (2013). Emotional intelligence assessment in a graduate entry medical school curriculum. *BMC Medical education*, 13(1), 1-8.
- [23] Drigas, A., & Mitsea, E. (2021). 8 Pillars X 8 Layers Model of Metacognition: Educational Strategies, Exercises & Trainings. *International Journal of Online and Biomedical Engineering (iJOE)*, 17(08), pp. 115–134.
- [24] Drigas, A., & Mitsea, E. (2020). The 8 Pillars of Metacognition. *International Journal of Emerging Technologies in Learning (iJET)*, 15(21), pp. 162–178.
- [25] Drigas, A., & Papoutsi, C. (2021). Nine Layer Pyramid Model Questionnaire for Emotional Intelligence. *International Journal of Online & Biomedical Engineering*, 17(7).
- [26] Drigas, A. S., & Papoutsi, C. (2018). A new layered model on emotional intelligence. *Behavioral Sciences*, 8(5), 45.
- [27] Drigas, A., Papoutsi, C., & Skianis, C. (2021). Metacognitive and Metaemotional Training Strategies through the Nine-layer Pyramid Model of Emotional Intelligence. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 9(4), pp. 58–76.
- [28] EUROPEAN COMMISSION. N.D. Gender Equality Strategy. Achievements and Key Areas for Action. Retrieved from: https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en (15/12/2021).
- [29] European Commission, Directorate-General for Employment, Social Affairs and Equal Opportunities, *Equal Guide on Gender Mainstreaming*, Employment and European Social Fund, Brussels: 2004.
- [30] Farrelly, D., & Austin, E. J. (2007). Ability EI as an intelligence? Associations of the MSCEIT with performance on emotion processing and social tasks and with cognitive ability. *Cognition and Emotion*, 21(5), 1043-1063.
- [31] Fernández-Berrocal, P., Cabello, R., Castillo, R., & Extremera, N. (2012). Gender differences in emotional intelligence: The mediating effect of age. *Behavioral Psychology*, 20(1), 77-89.
- [32] Fischer, A. H., Kret, M. E., & Broekens, J. (2018). Gender differences in emotion perception and self-reported emotional intelligence: A test of the emotion sensitivity hypothesis. *PloS one*, 13(1), e0190712.
- [33] Foucault, M. (1975). *Surveiller et punir. Paris*, 1, 192-211. Galey, M. E. (1984). International enforcement of women's rights. *Hum. Rts. Q.*, 6, 463.
- [34] Galey, M. E. (1984). International enforcement of women's rights. *Hum. Rts. Q.*, 6, 463.
- [35] Gilar-Corbí, R., Pozo-Rico, T., Sánchez, B., & Castejón, J. L. (2018). Can emotional competence be taught in higher education? A randomized experimental study of an emotional intelligence training program using a multimethodological approach. *Frontiers in psychology*, 9, 1039.
- [36] Goleman, D. (1998). What makes a leader? *Harvard Business Review*, 76(6), 93-102.

- [37] Grossman, M., & Wood, W. (1993). Sex differences in intensity of emotional experience: a social role interpretation. *Journal of personality and social psychology*, 65(5), 1010.
- [38] Hall, J. A., & Schmid Mast, M. (2008). Are women always more interpersonally sensitive than men? Impact of goals and content domain. *Personality and Social Psychology Bulletin*, 34(1), 144-155.
- [39] Hall, J. A., Carter, J. D., & Horgan, T. G. (2000). Gender differences in nonverbal communication of emotion. *Gender and emotion: Social psychological perspectives*, 97-117.)
- [40] Hilbert, M. (2011, November). Digital gender divide or technologically empowered women in developing countries? A typical case of lies, damned lies, and statistics. In *Women's Studies International Forum* (Vol. 34, No. 6, pp. 479-489). Pergamon.
- [41] Inglehart, R., Norris, P., & Ronald, I. (2003). *Rising tide: Gender equality and cultural change around the world*. Cambridge University Press.
- [42] Jaušovec, N., & Jaušovec, K. (2005). Differences in induced gamma and upper alpha oscillations in the human brain related to verbal/performance and emotional intelligence. *International Journal of Psychophysiology*, 56(3), 223-235.
- [43] Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: an integrative meta-analysis and cascading model. *Journal of applied psychology*, 95(1), 54.
- [44] Khan-Woehle, S. (2015). Emotional ability among college students: an exploration of gender differences. *Journal of Young Investigators*, 29(4).
- [45] Kitterød, R. H., & Nadim, M. (2020). Embracing gender equality. *Demographic Research*, 42, 411-440.
- [46] Kong, F. (2017). The validity of the Wong and Law Emotional Intelligence Scale in a Chinese sample: Tests of measurement invariance and latent mean differences across gender and age. *Personality and Individual Differences*, 116, 29-31.
- [47] Kong, F., Zhao, J., & You, X. (2012). Social support mediates the impact of emotional intelligence on mental distress and life satisfaction in Chinese young adults. *Personality and Individual Differences*, 53(4), 513-517.
- [48] Kret, M. E., & De Gelder, B. (2012). A review on sex differences in processing emotional signals. *Neuropsychologia*, 50(7), 1211-1221.
- [49] Lopes, P. N., Salovey, P., & Straus, R. (2003). Emotional intelligence, personality, and the perceived quality of social relationships. *Personality and individual Differences*, 35(3), 641-658.
- [50] Lopez-Zafra, E., & Gartzia, L. (2014). Perceptions of gender differences in self-report measures of emotional intelligence. *Sex roles*, 70(11-12), 479-495.
- [51] Marzuki, A. N., Mustaffa, C. S., & Mat Saad, Z. (2015). Emotional intelligence: Its relations to communication and information technology skills. *Asian Social Science*, 11(15), 267-274.
- [52] Maslow, A. H. (1981). *Motivation and personality*. Prabhat Prakashan.
- [53] Maslow, A. H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370.
- [54] Mattingly, V., & Kraiger, K. (2019). Can emotional intelligence be trained? A meta-analytical investigation. *Human Resource Management Review*, 29(2), 140-155.
- [55] Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4), 267-298.
- [56] Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Emotional intelligence as zeitgeist, as personality, and as a mental ability.

- [57] McIntyre, H. H. (2010). Gender differences in the nature and linkage of higher-order personality factors to trait and ability emotional intelligence. *Personality and Individual Differences*, 48(5), 617-622.
- [58] McNulty, J. P., Mackay, S. J., Lewis, S. J., Lane, S., & White, P. (2016). An international study of emotional intelligence in first year radiography students: The relationship to age, gender and culture. *Radiography*, 22(2), 171-176.
- [59] Meshkat, M., & Nejati, R. (2017). Does emotional intelligence depend on gender? A study on undergraduate English majors of three Iranian universities. *SAGE Open*, 7(3), 2158244017725796.
- [60] Mikolajczak, M., Luminet, O., Leroy, C., & Roy, E. (2007). Psychometric properties of the Trait Emotional Intelligence Questionnaire: Factor structure, reliability, construct, and incremental validity in a French-speaking population. *Journal of personality assessment*, 88(3), 338-353.
- [61] Mohebi, L. (2019). Towards a general framework for ICT and e-learning educational policy in the United Arab Emirates. Available at SSRN 3441563.
- [62] Mokhlesi, V., & Patil, C. B. (2018). A study of gender differences in emotional Intelligence and learning behaviour among children. *The International Journal of Indian Psychology*, 6(4), 2349-3429.
- [63] Nasir, M., & Masrur, R. (2010). An exploration of emotional intelligence of the students of IIUI in relation to gender, age and academic achievement. *Bulletin of education and research*, 32(1).
- [64] Neisser, U., Boodoo, G., Bouchard Jr, T. J., Boykin, A. W., Brody, N., Ceci, S. J., ... & Urbina, S. (1996). Intelligence: knowns and unknowns. *American psychologist*, 51(2), 77.
- [65] Nunes, A. R., Lee, K., & O'Riordan, T. (2016). The importance of an integrating framework for achieving the Sustainable Development Goals: the example of health and well-being. *BMJ global health*, 1(3), e000068.
- [66] Pappas, M. A., Drigas, A. S., Papagerasimou, Y., Dimitriou, H., Katsanou, N., Papakonstantinou, S., & Karabatzaki, Z. (2018). Female entrepreneurship and employability in the digital era: The case of Greece. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(2), 15.
- [67] Pappas, M. A., Papagerasimou, Y., Drigas, A., Raftopoulos, D., & Nikolaidis, P. (2017). ICT-based Innovation and Employability for Women. *International Journal of Engineering Pedagogy (iJEP)*, 7(2), pp. 36–47.
- [68] Papoutsis, C., Drigas, A., & Skianis, C. (2021). Virtual and Augmented Reality for Developing Emotional Intelligence Skills. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 9(3), pp. 35–53.
- [69] Petrides KV. *Technical manual for the trait emotional intelligence questionnaires (TEIQue)*. London: London Psychometric Lab; 2009.
- [70] Petrides, K. V., & Furnham, A. (2000). Gender differences in measured and self-estimated trait emotional intelligence. *Sex roles*, 42(5), 449-461.
- [71] Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European journal of personality*, 17(1), 39-57.
- [72] Reanda, L. (1981). Human Rights and Women's Rights: The United Nations Approach. *Hum. Rts. Q.*, 3, 11

- [73] Sanchez-Nunez, M., Fernández-Berrocal, P., Montañés, J., & Latorre, J. M. (2008). Does emotional intelligence depend on gender? The socialization of emotional competencies in men and women and its implications.
- [74] Scott-Halsell, S. A., Saiprasert, W., & Yang, J. (2013). Emotional intelligence differences: Could culture be the culprit?. *Journal of Teaching in Travel & Tourism*, 13(4), 339-353.
- [75] Shaffer, D. R., & Kipp, K. (2013). *Developmental psychology: Childhood and adolescence*. Cengage Learning.
- [76] Shahzad, S. & Bagum, N. (2012). Gender differences in trait emotional intelligence: A comparative study. *Business Review*, 7(2), 106 – 112.
- [77] Sharma, U. (2003). *Women empowerment through information technology*. Authorpress.
- [78] Shehzad, S., & Mahmood, N. (2013). Gender differences in emotional intelligence of university teachers. *Pakistan Journal of Social and Clinical Psychology*, 11(1), 16-21.
- [79] Squires, J. (2007). *The new politics of gender equality*. Macmillan International Higher Education.
- [80] Szczygieł, D., & Mikolajczak, M. (2017). Why are people high in emotional intelligence happier? They make the most of their positive emotions. *Personality and Individual Differences*, 117, 177-181.
- [81] Szymanowicz, A., & Furnham, A. (2013). Gender and gender role differences in self- and other-estimates of multiple intelligences. *The Journal of social psychology*, 153(4), 399-423.
- [82] Thompson, A. E., & Voyer, D. (2014). Sex differences in the ability to recognise non-verbal displays of emotion: A meta-analysis. *Cognition and Emotion*, 28(7), 1164-1195
- [83] Tinker, C. (1981). Human Rights for Women: The UN Convention on the Elimination of All Forms of Discrimination Against Women. *Hum. Rts. Q.*, 3, 32.
- [84] Tsaousis, I., & Kazi, S. (2013). Factorial invariance and latent mean differences of scores on trait emotional intelligence across gender and age. *Personality and Individual Differences*, 54(2), 169-173.
- [85] Turner, S. S. (1999). Intersex identities: Locating new intersections of sex and gender. *Gender & society*, 13(4), 457-479.
- [86] Uchang, J. T., & Limjap, A. A. (2021). Understanding the emergent attributes of 21st-century mathematics teachers in Bukidnon. *Technium Soc. Sci. J.*, 22, 269.
- [87] United Nations (1995), Beijing Declaration and Platform for Action: Fourth World Conference on Women, 4-15 September 1995, [A/CONF.177/20]. New York: United Nations.
- [88] UNITED NATIONS. (1979). Convention on the Elimination of All Forms of Discrimination against Women New York, 18 December 1979. Retrieved from: <https://www.ohchr.org/en/professionalinterest/pages/cedaw.aspx> (18/12/2021).
- [89] UNITED NATIONS. n.d. Peace, dignity and equality on a healthy planet. Retrieved from: <https://www.un.org/en/global-issues/gender-equality> (18/12/2021).
- [90] Wetherell, M. (Ed.). (1996). *Identities, groups and social issues* (Vol. 3). Sage.
- [91] Women, U. N. (1995). Beijing Declaration and Platform for Action-Beijing+ 5 Political Declaration and Outcome.
- [92] Women, U. N. (2015). The Beijing declaration and platform for action turns 20.

- [93] Wood, W., & Eagly, A. H. (2012). Biosocial construction of sex differences and similarities in behavior. In *Advances in experimental social psychology* (Vol. 46, pp. 55-123). Academic Press.
- [94] Drigas A, and Angelidakis P., 'Mobile Applications within Education: An Overview of Application Paradigms in Specific Categories', *International Journal of Interactive Mobile Technologies (iJIM)*, vol. 11, no. 4, p. 17, May 2017. <https://doi.org/10.3991/ijim.v11i4.6589>
- [95] Drigas A, Ioannidou R.E, A Review on Artificial Intelligence in Special Education, *Information Systems, Elearning, and Knowledge Management Research Communications in Computer and Information Science Volume 278*, pp 385-391, 2013 http://dx.doi.org/10.1007/978-3-642-35879-1_46
- [96] Kefalis C and Drigas A. (2019) Web Based and Online Applications in STEM Education. *International Journal of Engineering Pedagogy (iJEP)* 9, 4 (2019), 76–85. <https://doi.org/10.3991/ijep.v9i4.10691>
- [97] Papanastasiou, G., Drigas, A., Skianis, C., & Lytras, M. D. (2017). Serious games in K-12 education: Benefits and impacts on students with attention, memory and developmental disabilities. *Program*, 51(4), 424-440. <https://doi.org/10.1108/prog-02-2016-0020>
- [98] Drigas A, and Pappas M. "On line and other Game-Based Learning for Mathematics." *International Journal of Online Engineering (iJOE)* 11.4, 62-67, 2015 <https://doi.org/10.3991/ijoe.v11i4.4742>
- [99] Papoutsis C., Drigas A, and Skianis C., "Mobile Applications to Improve Emotional Intelligence in Autism – A Review," *Int. J. Interact. Mob. Technol. (iJIM)*; Vol 12, No 6, 2018
- [100] Drigas A, and Pappas M., "The Consciousness-Intelligence-Knowledge Pyramid: An 8x8 Layer Model," *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, vol. 5, no.3, pp 14-25, 2017. <https://doi.org/10.3991/ijes.v5i3.7680>
- [101] Mitsea, E., & Drigas, A. (2019). A journey into the metacognitive learning strategies. *International Journal of Online & Biomedical Engineering*, 15(14). <https://doi.org/10.3991/ijoe.v15i14.11379>
- [102] Drigas A, Karyotaki M (2017) Attentional control and other executive functions. *Int J Emerg Technol Learn iJET* 12(03):219–233