

Emotional intelligence and gender effects on collective intelligence in the workplace

Asen Trichkov, Ergyul Tair

Abstract. The study presents empirical results of the effects of gender and emotional intelligence of employees' collective intelligence measured as Coordination, Networking, Diversity and Independence. The sample includes 159 employees (63 male, 93 female) aged between 22 to 61 years ($M=35.48$; $SD=6.51$) from different mostly private organizations. The Work Group Emotional Intelligence Profile (WEIP, Jordan et al. 2002) and the four factors scale of Kaur & Shah (2018) for collective intelligence were used. The employees rated their emotional intelligence highly, demonstrating a statistically significant higher ability to manage own emotions. The men and women did not differ in their emotional intelligence, with one exception, women report higher scores in ability to deal with own emotions, than men. The collective intelligence scores are high, with Networking scores highest, representing good ability in developing a smooth working relations. There were no statistically significant gender differences in Networking and the Diversity, but men demonstrate higher scores in terms of Independence in thinking, and women better Coordination skills. Emotional intelligence has a significant positive effect on the components of collective intelligence. The most significant influence has the ability to manage others' emotions, which strongly determines relationships and Networking skills, and moderately determines the Diversity of perspectives toward a problem. The ability to deal with own emotions has a significant positive effect on Networking and Independence, and the ability to manage own emotions on Coordination and Independence skills. The results confirm that emotional intelligence has a significant effect not only on individual success in the organization, but also on building strong relationships and team effectiveness.

Keywords: emotional intelligence, collective intelligence, gender, organization

Introduction

Emotions fundamentally shape human experience, running through both personal and professional life, influencing personal thoughts and behaviour, the quality of social relationships, etc. In the work context attention has traditionally been paid to emotions within two main constructs - occupational stress and job

satisfaction (e.g., Briner 1999). A number of studies present the significant role of positive and negative experiences on both perceived stress and job satisfaction (for details see Tair 2011). With the growing interest in emotional intelligence (EI) in the 1990s research on emotions in work setting began to be carried out through different emotional intelligence model (Briner 1999). Emotional intelligence is essential in organizations determining two main competencies: personal (emotion regulation, self-esteem, motivation, etc.), but also social, related to relationships, commitment, etc. (e.g., Brackett, Rivers, Salovey 2011). Therefore, emotional intelligence will determine not only the motivation and hence the performance of employees, but also the effectiveness of teamwork. In recent years, there has been an increase in organizational research that examines team dynamics and results as a common construct defined as collective intelligence or teams combined capacity to perform various tasks and solve diverse problems (Wooley et al. 2010). Also, a review of the literature on emotions and EI gives a clear idea of the significant differences between men and women, as traditionally the female gender has been linked to a greater extent with experience of the positive and negative emotions more intensely than the male gender (e.g., Fernández-Berrocal et al. 2012). The article presents research on employees' emotional and collective intelligence tracing out the gender and emotions effects on team effectiveness and outcomes.

Emotional intelligence: Definitions, models and gender differences

The broad research interest since the construct “emotional intelligence” was proposed determines not only the differences in its definition, but also in the models and components it includes. Typically, models of emotional intelligence describe two main aspects: personal intelligence, which involves an individual's understanding, management, and use of emotions, and social intelligence, which involves understanding and managing the emotions of others. Models can be broadly categorized into three types: the ability model, the mixed model, and the trait model. The pioneering researchers Salovey and Mayer (1990) defined emotional intelligence primarily as a non-cognitive construct or “the ability to observe one's own emotions and the emotions of others, to discriminate, and to use this information to guide thinking and action” (Salovey, Mayer 1990, 189). Thus, Salovey and Mayer's ability model consists of groups of mental abilities for perceiving, evaluating and expressing emotions that allow to identify and distinguish emotions in self and others. The ability model is considered the most influential model of emotional intelligence and Mayer and Salovey argue that emotional intelligence is ability-based, and is not a stable trait as it can develop with age and experience (Mayer, Salovey 1997). One of the main criticisms of the ability model is that despite its focus on how emotional intelligence influences performance in different settings, there is research that challenges its ability to effectively predict job performance. A notable aspect is his reliance on the idea that emotional intelligence requires purposeful mental processes rather than relying solely on emotional response. In other words, ability theory emphasizes the importance of thinking and involves less reliance on intuition. Its proponents believe that emotional intelligence can be significantly

improved through training and does not depend solely on innate ability. As a result, organizations often use this model to develop management skills and human resource management abilities.

In addition, emotional intelligence is seen as a set of non-cognitive abilities, competencies and skills that successfully influence an individual's ability to cope with the demands and pressures of the environment (Bar-On 1997). The model includes the ability to be aware of, understand, and express oneself; the ability to be aware of, understand, and relate to others; the ability to handle strong emotions and control impulses; and the ability to adapt to change and solve problems of a personal or social nature. Bar-On's model argues that an individual's social abilities and emotional intelligence skills differ, but are equally important in achieving the goals. Simply put, the model distinguishes between social skills (the ability to influence the emotions and behaviour of others) and the ability to recognize and regulate one's own emotions. This model takes a more comprehensive approach to defining EI by including self-awareness, understanding others and relating effectively to people, as well as adapting to and coping with environmental demands and stressors. Thus, the mixed model of emotional intelligence combines elements of both competence (ability) and general attitude (trait). This approach is more psychological and refers to emotional intelligence as a series of interpersonal skills that influence an individual's behaviour at different times in his or her life.

In contrast to these definitions characterizing emotional intelligence as a capability, Petrides and Furnham (2001) define it as a trait or constellation of emotional self-perceptions located at the lower levels of the personality hierarchy. This model proposes the concept of trait emotional intelligence, which consists of fifteen aspects related to emotions that are distributed across different dimensions of personality. These aspects are grouped into four factors: well-being, self-control, emotionality, and sociability (Petrides 2009). Well-being is related to effective adaptation, self-control involves managing impulses and desires, emotionality indicates the perception and expression of emotions in establishing and maintaining relationships, and sociability is related to social relationships and influence. Adaptability and self-motivation are specific aspects that directly contribute to the general trait of emotional intelligence. Emotional intelligence is consistent with the major theories of the big five personality traits (Petrides 2009) and involves the ability to identify, understand, and manage emotions to solve problems by processing accompanying information.

Both biological and social explanations have received support from a diverse range of empirical studies of emotion, which show greater emotional abilities in women (for details see Fernández-Berrocal et al. 2012). These studies conclude that women have greater emotional knowledge, they express positive and negative emotions more fluently and more frequently, they have more interpersonal competencies, and they are more socially adept. Indeed, most studies of emotional intelligence that are based on ability tests and that include gender in their analysis have assumed women to be superior in emotional abilities. However, while all such studies do show women to be superior, they have produced conflicting results about the specific emotional intelligence dimensions on which women perform better. While some studies have reported gender dif-

ferences fundamentally in experiential aspects such as perception and emotional facilitation, others have found gender differences in strategic aspects such as understanding and emotional managing, and third set of studies has found mixed results (for details see Fernández-Berrocal et al. 2012, 79). A meta-analysis of emotional intelligence that included gender differences concluded that women obtained higher scores than men on all dimensions with an effect size ranging from .29 to .49 (Joseph, Newman 2010). While gender may determine differences in emotional intelligence, but some studies reveal that age mediates this relation such that these differences may decrease substantially or disappear altogether (Fernández-Berrocal et al. 2012). Thus, gender or other factors as culture, socioeconomic level, etc. may interact with gender in predicting emotional intelligence levels in men and women, as well as in predicting specific dimensions. Also, does gender only matter for emotional intelligence or does it also determine individual and team performance?

Collective intelligence: Team performance and gender effects

Numerous empirical studies, meta-analyses, and literature reviews are questioning does gender diversity matter for team processes and performance (e.g., Bear, Woolley 2011; Jackson, Joshi, Erhardt 2003; Woolley et al. 2010). Overall, existing research suggests that gender diversity can have a positive effect on group process, as evidence strongly suggests that group collaboration, as indexed by collective intelligence, is greatly improved by the presence of women in the group (Woolley et al. 2010). Collective intelligence can be described as the overall ability of a group to cope with different tasks and these patterns of behaviour are responsive to the accomplishment of desired outcomes, rather than the mindless enactment of prescribed processes or routines (Bear, Woolley 2011). Thus, collective intelligence is evident in the consistency of the outcome quality a collective produces across domains, as a result of the responsiveness of members to one another and to the shifting performance contingencies in dynamic situations. Woolley et al. (2010) found that the proportion of women in a group is strongly related to the group's measured collective intelligence. Upon further examination, they found that the effects were explained in part by the higher levels of social sensitivity exhibited by women, based on their greater ability to read nonverbal cues and make accurate inferences about what others are feeling or thinking. Groups with more women also exhibited greater equality in conversational turn-taking, further enabling the group members to be responsive to one another and to make the best use of the knowledge and skills of members.

The collective intelligence survey in gender mixed teams in outsourcing organization with 4-factor model of collective intelligence tool of Kaur & Shah (2018) showed some significant gender differences (Trichkov 2022). The obtained results present statistically significant gender differences in two of the four subscales of collective intelligence: "Coordination" and "Networking", where the results of women are higher compared to those of men. Accordingly, women in the study demonstrated a greater willingness to work with others, to apply skills to achieve work goals, along with higher scores on networking and

teamwork skills. There are no gender differences in other two subscales “Diversity” and “Independence”. Women and men did not differ in their ratings of independence in thinking and generating different points of view on problems related to their joint work.

Emotional and collective intelligence in the workplace

There are marked differences in the emotions that people express and in their performance at the individual level, and when collaborating in a team. Alongside how individuals understand, control, and regulate their personal feelings, it is important for groups to pay attention to collective emotions in the same way. Participation in teamwork requires demonstrating consideration, recognition, and respect for one another through emotional expressions such as support, affirmation, etc. Emotional intelligence is believed to influence a variety of work-related behaviours, including teamwork, work engagement and career success (Tair 2019). Enthusiasm and involvement in work, social relationships and career satisfaction increase significantly. Emotional intelligence plays a vital role in people’s ability to function effectively in teams and one’s ability to navigate the demands and pressures of the environment, especially important actions in challenging work settings (Bar-On 1997).

The concept of collective intelligence in organizational teams has traditionally been interpreted and defined by the quality of outcomes achieved by the team or can be measured as team emotional intelligence for examining a positive effects on the performance of the groups (Fotopoulou et al. 2021). High level of collective intelligence is associated with various positive effects in the group, such as the improvement of the cohesion (the force that keeps the group together) within the group, the capacity to manage conflicts and devise creative solutions to disagreements, the recognition and management of the emotional spirals of conflicts and the improvement of the overall group effectiveness.

Emotional intelligence becomes increasingly important in the today’s organizations not only for individual success, but also for success in teamwork. Many employees have to work in teams in order to achieve complex organizational objectives and work groups are becoming more common in organizations, and emotional intelligence influences relationships within the team (for details see Coronado-Maldonado, Benítez-Márquez 2023). On an individual level, team members’ personalities and abilities play an integral role in the work team. Highly emotionally intelligent individuals can communicate effectively and empathize with others, allowing them to develop cohesive, supportive relationships, effective task processes, and overall group effectiveness. Therefore, in this paper we will trace the impact of emotional intelligence on collective intelligence, measured as skill for Coordination or ability to create a good group dynamic, Networking, Diversity or different points to the problem, and Independence in opinion and ideas.

Various measures have been made available for measuring the emotional and collective intelligence in work place. The Work Group Emotional Intelligence Profile (WEIP) is a self-report measure that evaluates the aggregated construct of the group emotional intelligence using an individual-referent model

(Jordan et al. 2002). It captures two dimensions of emotional intelligence; the ability to deal (recognize, discuss, manage) with own emotions and the ability to deal (recognize, manage) with others' emotion. This instrument would be most appropriate for the purpose of this study, examining the impact of emotional intelligence on team attitudes and behaviour. The collective intelligence will be measure with Collective Intelligence scale consisting of four subscales (Kaur, Shah 2018): "Coordination" or the extent to which a person is ready to work together with others efficiently; "Networking" representing the interaction with other employees or team members; "Diversity" or ability to present different perspectives toward a problem; and "Independence" or ability to produce an original idea and does not get easily influenced by other's ideas.

Objectives and hypothesis

The purpose of the present study is to establish the effects of gender and emotional intelligence on collective intelligence of employees measured as Coordination, Networking, Diversity and Independence.

The tasks of the study are as following:

- to establish the level of emotional and collective intelligence in the studied sample;
- to establish the effects of gender on employees' emotional and collective intelligence;
- to establish the emotional intelligence effects on employees' collective intelligence measured as Coordination, Networking, Diversity and Independence.

The general hypothesis of the study assumes a statistically significant effect of gender and emotional intelligence on the collective intelligence of employees. Specifically, we expect significant differences in employees' emotional and collective intelligence by gender. We hypothesize that women will have better awareness of emotions than men and higher scores on networking and teamwork skills. We hypothesize that emotional intelligence will be a significant predictor of employees' collective intelligence, expecting that management of emotion will significantly determine the employees skills of coordination, networking, and independence in thinking.

Methodology

The research was conducted in July 2024 via "Typeform" platform. The sample includes 159 employees from different mostly private organizations. Near 40% of the sample was male, with ages ranging from 22 to 61 years ($M=35.48$; $SD=6.51$). Almost a quarter of the surveyed employees (27%) are in a managerial position.

The tools of the study included:

- 1) The Work Group Emotional Intelligence Profile - WEIP - a self-report short form with 16 items, designed to measure emotional intelligence of individuals in teams (Jordan et al. 2002). The scales employs a seven-point reference format ranging from 1 (strong disagree) to 7 (strongly agree), with items encouraging reflection on one's own behaviour, such as "I am aware of my own

feelings when working in a team” and “I am able to describe accurately the way others in the team are feeling”. Based on performed exploratory factor analyses (KMO .798; Bartlett’s test approx. chi-square = 1217.054 df = 120, Sig. = .000) with Varimax rotation 4 factors generated with eigenvalues >1.0, explaining 67.32% of the variation. The factors are: Ability to manage others’ emotions (4 items); Ability to deal with others’ emotions (4 items); Ability to deal with own emotions (4 items); and Ability to manage own emotions (4 items). The reliability of the scale measured by Cronbach’s alpha is high (.845), as for subscales alpha is between .695 to .877, demonstrating a good internal consistency for the purpose of the study.

2) Collective Intelligence scale consisting of 17 items evaluated using a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) (Kaur, Shah 2018). Performed exploratory factor analyses (KMO .746; Bartlett’s test approx. chi-square = 684.20 df = 136, Sig. = .000) with Varimax rotation confirmed a 4-factor structure with eigenvalues >1.0. The subscales are: 1) “Coordination” or the extent to which a person is ready to work together with others efficiently and smoothly. High results present an agreement between relative member of the group and their contributions to work on a task, ability to coordinate work to accomplish all of the elements of the task, and effort captures the total amount of activity members contribute to task completion. 2) “Networking” refers to the level of networking skills possessed and represents the interaction with other employees or team members and developing smooth working relations. 3) “Diversity” represents the diversity of perspectives toward a problem and ability to generate various ideas. 4) “Independence” represents independent thinking or ability to produce an original idea and does not get easily influenced by other’s ideas. The reliability of the scale measured by Cronbach’s alpha is .793, as for subscales vary between .630 to .695, and demonstrate an acceptable internal consistency for the purpose of the study.

Results and discussion

Table 1 presents the means, standard deviations, minimum and maximum values of the Emotional intelligence subscales. The highest were the evaluations of the studied employees regarding the ability to manage own emotions (M=23.03), followed by those for managing the emotions of others (M=20.31). Similar, rather slightly above average, are the results for the ability to deals with own and others’ emotions. The conducted Pared Sample T-Test showed that employees significantly higher value their skills to manage own emotions compared to managing others’ emotions (t=7.16, p=.000), compared to ability to deal with own emotions (t= 7.91, p=.000) and to deal with others’ emotions (t=7.91, p=.000). Thus the employees in the study rated their emotional intelligence highly, scoring above average on emotion awareness skills and rather high on emotion management skills. They demonstrate a statistically significant higher competence in terms of the skills to manage their own emotions comparing with others emotional intelligence subscales.

Table 1. Descriptive statistics of the subscales of the Emotional intelligence scale (N=159)

Subscale	Min	Max	Mean	SD	T, p
1. Ability to deal with own emotions	6.00	28.00	19.87	4.82	2:1 t=7.91, .000
2. Ability to manage own emotions	8.00	28.00	23.03	3.53	2:3 t=8.09, .000
3. Ability to deal with others' emotions	9.00	28.00	19.95	4.28	3:1 t=.174, .862
4. Ability to manage others' emotions	7.00	28.00	20.31	4.49	3:4 t=1.01, .314

Table 2 presents the means, standard deviations, minimum and maximum values of the Collective intelligence subscales. The results testify the highest scores in Networking skills (M=22.26), followed by the Coordination ability and skills for effective work with others in the team (M=18.40). The lowest are the results in subscales Diversity or providing different points of view to the problem (M=16.23) and Independence in thinking (M=16.14), which are above average values. The conducted Pared Sample T-Test showed that the scores on Networking were significantly higher compared to Coordination (t=15.36, p=.000), to Diversity (t=22.83, p=.000) and to Independence (t=19.07, p=.000). Coordination skills were significantly higher than Diversity (t=11.30, p=.000) and Independence (t=9.67, p=.000). The scores for Diversity and Independence were not statistically different (t=.373, p=.710). In short, employees rate their collective intelligence highly, with Networking scores highest, followed by Coordination, Diversity, and Independence.

Table 2. Descriptive statistics of the subscales of the Collective intelligence scale (N=159)

Subscale	Min	Max	Mean	SD	T, p
1. Coordination	10.00	20.00	18.40	1.87	2:1 t=15.36, .000
2. Networking	8.00	28.00	22.26	3.30	2:3 t=22.83, .000
3. Diversity	9.00	20.00	16.23	2.33	3:1 t=.11.30, .862
4. Independence	7.00	20.00	16.14	2.65	3:4 t= .373, .710

The second task of the study is to establish the gender effects on emotional and collective intelligence of the employees. Table 3 presents the results of the conducted Independent-Sample T-Test for gender differences in the subscales of emotional intelligence. There are no statistically significant differences between men and women in three of the subscales: ability to manage own and others' emotions, and the ability to deal with others' emotions. Therefore, the men and women in the study did not differ in their ability to manage their own and others' emotions or in perceptions of others' emotions. The only statistical-

Table 3. Gender differences in Emotional intelligence subscales (N=156)

Subscale	Gender	N	Mean	SD	t/p
Ability to deal with own emotions	Men	63	18.65	4.61	2.52; .013
	Women	93	20.59	4.85	
Ability to manage own emotions	Men	63	22.84	3.92	.676; .501
	Women	93	23.25	3.31	
Ability to deal with others' emotions	Men	63	19.38	4.84	1.32; .190
	Women	93	20.34	3.88	
Ability to manage others' emotions	Men	63	20.25	4.98	.009; .993
	Women	93	20.24	4.13	

ly significant result between men and women is in the ability to deal with own emotion ($t=2.52$, $p=.013$). Women report higher scores than men regarding the ability to recognize their own emotions, which is consistent with a number of studies reported women superiority in perception and emotional facilitation (e.g., Fernández-Berrocal et al. 2012; Joseph, Newman 2010).

Table 4 presents the results of the conducted Independent-Sample T-Test for gender differences in the subscales of collective intelligence. There were no statistically significant gender differences in scores on the “Networking” and the “Diversity” subscale. Statistically significant differences between men and women were present in “Coordination” ($t=2.10$, $p=.038$) and “Independence” ($t=2.33$, $p=.021$) scores. Accordingly, men demonstrate higher scores in terms of independence in thinking, and women better coordination skills.

Table 4. Gender differences in Collective intelligence subscales (N=156)

Subscale	Gender	N	Mean	SD	t/p
Coordination	Men	63	18.03	2.09	2.10; .038
	Women	93	18.69	1.64	
Networking	Men	63	21.95	3.62	.971; .334
	Women	93	22.49	3.12	
Diversity	Men	63	16.03	2.37	.959; .339
	Women	93	16.40	2.29	
Independence	Men	63	16.71	2.30	2.33; .021
	Women	93	15.75	2.85	

The obtained results testify that the studied men and women do not differ in their networking skills or in their ability to interact with other employees or team members and developing smooth working relations. At the same time they demonstrate similarity in ability to generate various ideas or represent the diversity of perspectives. Women declare a higher readiness in the extent to which is a ready to work together with others efficiently and smoothly or in their willingness to contribute in team work and in effort to complete the task. Men rate their skills more highly in ability to produce an original idea and in asserting one's own ideas or independence of thought. The higher results in women's coordination skills were also found in a previous study in a Bulgarian work environment (Trichkov 2022), and evidence strongly suggests that team collaboration, as indexed by collective intelligence, is greatly improved by the presence of women in the group (Woolley et al. 2010). Traditionally, meta-analysis presented, that women were significantly more interpersonally oriented than men (Eagle, Johnson 1990), and they generally score high on personality traits Neuroticism (greater extend of negative emotions, low self-esteem, etc.) and Agreeableness or more open to cooperation and feelings (Costa, Terracciano, McCrae 2001). While men were often high on assertiveness and had slightly higher self-esteem and open to new ideas, which may explain their higher scores in ability to produce an original idea and independence.

The correlations between the components of emotional intelligence with the components of collective intelligence are presented in Table 5. Moderate to strong positive correlations are found among the components, with only two of the relationships of the ability to deal with own emotions not statistically significant with Networking and Diversity and one of the ability to manage own emotions with Independence. The relationships of emotional intelligence components with Networking and Diversity are strongest. The ability to manage

Table 5. Correlations between components of EI and KI subscales (N=159)

Subscale	Coordination	Networking	Diversity	Independence
Ability to deal with own emotions	.154	.278	.104	.224
	.53	.000	.193	.004
Ability to manage own emotions	.374	.872	.274	.064
	.000	.000	.000	.424
Ability to deal with others' emotions	.202	.526	.429	.247
	.011	.000	.000	.002
Ability to manage others' emotions	.239	.379	.336	.249
	.002	.000	.000	.002

own emotions has strong positive associations with Networking ($r=.87$; $p=.000$) and rather moderate associations with Coordination ($r=.37$; $p=.000$) and Diversity ($r=.27$; $p=.000$). The ability to deal with others' emotions has moderate relationships with Networking ($r=.53$; $p=.000$) and Diversity ($r=.43$; $p=.000$) and rather weak positive relationships with Coordination ($r=.20$; $p=.002$) and Independence ($r=.25$; $p=.002$). The ability to manage others' emotions has weak to moderate positive associations with all components of collective intelligence. There were weak and positive relationships of ability to deal with own emotions with Networking ($r=.28$; $p=.000$) and Independence ($r=.22$; $p=.004$).

The influence of the components of emotional intelligence on the components of collective intelligence was traced through a series of stepwise linear regression analyses. Because of the interest in the gender effects in these relationships and the some age differences in the studies (e.g., Fernández-Berrocá et al. 2012), the age and gender of the employees studied was added in the first step of the regression analysis. In the second step of the regression analysis the four components of emotional intelligence were added.

Table 6 presents the results of the regression analysis on the influence of the studied variables on the Coordination component of collective intelligence. The only significant predictor is an ability to manage own emotions, which had a moderately positive influence ($\beta=.32$; $p=.000$) on and explained 17,6% of the coordination skills. Therefore, ability to manage own emotions contribute moderately to the readiness of the employees to work with others efficiently to accomplish the task, and determine the significant part of the activity of the coordination of completion of the task.

The Networking skills is significantly determined by emotional intelligence ($R^2=.87$) as the predictors are the ability to manage others' emotions and ability to deal with others' emotion as results shown in a Table 7. The effects of the

Table 6. The effects of age, gender, and emotional intelligence on Coordination (N=159)

Model	Unstand. Coefficients		Stand. Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	11.903	1.394		8.540	.000
Age	.369	.272	.103	1.356	.177
Gender	.012	.022	.041	.551	.583
Deal own emotions	.009	.282	.002	.032	.975
Manage own emotions	.002	.031	.004	.051	.959
Deal others' emotions	.169	.043	.318	3.961	.000
Manage others' emotions	.028	.037	.064	.754	.452

Table 7. The effects of age, gender, and emotional intelligence on Networking (N=159)

Model	Unstand. Coefficients		Stand. Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.651	.970		.672	.503
Age	-.044	.190	-.007	-.230	.819
Gender	-.017	.015	-.033	-1.105	.271
Deal with own emotions	-.100	.196	-.015	-.509	.612
Manage own emotions	.004	.022	.005	.165	.869
Deal with others' emotions	.743	.030	.793	25.087	.000
Manage others' emotions	.265	.026	.343	10.299	.000

ability to manage others' emotions ($\beta=.79$; $p=.000$) are greater than those of the ability to deal with others' emotions ($\beta=.34$; $p=.000$). It can be confidently assumed that relationships with others and the creation of conditions for effective work in the team are essentially determined by the ability to deal with their emotions, but above all by the ability to manage others' emotions.

The results presented in Table 8 illustrate that the components of emotional intelligence are significant predictors of Diversity, explaining 27% of the variance. The ability to manage others' emotions has a moderate positive influence on the skill to offer different points of view ($\beta=.34$; $p=.000$), while the ability to deal with others' emotions has a weaker, but still significant positive effects ($\beta=.17$; $p=.000$). The ability to deal with own emotions also has a weak positive influence, but the result is not statistically significant.

Table 8. The effects of age, gender, and emotional intelligence on Diversity (N=159)

Model	Unstand. Coefficients		Stand. Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.374	1.634		3.900	.000
Age	.061	.319	.014	.190	.850
Gender	.039	.025	.109	1.541	.125
Deal with own emotions	.649	.330	.139	1.965	.051
Manage own emotions	-.015	.037	-.031	-.415	.679
Deal with others' emotions	.110	.050	.167	2.212	.028
Manage others' emotions	.183	.043	.338	4.236	.000

Table 9. The effects of age, gender, and emotional intelligence on Independence (N=159)

Model	Unstand. Coefficients		Stand. Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	11.039	1.965		5.618	.000
Age	-1.187	.384	-.235	-3.090	.002
Gender	.055	.030	.134	1.802	.074
Deal with own emotions	-.021	.397	-.004	-.052	.959
Manage own emotions	.131	.044	.238	2.974	.003
Deal with others' emotions	-.063	.060	-.084	-1.054	.294
Manage others' emotions	.116	.052	.188	2.233	.027

Finally, Table 9 presents the results of the regression analysis for the influence of the studied variables on the Independence component of collective intelligence, which explain 18% of the variations. Ability to manage own emotions ($\beta=.24$; $p=.003$), and manage others' emotions ($\beta=.19$; $p=.027$) have weak positive effect. A significant effect of age was also found ($\beta=-.24$; $p=.002$), with the established tendency being more typical for employees over 30 years old ($F=3.10$; $p=.028$).

In summary, we can indicate that emotional intelligence has a significant positive effect on the components of collective intelligence. The ability to manage others' emotions has the greatest influence, determining very significantly relationships and Networking skills, and still significantly but moderately the Diversity of perspectives toward a problem and ability to generate various ideas. The ability to deal with own emotions has a significant positive effect on Networking and Independence, while the ability to manage own emotions has a significant influence on Coordination and Independence skills.

Conclusion

Emotional intelligence involves understanding own emotions and reactions, the emotions and the actions of others in a social context, in such a way it enables employees to use this knowledge to influence personal and others behaviour by controlling and regulating emotions. As the organizational environment changes and the complexity of tasks increases, emotional intelligence becomes increasingly important not only for individual success, but also for success in social relationships and teamwork. The employees in the study rated their emotional intelligence highly, demonstrating a statistically significant higher ability to manage own emotions comparing with others components. The men and women did not

differ in their emotional intelligence, with one exception, women report higher scores in ability to deal with own emotions, than men. The collective intelligence scores also are high, with Networking scores highest, representing good ability in developing a smooth working relations, following by Coordination, Diversity, and Independence. There were no statistically significant gender differences in Networking and the Diversity, but men demonstrate higher scores in terms of Independence in thinking, and women better Coordination skills. Emotional intelligence has a significant positive effect on the components of Collective intelligence. The ability to manage others' emotions has the most significant influence, which strongly determines relationships and Networking skills, and moderately determines the Diversity of perspectives toward a problem. The ability to deal with own emotions has a significant positive effect on Networking and Independence, and the ability to manage own emotions on Coordination and Independence skills. The results confirm that emotional intelligence has a significant effect not only on individual success in the organization, but also on building successful relationships and team effectiveness. Of course, the current research has its limitations, due to the self-reported nature of the instruments, but the obtained results provide reasons to continue the research and look for the role of emotional and collective intelligence on important individual and organizational characteristics such as resilience and well-being.

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Asen Trichkov, PhD student
 Institute for Population
 and Human Studies
 Bulgarian Academy of Sciences
 Acad. Georgi Bonchev Str., Bl. 6, Fl. 5/6
 1113 Sofia, Bulgaria
 Email: asen.trichkov@gmail.com

Prof. Ergyul Tair, DSc
 Institute for Population
 and Human Studies
 Bulgarian Academy of Sciences
 Acad. Georgi Bonchev Str., Bl. 6, Fl. 5/6
 1113 Sofia, Bulgaria
 Email: ergyul_tair@cu.bas.bg