Behavioral aspects of organizational effectiveness: Emotional intelligence, organizational citizenship behavior, and their relationship roles

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Abstract
The article examines the constructs of emotional intelligence and organizational citizenship behavior and their role in practicing behaviors that increase organizational effectiveness. After outlining these terms and the connection between them a study is presented covering a group of 110 operational managers from eight different manufacturing companies. For this purpose, psychometric questionnaires 3D ECI (3-Dimensional Emotional Competencies Inventory) and organizational citizenship behavior (OCB) – C Scale (Organizational Citizenship Behavior – Checklist Scale) were used. The results of the study show correlations between individual competencies of emotional intelligence such as Maintaining Relationships and Managing Social Situations within the dimensions of organizational citizenship behavior. The correlations are discussed from the point of their practical implementation in HR practices such as recruitment, the creation of competency models, career paths, course training, and development programs.

Keywords: emotional intelligence, organizational citizenship behavior, organizational effectiveness, behavioral change, role modeling.

Introduction
What makes a successful company and what are the key factors for achieving success? Some would say that the recruitment process is the key to everything, others would focus on training and development while others would argue that the transformation of managers as role models will increase individual and hence team effectiveness. Are there any ground rules that need to be followed, or are conditions different for each organization? To answer these questions, we need to understand what actually helps organizations achieve their business goals.

When specialised literature informs us about the factors related to achieving set goals, effectiveness is universally cited as the principal feature to gain success (Comrey, Pfiffner & Beem, 1952; Rubenstein, Radnor, Baker, Heiman, & McColly, 1967). Viewed through the prism of the traditional terminological paradigm, effectiveness is understood as the degree to which “organizations achieve their missions through core strategies” (Kushner, 2000, p. 11). Defined in this manner, the concept raises a number of controversies, among which are its generality and lack of consideration paid to human effectiveness.

There are different research approaches available when seeking to unlock the key to greater effectiveness. A number focus on providing resources needed to achieve the goal; some review the system of a complex interaction between the organization and the external environment, while others focus on internal processes. To a large extent, these approaches adhere to the notion that effectiveness is expressed as the ratio between expenditure and the end result. Although, based on valid
arguments, we must bear in mind that these notions emerged in the early 1980s (e.g., Goodman & Pinning, 1980), and since then, business models and organizations have evolved significantly. Although still perceived as a concept within the scope of economic theories, the understanding of organizational effectiveness is changing and beginning to embrace more and more behavioral aspects. Concepts such as emotional intelligence (EI) and OCB are increasingly becoming the focus of research into effectiveness. This determines the role of scientific fields such as business, organizational, and occupational psychology, which have contributed to the recent multidisciplinary examination of the topic. Based on such scrutiny, this article offers disclosures and ideas as to how we can improve the effectiveness of modern organizations by focusing on the human factor within.

Material and methods

Theoretical framework, concepts, and definitions

Organizational effectiveness is a topic that attracts the interest of authors from various scientific fields. (Cameron, 1978, Connolly, Conlon, & Deutsch, 1980; Lewin & Minton, 1986; Nord, 1983). Their conclusions so far have formed a theoretical framework of sorts, which includes a variety of models, each of which describes to varying degrees the economic and behavioral factors influencing effectiveness. Despite their diversity, these models can be grouped into three main approaches: Goal Approach; System Resource Approach and Internal Process Approach.

Goal Approach

This was the first to gain widespread popularity among organizations. In the spirit of the classical economic paradigm, this approach pays particular attention to factors such as profit, product quality and manufacturing innovation (Price, 1968). One of the main assumptions of the Goal Approach is that the number of set goals and their scope depends entirely on a certain amount of irreplaceable resources (Robbins, 2003). As far as the behavioral factor is concerned, the view is that once employees are abreast of the main organizational goals, they should then presumably focus on their implementation.

Although often seen as the most logical approach to studying and improving organizational effectiveness, the Goal Approach has serious weaknesses. The most obvious weakness being the neglect of processes related to employee motivation and their identification with the goals. The second comes from the complexity of the processes in larger organizations. In such organizations, the goals of one team can often contradict with the goals of another team. A salient example of this can be observed in insurance companies, where the sales department and the liquidation department have completely different priorities and therefore their efficiency is measured differently.

System Resource Approach

This came on in the wake of the Goal Approach (Yuchtmann & Seashore 1967). This approach looks at effectiveness in terms of the organization’s ability to obtain the necessary resources externally. Its central view is that the procurement of such resources should be carried out in harmony with the external environment. This approach considers organizational effectiveness not only as a phenomenon related to a specific organization, but as such concerning a wider group (e.g., industry, cluster, economic sector). This approach states that in order for an organization to continue attracting new resources, its products and/or services must bring added value to other resource users within the environment (Mullins, 2008). Although this offers a macroeconomic, even macro-social perspective, this approach carries a serious weakness with it. A systemic approach is only applicable when there is a direct link between the resources the organization draws on and the product and/or services it produces, which in itself can be a significant challenge. This is especially true in the 21st century, where areas
such as education or medical research have become real industries, and obtaining results can be a long, drawn out process; if they are even measurable at all.

Internal Process Approach
This third approach considers effectiveness to be entirely dependent on the optimal use of existing resources in the organization in order to achieve the set goals. Effectiveness here means largely the optimisation of internal processes. Many modern approaches focusing on effectiveness enhancement in the production process, such as Lean (Chiarini, 2013) or Sigma 6 (Thomas, 2003) are based on this approach. The key to this method is the manner in which resources are put to use as well as the elimination of activities that consume resources in areas not relevant to the task at hand. Although a strong case can be made for this approach, it also has at least one serious drawback. This is the one-sided perception of effectiveness through the prism of optimisation. As a result of such a view, purely economic aspects such as customer satisfaction can often be neglected. Furthermore, employees in any given organization would surely react negatively to seemingly endless optimisation; and counter productive work practices may well follow (Matta, Erol, Johanson & Bacakzis, 2014), resulting in demotivation and employee inefficiency.

A different perspective Bearing in mind the approaches already presented, the need for a different perspective to consider the issue of organizational efficiency is clearly outlined. Although these approaches have remained operational, there is something amiss in all three, particularly in the behavioral domain. That said, many organizations are more than familiar with one or other of the three, having extracted a good deal of effectiveness from each in turn. The better companies have clearly set their goals, provided the necessary resources, optimised their costs and fine-tuned the approach adopted. In many cases, entire Public Relations (PR) departments will publicise the economic and social contribution that the company makes to society in exchange for the resource used. Such endeavor has certainly borne fruit, but as of today there has been saturation with the adverse effects on effectiveness being all too evident. Business will continue to glean some benefit from these three approaches, but must continually strive for new ways to power the “machine of success”. In response to these models, fresh exploration and a new wave of approaches is beginning to focus on the human factor within organizations and their personal and behavioral characteristics. This was noticeable as early as the end of the 20th century, with authors starting to associate effectiveness not so much with material or financial factors as with human resources.

Studies have emerged illustrating the relationship between organizational effectiveness and the levels of expertise and behavioral skills of employees. (Biswas, Giri & Srivastava, 2006; Demerouti & Cropanzano, 2010; Goodman & Pennings, 1977). Those who analyse business goal achievement, cite support and development of employees as the single most crucial factor in increased efficacy (Vinitwatanakhum, 1998). As this trend continues, the conceptualisation of effectiveness looks to focus on the ability of people to cooperate, to maintain sustainable motivation and to identify with organizational goals. This, of course, is expressed through heterogeneous behaviors, but those that are of prime interest at the core of research, most often have value or emotional determinants. The work created in this framework contributes immensely to the understanding and importance of people’s behavior in organizations.

Among them, the concepts of Organizational Citizenship Behavior (Organ, 1988) and Emotional Intelligence (Dulewicz & Higgs, 2000; Goleman, 1998; Salovey & Mayer, 1996), which examine the relationship between the emotions and internal attitudes with human behavior and the effect it has on work performance (Mikolajczak, Petrides, Coumans & Lumine, 2009; O’Boyle, Humphrey, Pollack, Hawver & Story, 2011; Podsakoff & MacKenzie, 1997). It is these two theoretical constructs that form the basis of this article, and the analysis of their
Organizational Citizenship Behavior

The concept of OCB gained popularity in 1988 when Dennis W. Organ published his book *The Good Soldier Syndrome*. In the book, the author creates a concept with the idea of covering only those behavioral manifestations of motivation directly related to organizational effectiveness. Consider the definition given by Organ, that OCB is: “individual conduct that is discretionary, is not explicitly recognized by the formal remuneration system and in aggregation promotes the effective functioning of the organization” (Organ, 1988, p. 4).

Organizational Citizenship Behavior can be described as behavior practiced within or in the context of the organization. Such behavior can manifest itself voluntarily by the goodwill of the individual and have a direct or indirect contribution to organizational effectiveness. This behavior is practiced due to the altruism of the individual and is free of any desire for reward. Furthermore, such action should not be undertaken merely to avoid punishment.

Organ emphasises that OCB is vital to the success of any organization and that it has a positive impact on both effectiveness and the working atmosphere. Not only does it enhance these aspects of business, but OCB also has the added benefit of having a tangible effect on employees who are not directly concerned with the OCB. What are the behaviors that formulate OCB? In order to set the parameters of the construct Organ combines these behaviors into five dimensions listed below:

- **Altruism** is evident simply by considering the assistance employees receive from colleagues without having requested any manner of help or support. When overwhelmed with the burden of too much to do, the altruistic aid coming from colleagues can be nothing but a positive boon all round. When the altruist performs so the logical assumption is that the common goal will be achieved more quickly;

- **Conscientiousness** includes voluntary behaviors related to compliance with work practices and standards – even when no one is watching. Such behaviors contribute to the emergence of team role models. This, in its turn, has a positive effect on the organizational atmosphere and the emotional background in which employees perform their duties and helps to increase team effectiveness;

- **Civic Virtue** includes behaviors that demonstrate responsibility and concern for the organization’s image. The link between civic virtue and organizational effectiveness can be witnessed through the building of the organization’s image as its value increases in the eyes of the employees. The result of this is that employees will identify more with organization’s goals in general;

- **Courtesy** includes behaviors that are related to the way information is exchanged or the way it is communicated within the organization. Such are the expressions of tolerance and courtesy towards other employees. Politeness is considered to be a precondition for a more conflict-free environment in which effectiveness is not hindered by communication barriers or hostile and asinine statements and attitudes;

- **Fare Play** (in the original Organ model titled *Sportsmanship*) describes behaviors that are expressed through honesty, positivism, openness, and the competitive spirit. An important clarification is that such competition should be focused on the situation, and not the colleagues. A good example of fair play is when an employee with a commercial profile fails to reach a deal with a potential client and so another colleague decides to try their luck with the client in question. The employee, who had previously failed to conclude the deal, acquaints the second representative with details of the negotiation to date; such as the peculiarities of the client and the approaches they have tried. The interrelation of fair play with organizational effectiveness is expressed by the fact that it creates internal cooperation, making the organization more competitive all round.

Although there are other models for OCB, the Organ model is the most frequently discussed and quoted in academic and scientific literature.
He conceptualises the construct comprehensively and thoroughly, describing and clearly defining the five characteristics with the behaviors inclusive within each one. The working model is successfully amplified by Williams and Anderson (1991) who added a very practical element to the theory by grouping the five dimensions of Organ's model into two large clusters. Grouping is done on the basis of the direction of the behaviors – towards the individuals or the organization as a whole. Thus, OCB person (OCBP) behaviors targeting the individual include the dimensions of Courtesy and Altruism, while OCB organization (OCBO) behaviors targeting the organization include Civic Virtue, Conscientiousness and Fare Play.

This addition Organ's concept makes it much more operational, especially with regard to measuring OCB.

When we look at the OCB concept the logical question is: since these behaviors and their relation to organizational effectiveness are so clearly defined, why is no action taken to develop them? For example, why is there a clear lack of developed training methodology pertaining to OCB or indeed any coaching initiatives focused on OCB? This is a straightforward question but one without an apparent answer. It is due to the very nature of the construct entailing the expression of goodwill behaviors, that development in the traditional manner through training and development initiatives is not only inappropriate but also impossible. When the aim is to increase employee awareness and implementation of OCB, we find ourselves in a catch 22 situation. This is a situation in which in order to be recognised as an illustration of OCB, the existent behaviors must be voluntary in nature and not a formal requirement. A prerequisite would take the form of a spontaneous display motivated by inner attitudes or values. Then and only then is the contribution to organizational effectiveness considered an example of OCB. Experience has shown that when such behaviors are an intrinsic part of the job description or fall into the expected role repertoire, they cannot be considered spontaneous (Jafri, 2012, p. 33). Also, as a mere verbal requirement on the part of management, 'they can even trigger a negative response, expressed in resistance to behaviors from the OCB spectrum' (Bolino & Turnley, 2003, p. 69). This is the principal reason OCB cannot and should not be developed through the familiar development programmes where people are trained to be good citizens of the organization. This is why there is neither the experience nor a developed training methodology in this field.

It is for these reasons that other ways to develop OCB should be sought. One option being explored is OCB-related behaviors, such as those for which there are already established development methodologies with a proven link to organizational effectiveness. In this regard, we can find evidence of the relationship between effectiveness and employee engagement (Andrew & Sofian, 2011; Coffman & Gonzalez-Molina, 2002) or the managerial skills at different levels to have an emotional impact and increase the motivation of teams (Germano, 2010; Hu, Zhang, & Wang, 2015; Bayer, Krupskyi, & Bondarenko, 2020). As already mentioned, a concept that includes such behaviors is the widely familiar emotional intelligence. Its association with OCB and effectiveness in general has been an area of increasing interest in recent years. Before we look at the links between the two constructs, however, let's first outline the scope of the concept of emotional intelligence.

**Emotional Intelligence**

This theory became particularly prominent in the late 20th century. This was largely due to the fact that, unlike OCB which remains a concept focused on behaviors manifested only within organizations, EI considers a number of other aspects of human existence, giving it a much wider popular appeal. Issues such as child rearing, personal happiness and forming friendships ensured more widespread interest. In this article, however, we will focus only on those aspects of EI related to organizational behavior and, in particular, relevant to the issue of increasing organizational effectiveness.
When we talk about EI, there are varying models to consider which are able to theories the concept. Different groups of authors make different, sometimes contradictory claims, most of which are in regard to the building blocks of the construct. There are three theoretical lines that can be broadly presented. The first argues that EI is a collection of abilities that can be acquired and learned as behavioral responses. The majority of authors stand by this maxim including such names as Goleman, Salovey, Mayer, Higgs, and Dulewicz (Goleman, 1995; Salovey, & Mayer, 1990; Higgs & Dulewicz, 2003).

The second theoretical model, supported by Petredes and Furnham (2000) is known as the trait model because it argues that EI consists of behaviors based on personality traits. A third line offers a mixed model characterising EI as a mixture of both types, a blending of behavioral skills and personal traits. The most prominent advocate of this line is Bar-On (2006).

An important clarification to make here is that although there are scientific arguments in support of each of the afore mentioned theoretical ideas, this article will consider EI as a set of abilities, and the model that will be adopted is that created by Salovey, Mayer and Caruso (2008). This is dictated by the high validity of the model, a fact which makes it the most preferred model by researchers and scholars compared to all of the alternative EI modes combined (Matthews, Roberts & Zeidner, 2004, p. 181).

Let us begin the presentation of EI with the definition that Salovey and Mayer give: ‘Emotional Intelligence includes the ability to engage in sophisticated information processing about one's own and others emotions and the ability to use this information as a guide to thinking and behavior’ (Mayer, Salovey, Caruso, 2008, p. 506).

Salovey, Mayer & Caruso (2008) present EI as a constellation of 16 emotional abilities grouped into four dimensions as follows:

- **Perceiving emotions** include abilities to:
  a) identify own emotions and feelings; b) identify emotions and feelings in other people based on their appearance and behavior; c) express own emotions accurately; and d) discriminate between honest versus dishonest expressions of feeling of others;

- **Emotional facilitation of thinking** includes abilities: a) to direct attention to important information by usage of emotions; b) to support judgment and memory concerning feelings by usage of emotions; c) for mood change in the individual’s perspective, encouraging consideration of multiple points of view; and d) to deliberately provoke emotional states and to encourage specific problems solving approaches;

- **Understanding emotions** include abilities to: a) label emotions and describe them by words; b) interpret the meanings that emotions convey regarding relationships; c) understand complex feelings or combination of feeling (sympathy and love); and d) recognise likely transitions among emotions (e.g., transition from anger to shame).

- **Managing emotions** include abilities to:
  a) stay open to feelings, pleasant or unpleasant; b) reflectively engage or detach from an emotion based on its own situational judgment; c) reflectively monitor emotions in relation to oneself and others; and d) manage emotion in oneself and others, without hiding or exaggerating information.

Since the inception of the concept of EI, Salovey and Meyer's model and other models have argued that the concept is about the way people behave in organizations, with career success and job performance. To investigate these statements, a number of authors focus on seeking evidence of the relationship between EI and personal and team effectiveness. Thus, based research as early as 2001, Cary Cherniss created a model linking organizational effectiveness with phenomena such as leadership, organizational climate and culture, HR functions and group and individual emotional intelligence (Cherniss, 2001, p. 8). Numerous other studies have subsequently confirmed these findings by linking EI to job performance (Lopes et al., 2006), organizational climate, and the ability of employees to learn from each other (Zeidner, Matthews & Roberts, 2002), job satisfaction, job performance, and job...
commitment (Shooshtarian, Ameli & Aminilari, 2013); concepts that we know are directly or indirectly related to organizational effectiveness.

As a logical consequence of these findings, an interest in exploring the relationship between EI and OCB emerged. Shortly after the above-mentioned revelations, various publications could unequivocally state that indistinguishable behaviors existed relevant to both concepts. Despite this there remains a dearth of tools aimed at improving organizational efficiency.

There are many reasons for the lack of sufficient tools. Let us not forget that many teams conducting such research do not have an active consulting experience, which makes it difficult to create a practical and easily accessible methodology. It is also not uncommon for such research to be riddled with jargon, unfamiliar to the business world. In other cases, the research is done by internal Human Resource (HR) specialists and although very practical, their findings are valid only in the context and culture of the organization they work for, therefore the applicability of the findings is limited. Last but not least, attention should be paid to the target groups of the research. In most cases, the respondents lacked significant work experience (i.e., they were denied any real opportunity to put OCB behaviours into practice). In such cases, when completing the relevant questionnaire, answers are not based on any real-life experience, but merely on assumption as to how they would have behaved. This is the case with research conducted with: university professors (Vandewaa & Turnipseed, 2012); students (Khalid et al., 2009); High School teachers (Somayehadabifirozjaee, Abbas Abbaspour & MostafaAzizishomami, 2014); and physicians (Sahafi et al., 2011).

On the other hand, when the target group are business people, the corporate executive level will account for the lion’s share of research attention (e.g., Antony, 2013; James, Velayudhan & Gayatridevi, 2010). This certainly seems logical from the point of view that employees at executive level are expected to guide the entire organization towards goal achievement. However, in an in-depth look at a corporate executive’s efficiency, we can clearly see that it is hardly expressed in the demonstration of behaviors from the scope of OCB. In essence, executive positions presuppose greater strategic thinking, so they are not operationally involved in the work process. Furthermore, when the executive is not present on a daily basis, behaviors can hardly be regularly observed, and so we cannot expect a spontaneous expression of behaviors. With this in mind, even if upper management does practice some OCB behaviors, they are hardly likely to become a natural part of the role repertoire of the employees.

However, when the goal is to improve organizational effectiveness, it should be expected that as many employees as possible will undertake OCB practices. The most logical option would be to endeavor to influence the areas of the organizational structure with closest contact to the executive. The result of their OCB behaviors would be the most pronounced. Due to their involvement in the work processes, middle management most often spontaneously becomes a role model for employees, and this is a prerequisite for them to take on board these behaviors and put them into practice. This logic is a widely studied phenomenon, and a number of authors provide indisputable evidence for the impact of role modelling (Kumarasinghe & Hoshino, 2010; Lee & Teece, 2013; Gatcher & Renner, 2018; Bogodistov, Y., & Moormann, 2019). This argument, as well as the previous considerations, led to the formation of the specific target group in the research to be presented. A study conducted with a group of employees at the middle management level, who on the one hand have experience in real business structures, while on the other are sufficiently involved in work processes so that their behaviors can be monitored daily. This is a prerequisite for increased effectiveness of the organization as they are involved in operational activities with all employees on daily bases.

The aim of the study was to explore the levels of EI and OCB in individuals from the target
group, and then to look for correlations between them and between the constituent behaviors. In the presence of such associations, to study the direction and strength of the associations, as well as how they would manifest as specific behavioral tendencies. The study also hypothesizes the use of these associations to improve organizational effectiveness as they can be implemented in various HR practices such as staff selection, training and development and competency modeling among others.

Method

This study was conducted during the period 2016–2018. The idea was born during several major projects in the field of training and development, all of which involved manufacturing companies operating in the Republic of Bulgaria. Although the initiatives did not directly address organizational effectiveness, the sponsors’ expectations included a change in the behavior of employees at management levels in a direction that would lead to the improved performance of the teams they manage and the processes for which they are responsible.

Participants

The study was conducted using a group composed of employees in middle management – often referred to as ‘board minus two’ because this position is two levels below GM (general manager) in the organizational structure. The target group was composed of 110 employees. They were representatives of eight different international companies operating in industries such as, automotive, heavy industry and energetics. Their minimum experience in this position was not less than 18 months. Of the 110 people surveyed, 37 were men and 73 women. All individuals participated in the development programs organized by their companies and conducted by an external provider; I was part of the consulting team conducting these initiatives.

Procedure

As a part of the survey procedure the participants completed two psychometric questionnaires, one measuring EI, the other OCB. The EI questionnaire was used as a development tool within the framework of the development programmes, in connection with the training related to emotional intelligence and development of management skills. The questionnaire measuring the OCB was completed a week later. This methodological feature is imposed by the desire not to "mix" the answers of the two questionnaires, as well as ensuring respondents do not make associative references from one type of behavior to another, which may reduce the validity of the study (Groebner, Shannon, Fry & Smith, 2000).

Instruments

Psychometric instruments measuring EI the 3D ECI (Puravangara, 2012) and OCB the OCB-C Scale (Spector, Bauer & Fox, 2010) were used in the study. Both questionnaires use a 5-point frequency scale as a basis for evaluation, which greatly facilitates the analysis of correlations.

Emotional Intelligence

A Three-Dimensional Emotional Competency inventory (3D ECI) self-assessment test was used to measure EI.

The test uses 63 questions to generate information in three dimensions (D). D1 – Dealing with self, D2 – Dealing with others, D3 – Dealing with life.

These “D”s are divided into seven different subscales (“M”s) These subscales are: M1 – maintain self-esteem and motivation; M2 – manage impulses and emotions; M3 – maintain relationships; M4 – manage social situations; M5 – maintain compassion and conscientiousness; M6 – manage challenges and threats; M7 – maintain positivity.

The five-point response scale is organized as follows:

1 – Strongly disagree; 2 – Disagree; 3 – Undecided; 4 – Agree; 5 – Strongly Agree.

There some examples from the question included in the test.

Example 1: This person . . .

trusts people until they prove unworthy.

Example 2: This person . . .

avoids problems rather than confronting them.

Example 3: This person...

gets angry if a subordinate question his/her view.
Unlike many other EI questionnaires that generate only one common EQ index, 3D ECI generates separate indices for each of its subscales, offering ample opportunity to look for a correlation between two multifactor constructs such as EI and OCB. The validity data of the questionnaire are promising: “The seven subscales of the 3D-ECI test have been reported to have internal consistency as indicated by the Cronbach’s alpha coefficients, which ranged from 0.72 to 0.83. The split half reliability coefficient was also found to be high (r _ 0.76)” (Puravangara, S., 2012, p. 127).

**Organizational citizenship behavior**

The OCB-C scale is also a self-assessment tool measuring OCB using 36 questions (Spector et al., 2010).

The questions gather information on the dimensions described in the Organ’s model, with the report generated giving two coefficients – one for OCB behaviors directed towards the organization (OCBO), the other for OCB behaviors targeted at the individual (OCBP). The OCB-C uses a 5-point frequency scale ranging from 1 – Never to 5 – Every day.

*Exemple1:* Changed vacation schedule, work days, or shifts to accommodate co-worker’s needs.

*Exemple2:* Volunteered to work on after-hours or out-of-town events.

The measurement shows an internally consistent validity for the scale as a whole and for the overall result (Cronbach Alpha) is 0.97. As for the OCB, the behavior directed towards the organization (OCBO) is 0.92, and for the behavior directed at individuals (OCBP) is 0.91. The reported alpha coefficients are 0.94 for the overall score, 0.89 for the OCBO and 0.90 for the OCBP (Spector et al., 2010, p. 788).

**Analyses**

After the completion of the two tests, indices describing seven sub-dimensions (marked with “M”) for EI and the two indices for OCBO (behaviors directed to the organization) and OCBP (behaviors directed to the individual) were calculated.

SPSS statistical software was then used for correlation and regression data analysis. The task of the correlation analysis done in this research was to determine the degree of influence of the dimensions of EI, in this case the factors (M1; M2; M3; M4; M5; M6; M7), on the OCB behaviors, in this case the two traits (OSBO and OCBP). Correlation analysis highlights the nature of the links between the factors and the trait; it also determines the factors having the greatest impact on the change in the values of the trait.

**Results and discussion**

Before we start with the presentation of the correlation analysis between the two constructs, let’s look at the total values of EI and UGP among the participants.

A review of the seven subscales of EI, measured by the questionnaire, shows that the highest average value is in M7 – maintain positivity (37.77). The lowest average is for M2 – manage impulses and emotions (32.51), where is the lowest minimum value (18).

All subscales have a maximum value of 45, except M6 – manage challenges and threats, where it is 42.

**Table 1 – descriptive statistics EI**

| Emotional Intelligence                                    | N   | Minimum | Maximum | Mean   |
|-----------------------------------------------------------|-----|---------|---------|--------|
| M1 – maintain self-esteem and motivation                  | 110 | 25      | 45      | 36.49  |
| M2 – manage impulses and emotions                         | 110 | 18      | 45      | 32.51  |
| M3 – maintain relationships                               | 110 | 24      | 45      | 34.34  |
| M4 – manage social situations                             | 110 | 23      | 45      | 35.24  |
| M5 – maintain compassion and conscientiousness           | 110 | 26      | 45      | 36.64  |
| M6 – manage challenges and threats                        | 110 | 26      | 42      | 33.80  |
| M7 – maintain positivity                                 | 110 | 30      | 45      | 37.66  |
These results show a similar trend for the average values of EI competencies for middle management employees measured by Ugoani, Amu, & Kalu, (2015) when using the MSCEIT test based on the Salavey and Meyer model the highest average value is measured in Self-awareness, a category that largely overlaps the category of the same name in 3D ECI.

Another study outlining a similar profile of EI among managers is that of Carmeli (2003), which reported high values of self-motivation management, an ability that falls within the M1 subscale in 3D ECI.

The results of the descriptive statistics of the questionnaire measuring OCB show relatively equal average values between OCBP and OCBO. In the case of OCBP – the OCB behaviors aimed at the individual have a slightly higher average value (3.2295) compared to those aimed at the organization OSO (3.2077) (table 2).

| Table 2 – descriptive statistics OCB |
|--------------------------------------|
| OCB       | N | Minimum | Maximum | Mean   |
|----------|---|---------|---------|--------|
| OCBP     | 110 | 1.38    | 4.63    | 3.2295 |
| OCBO     | 110 | 1.87    | 4.80    | 3.2077 |

A similar balance of the distribution of values in OSVR and OSVO can be seen in the meta-analysis made by Organ & Ryan (1995), which clarifies the importance of both groups of behaviors in terms of organizational effectiveness.

The results of the correlation analysis of the results of the two tests are shown in Table 3.

Correlation statistics between EI and OCB able 1 about here

As can be seen in Table 3 most of the EI abilities have a direct interrelation with the behaviors of the OCB. Of all the correlations, the most interesting are those exhibiting the greatest strength, because they show a higher degree of influence on the illustration of the behavior (trait) with which they correlate.

When we look at the correlation between EI and OCBP (person), the strongest correlation is with M3 (Maintain relationships), where the strength of the connection of 0.709 (sig. level 0,01 – 2 tiled). This correlation also deserves attention. The M4 dimension includes behaviors / attitudes of the social skills spectrum. Although this group of EI skills has a fairly wide range, in an organizational environment it is most often expressed in the form of abilities such as social confidence and social interaction. On the other hand, OCBO includes behaviors that fall into the dimensions of Conscientiousness and Fair Play.

Other relations that are moderately strong and can also be interpreted as part of the more general correlation between EI and OCB are those within M5 (Maintain compassion and Conscientiousness) with OCBP – 0.346, also M7 (Maintain positivity) with OCBO – 0.339. The building blocks such as awareness, compassion and a positive attitude are easily recognisable pieces of the puzzle of the positive work environment, and undoubtedly also contribute to improving motivation and hence the effectiveness of people working in the organization.

Observing the relationship between OCB and EI we have to summarize that there are a significant number of correlations between the two constructs providing a solid base for further discussion in the search for practical applications.
Table 3 – The results of the correlation analysis of the results of the two tests

|                | M1 (Maintain self-esteem and motivation) | M2 (Manage impulses and emotions) | M3 (Maintain relationships) | M4 (Manage social situations) | M5 (Maintain compassion and conscientiousness) | M6 (Manage challenges and threats) | M7 (Maintain positivity) | OCBP (OCB-person) | OCBO (OCB-organization) |
|----------------|-----------------------------------------|----------------------------------|------------------------------|--------------------------------|-----------------------------------------------|----------------------------------|--------------------------|---------------------|--------------------------|
| M1 (Maintain self-esteem and motivation) | Pearson Correlation                     | 1.0                              | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
| M2 (Manage impulses and emotions)       | Pearson Correlation                     | 4.9*                            | 1.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
| M3 (Maintain relationships)             | Pearson Correlation                     | 0.0                            | 2.2*                         | 1.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
| M4 (Manage social situations)           | Pearson Correlation                     | 3.3*                            | 3.5*                         | 1.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
| M5 (Maintain compassion and conscientiousness) | Pearson Correlation                     | 0.0                            | 0.3*                         | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
| M6 (Manage challenges and threats)      | Pearson Correlation                     | 4.3*                            | 5.2*                         | 2.5                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
| M7 (Maintain positivity)                | Pearson Correlation                     | 4.5*                            | 4.7*                         | 2.3*                           | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
| OCBP (OCB-person)                       | Pearson Correlation                     | 1.4*                            | 2.6*                         | 0.9*                           | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
| OCBO (OCB-organization)                 | Pearson Correlation                     | 0.0                            | 5.3*                         | 2.2*                           | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |
|                |                                          | Sig. (2-tailed)                  | 0.0                          | 0.0                            | 0.0                            | 0.0                              | 0.0                      | 0.0                | 0.0                      |

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

N = 110
Discussion

After presenting the results of the study, it will be useful and interesting not only to interpret the correlation analysis, but also to consider the behaviours behind their correlated dimensions by discussing how they could affect the improvement of organizational effectiveness.

Focusing first on the relation of M3 with OCBP, we can discuss how an ability to maintain relationships is related to personality-oriented OCB behaviors. Obviously, the ability to maintain interpersonal relationships falling within the M3 is expressed in an organizational context through behaviors related to expression of politeness, tolerance and courtesy towards other employees. Other behaviors related to M3 may be altruistic acts of support for a colleague with work load difficulties. This can improve not only the working climate, but also team effectiveness in terms of completed working day tasks. The correlation strength between these two dimensions of 0.709 being rather high, provides predictive value for predicting behaviors from the OCBP spectrum based on EI. Regarding the development of these skills, it should be noted that the interpersonal skills which build M3 and especially those related to communication, are areas where companies traditionally invest in endeavor and resources. Training focused on providing feedback, assertive communication and so on are part of many training and development initiatives and they can surely only have a positive impact on OCB behaviors.

The other connection for discussion is that of M4 and OCBO with a strength of 0.397. This correlation shows us that social confidence, which is a prerequisite for interacting freely within large groups of people, favours the expression of acts of conscientiousness and the exchange of information, making the organization more competitive. When the managers behave in a way that builds the image of the organization its value increases in the eyes of the employees. And if through fair play internal cooperation is created, a positive effect on organizational effectiveness is the concomitant result. Taking into account that the target group of the research is middle-management, this will be recognised as a behavioral standard, and the phenomenon of the role model will encourage other employees to follow suit. With regard to this correlation, I will allow myself to make an even bolder assumption: if such behaviors become a permanent feature, mechanisms of social regulation will be activated and over time the majority of employees will show evidence of OCBO behaviors. This is without having had much contact with higher levels of management but simply because the general staff are leading by example.

Application in organizations

When we talk about the relation between two such multifactor constructs as EI and OCB, it seems that it is easier by far to measure correlations between their constituent elements than to provide specific guidelines for their application. This becomes even more difficult when done in the context of such a large topic as organizational effectiveness. However, if no effort is made towards this, the results of the present study will once again generate data that can at best be used for academic purposes as opposed to real life business practice. Even in the form of notes and suggestions, such ideas should be shared in order to at least lay the foundations for building the bridge that will connect theoretical discoveries with their practical applications.

Viewed through the prism of the desire of organizations to become more effective, a form should be sought through which the interrelations revealed in this study can be applied in specific HR practices. These practices can be focused on three main aspects: a) recruitment; b) training; and c) promotion and development.

Recruitment

The relations between EI and OCB can be used in the recruitment process in order to more accurately predict the likelihood of candidates practicing OCB in the organization, and thus indirectly having a positive impact on
performance levels. This can be done both through the appropriate tests and through the use of methodologies for an assessment centre. There are many examples which have proven to be highly reliable.

Another well-known practice is to draw up a questionnaire for special situation-based recruitment interviews which can be validated and used within the company. This should include customization, which each organization can do internally using internal resources, thus ensuring that the questions are highly relevant to the culture, context and challenges that the applicant will have to deal with. In this way, the organization can ensure from the start that those admitted will be exposed to high levels of EI, especially in those competencies that are known to have a strong connection with the OCB. Even if it is not applied to all levels in the organization, when selecting people for middle management, such an approach would significantly contribute to the practice of OCB.

Another possibility is to design a customized assessment centre, incorporating role play and business simulation relevant to the two EI dimensions that have shown the strongest correlation with OCB. Such recruitment tools are not new to HR specialists and can easily replace some existing activities with others more suitable for revealing the EI abilities represented in M3 and M4.

**Training**

The positive correlations between EI and OCB can undoubtedly be used in the design and planning of training programmes aimed at the development of EI; the emphasis on the dimensions Maintaining Relationships and Managing Social Situations for which we have strong correlations with the behaviors of the OCB spectrum. As we have already discussed, the development of OCB through training initiatives of the organization has no effect. The reason for this is that these behaviors must be voluntary in nature and not a formal requirement. Also, we have to remember the fact that in order to have a positive impact on organizational effectiveness this OCB manifestations should be a spontaneous expression on employee free will and not related with any reward or punishment. With regard to the development of EI, however we do not have such limitations. There is also a large enough know – how, a rich set of information and data proving that EI can be quite successfully developed within organizations. This is possible with a wide range of methodologies, starting with standard soft skills training (Delewich & Higgs, 2004) and leading to the application of approaches such as social learning (Bandura, 1971). During social learning, employees develop their emotional intelligence, even without being separated from the work processes, while working and interacting with their colleagues (Evered & Selman, 1989).

Although there are currently many elaborate programmes claiming to successfully develop EI competencies, given the interrelations identified by the study, consideration should be given to developing training initiatives that target the skills most strongly correlated with OCB. Their effect can be enhanced if interactive activities and role-plays, which are an integral part of any experiential training, take place in a context that involves the practice of OCB.

**Promotion and development**

The disclosures of EI and OCB relations can also be used in promotion and development procedures and systems. For example, they can be used as a key part of the soft skills in the relevant competency models of the organization, especially in relation to middle management positions. Another possibility is EI competencies being used in the creation of career paths which indicate the direction the employees should follow, and the skills they must develop for a successful career. In this area, a number of organizations have displayed good practice by providing their employees with the opportunity to acquire the necessary skills which are required in the workplace.

The suggestions concerning the three main areas of HR – recruitment, training and development and promotion are easy to grasp and it is simple to apply the guidelines required for organizations to model to their own specific needs. They can be applied individually or
combined in a comprehensive HR strategy aimed at increasing effectiveness. In most cases, their implementation does not require any additional qualifications or particularly large financial resources, only the desire, motivation and energy of the HR professionals.

**Limitations**

For the sake of objectivity, it would be but equitable to look at some of the weaknesses of the research. The most obvious weakness is the breadth of the sample. A hundred and ten respondents are a fair sample in terms of a pilot study, but if the aim is to create a serious methodology for improving organizational effectiveness through the practice of OCB, then the sample should be expanded, both in terms of volume and in terms of the scope of different business niches, where the challenges are certainly different.

The other major weakness can be seen in the nature of the correlation analysis itself. Although the most commonly used type of analysis when looking for links between behavioral-based constructs, the truth is that it only really shows relatedness between the two concepts. The correlation hypothesis neither seeks nor can answer the other important question – which of the behaviors is the cause and which is the consequence. This is of course an important issue when we want the emergence of a closely related behavior. The need for further research is obvious. As well as work in the HR field, where different approaches and techniques must be tested in order to discover those most effective, we must also strive for those which will show a real impact on organizational effectiveness.

**Conclusions**

Organizational effectiveness is a term that is most often associated with words such as strategy, optimisation and goal setting. The pursuit of achieving and exceeding goals has been and will continue to be an integral part of the business world. The effect of the consumer culture in which we live only intensifies this aspiration and causes companies to “raise the bar” sometimes too quickly or too high. In this business reality, to achieve their goals, most organizations now rely on technology and artificial intelligence, synthetic materials and low-budget solutions. Although there is ongoing discussion as to how valuable human capital is, in the background of all Smart and Lean solutions, investment seems uncertain with at best a slow return. Do digital technologies and endless optimisations lead to sustainable effectiveness? It must be doubted. I believe that against the background of all the crises that business has gone through, one thing has not changed: humans have proved that through their adaptability and ability to model their behavior, they are still the most valuable resource for organizations. And maybe now is the time for organizations to look at effectiveness through the prism of behavioral determinants, so that with a push in the right direction, the conditions for their next business successes are created.

**References**

Andrew, C., & Sofian, S. (2011). Engaging People who Drive Execution and Organizational Performance. *American Journal of Economics and Business Administration, 3*(3), 569–575. DOI: 10.3844/ajebasp.2011.569.575.

Antony, J. M. (2013). The influence of emotional intelligence on organizational commitment and organizational citizenship behavior. *Journal of social science research, 1*(1), 5–8. DOI: 10.24297/jssr.v1i1.6674.

Bandura, A. (1971). *Social Learning Theory*. New York: General Learning Press.

Bar-On, R. (2006) The Bar-On Model of Emotional-Social Intelligence (ESI), Psicothema, 18, supl., 13-25, ISSN: 0214-9915.

Bayer, O., Krupskyi, O., & Bondarenko, E. (2020). Subordinate evaluations of high-performance managers. *Leadership & Organization Development Journal, 41*(7), 927–938. DOI: 10.1108/lodj-02-2019-0080.
Biswas, S., Giri, V. N., & Srivastava, K. B. L. (2006). Examining the Role of HR Practices in Improving Individual Performance and Organizational Effectiveness. Management and Labour Studies, 31(2), 111–133. DOI: 10.1177/0258042x0603100202.

Bogodistov, Y., & Moormann, J. (2019). Cash means control. European Journal of Management Issues, 27(3-4), 55-62. DOI: 10.15421/191906.

Bolino, M. C., & Turnley, W. H. (2003). Going the extra mile: Cultivating and managing employee citizenship behavior. Academy of Management Executive, 17(3), 60–72 DOI: 10.5465/ame.2003.10954754.

Cameron, K. (1978). Measuring Organizational Effectiveness in Institutions of Higher Education. Administrative Science Quarterly, 23(4), 604-632. DOI: 10.2307/2392582

Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes. Journal of Managerial Psychology, 18(8), 788–813. DOI: 10.1108/02683940310511881

Chelladurai, P., & Haggerty, T. R. (1991). Measures of organizational effectiveness in Canadian national sport organizations. Canadian Journal of Sport Science, 16(X),126-133. PMID: 1647858

Cherniss, C. (2001). Emotional intelligence and organizational effectiveness. In C. Cherniss & D. Goleman (Eds.) The emotionally intelligent workplace. San Francisco: Jossey-Bass.

Chiariini, A. (2013). Lean Organization: from the Tools of the Toyota Production System to Lean Office. Perspectives in Business Culture. (3). 15-30. DOI: 10.1007/978-88-470-2510-3.

Coffman, C. and Gonzalez-Molina, G. (2002), A new model: Great organizations win business by engaging the complex emotions of employees and customers’, Excerpt from Follow This Path. Warner Books, The Gallup Management Journal, pp. 12-21, DOI: 10.1177/0734371X04270718

Comrey, A. L., Piffnfer, J. M., & Beem, H. P. (1952). Factors Influencing Organizational Effectiveness. Personnel Psychology, 5(4), 307–328. DOI: 10.1111/j.1744-6570.1952.tb01021.x.

Connolly, T., Conlon, E. J., & Deutsch, S. J. (1980). Organizational effectiveness: a multiple-constituency approach. Academy of Management Review, 5. 211-217, DOI: 10.5465/amr.1980.4288727

Delewich, V., & Higgs, M. (2000). A review of Emotional Intelligence, Journal of Managerial Psychology, 15(4). 341–372, DOI: 10.1108/0268394001030993

Delewich, V., & Higgs, M. (2004). Can Emotional Intelligence be developed? International Journal of Human Resource Management, 15(1), 95–111. DOI: 10.1080/0958519032000157366.

Demerouti, E. and Cropanzano, R., (2010), “From Thought to Action: Employee Work Engagement and Job Performance”, in Bakker A B and Leiter M P (Eds.), Work engagement: A Handbook of Essential Theory and Research, pp. 147-163, New York: Psychology Press. ISBN 978-1-8416-9736-9

Evered, R., & Selman, J. (1989). Coaching and the art of management. Organizational Dynamics, 18(2), 16-32. DOI: 10.1080/1367886060893524

Gatcher, S., & Renner, E. (2018). Leaders as role models and ‘belief managers’ in social dilemmas. Journal of Economic Behavior & Organization, 154, 321-334. DOI: 10.1016/j.jebo.2018.08.001

Germano, M. A. (2010). Leadership Style and Organizational Impact. [Online] Available at: http://ala-apa.org/newsletter/2010/06/08/spotlight

Goleman, D. (1995). Emotional intelligence. Bantam Books, Inc.

Goleman, D. (1998). Working with emotional intelligence. New York: Bantam Books.

Goodman, S., & Penning, J., (1977), New Perspectives on Organizational Effectiveness, San Francisco: Jossey-Bass, DOI: 10.4236/ajibm.2018.86109.

Goodman, S., & Pinning, J. (1980). Critical issues in assessing organizational effectiveness. In E. E. Lawler III, D.A. Nadler & C. Camman (Eds.) Organizational Assessment. New York: Wiley.
Groebner, D., Shannon, P., Fry, P., & Smith, K. (2000). Business Statistics, A Decision-making Approach, Prentice Hall.

Higgs, M., & Dulewicz, V. (2003), Leadership at the top: The need for Emotional Intelligence in Organizations". The International Journal of Organizational Analysis. 11(3). 193-210. DOI: 10.1108/eb028971.

Hu, D., Zhang, B., & Wang, M. (2015). A Study on the Relationship among Transformational Leadership, Organizational Identification and Voice Behavior. Journal of Service Science and Management, 08(01), 142–148. DOI:10.4236/jssm.2015.81017.

Jafri, H. (2012). Influence of Psychological Contract Breach on Organizational Citizenship Behaviour and Trust, Psychological Studies, 57, 29–36

Khalid, S., & et al. (2009). Emotional Intelligence and Organisational Citizenship Behaviour as Antecedents of Students Deviance. International Journal of Business and Management, 4(7), 117-122

Kumarasinghe, S. & Hoshino, Y. (2010). The Role and Perceptions of Middle Managers and Their Influence on Business Performance: The Case of Sri Lanka. International Business Research, 3(4), 3–16.

Kushner, R. J. (2000). Facilitators guide for assessing organizational effectiveness in national societies: A resource for organizational development facilitators in the international Red Cross, Red Crescent Movement. International Services Department: Technical Assistance, Planning and Evaluation Unit. Washington, DC available on: http://www.abepro.org.br/biblioteca/icieom2012_submission_261.pdf.

Lee, S., & Teece, D. J. (2013). The Functions of Middle and Top Management in the Dynamic Capabilities Framework. Kindai Management Review. (1). 28–40, ISSN: 2186-6961.

Lewin, A., Minton, J. W. (1986). Determining organizational effectiveness: Another look, and an agenda for research. Management Science, 32: 514-538. DOI: 10.1287/mnsc.32.5.514.

Lopes, P.N., Grewal, D., Kadis, J., Gall, M. and Salovey, P. (2006) Evidence that Emotional Intelligence Is Related to Job Performance and Affect and Attitudes at Work. Psicotherma, 18, 132–138.

Matta, F., Erol, T., Johanson, R., Bacakzis, P. “Significant work events and counter-productive work behavior: The role of fairness, emotions, and emotion regulation, Journal of Organizational Behavior 35:920-944, DOI: 10.1002/job.1934.

Matthews, G., Roberts, R. D., & Zeidner, M. (2004) Seven myths about emotional intelligence. Psychological Inquiry, 15, 179-196.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional intelligence: New ability or eclectic traits? American Psychologist, 63, 503–517. DOI: 10.1037/0003-066X.63.6.503.

Mikolajczak, M., Petrides, K. V., Coumans, N., & Luminet, O. (2009). The moderating effect of trait emotional intelligence on mood deterioration following laboratory-induced stress. International Journal of Clinical and Health Psychology, 9(3), 455–477.

Mullins, L. J. (2008). Essentials of organisational behaviour: Pearson Education.

Nord, W. R., (1983). A political-economic perspective on organizational effectiveness. In K. Cameron & D. Whetten (Eds.), Organizational effectiveness: A comparison of multiple models, New York: Academic Press. 95-113. DOI: 10.1002/pam.4050030351.

O’Boyle, H., Humphrey, R. H., Pollack, J., Hawver, T., & Story, P. (2011). The relation between emotional intelligence and job performance: A meta-analysis. Journal of Organizational Behaviour, 32(5), 788 – 818.

Organ, D. (1988). Organizational Citizenship Behavior: The Good Soldier Syndrome. Lexington: Lexington Books.

Organ, D., & Ryan, K., (1995), “A Meta-analytical Review of Attitudinal and Dispositional Predictors of OCB,” Personnel Psychology, Vol. 48, pp. 775-802. DOI: 10.1111/j.1744-6570.1995.tb01781.x.

Petrides, K. V., & Furnham, A. (2000). On the dimensional structureof emotional intelligence. Personality and Individual Differences, 29, 313–320. DOI: 10.1016/S0191-
Podsakoff, P., & MacKenzie, S. (1997). Impact of organizational citizenship behavior on organizational performance: A review and suggestions for future research. *Human Performance, 10*(2), 133–151, DOI: 10.1207/s15327043hup1002_5.

Price, J. L. (1968). The study of organizational effectiveness. *Sociological Quarterly, 13*: 3–15.

Puravangara, S. M. (2012) Three-Dimensional Emotional Competence Inventory (3D-ECI), *The Pfeiffer Annual 2012: Training*, Edited by Elaine Biech. 127–147.

Robbins, S. P. (2003). Essentials of organizational behavior: Prentice Hall.

Rubenstein, A. H., Radnor, M., Baker, N. R., Heiman, D. R., & McColly, J. B. (1967). Some Organizational Factors Related to the Effectiveness of Management Science Groups in Industry. *Management Science, 13*(8), B–508–B–518. DOI: 10.1287/mnsc.13.8.b508.

Sahafi, E. Danaee, H. Salark, M.A., & Haghollahi, F. (2011). The Impact of Emotional Intelligence on Citizenship Behavior of Physicians (With Emphasis on Infertility Specialists). *Journal of Family and Reproductive Health,* 5(4). 19–115.

Salovey, P., & Mayer, J. D. (1990). *Emotional Intelligence*. Baywood Publishing Co., Inc.

Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality, 9*(3), 185–211. DOI: 10.2190/dugg-p24e-52wk-6cdg.

Shooshtarian, Z., Ameli, F., & Aminilari, M. (2013) The Effect of Labor’s Emotional Intelligence on Their Job Satisfaction, Job Performance, and Job Commitment. *Iranian Journal of Management Studies, 6*, 27–43.

Somayehabadibifirozjaee, A., & Azizishomami, M. (2014). The Study of Relationship between Emotional Intelligence and Organizational Citizenship Behavior of High School Teachers in Iran. *J. Appl. Sci. & Agric., 9*(6): 2457–2465.

Spector, P. Baver, J.& Fox, S. (2010), Measuring artefacts in the assessment of cintraproductive work behaviors and organizational citizenship behavior: Do we know what we think we know? *The Journal of Applied Psychology, 95*(4), 781–790.

Thomas, P. (2003) The Six Sigma Handbook: A Complete Guide for Green Belts, Black Belts, and Managers at All Levels. McGraw-Hill, New York, NY, ISBN: 9780071623384.

Ugoani, J., Amu, C., Kalu, E., (2015), DIMENSIONS OF EMOTIONAL INTELLIGENCE AND TRANSFORMATIONAL LEADERSHIP: A CORRELATION ANALYSIS, INDEPENDENT JOURNAL OF MANAGEMENT & PRODUCTION v. 6, n. 2, April – June 2015 ISSN: 2236-269X DOI: 10.14807/ijmp.v6i2.278

Vandewaa, E., & Turnipseed, D. (2012) Emotional Intelligence and Organizational Citizenship Behavior of University Professors. *The International Journal of Interdisciplinary Social Sciences: Annual Review, 6*(7). 1–12. DOI: 10.18848/1833-1882/CGP/v06i07/52115.

Vinitwatanak hun, M. W. (1998). Factors affecting organizational effectiveness of nursing institutes in Thailand. 1–5. [Online] Available: http://www.journal.au.edu/au_techno/2002/apr2002/article8.pdf.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behavior. *Journal of Management, 17*(3), 601–657.

Yen, H., & Neihoff, B. (2004). Organizational Citizenship Behavior and Organizational Effectiveness. *Journal of Applied Social Psychology, 34*(8), 1617–1637.

Yuchtman, E., & Seashore, S., (1967) A System Resource Approach to Organizational Effectiveness, *American Sociological Review, 32*(6), 891–903, DOI: 10.2307/2092843

Zeidner, M., Matthews, G., & Roberts, R. (2002). What We Know about Emotional Intelligence: How It Affects Learning, Work, Relationships, and Our Mental Health. *MIT Press, Location.*