UNVEILING THE NEXUS BETWEEN EMPATHY AND LEADERSHIP STYLE IN THE PRODUCTION SECTOR

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Abstract

Work in the production and manufacturing sector is characterized by following strict procedures, meeting norms and targets, upholding standards, and producing results and products that are entering the market. Considering these characteristics, leading people and teams in this context may pose a challenge, especially if the leaders are not aware of their emotional intelligence or, are lacking crucial social skills, thus reflecting and embedding various norms in the organizational culture. Experts have been researching organizational cultures, as well as the relationship between leadership styles and emotional intelligence, building knowledge on findings, usually following Dr. Goleman's scholarly work. Thus, the focus of the research in this manuscript is directed toward exploiting empirical data to explore specific leadership styles in relation to emotional intelligence within a specific organizational context- the manufacturing sector. Drawing insights from 125 respondents, this research utilizes a questionnaire designed with validated research instruments. Findings reveal a strong overall correlation value

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between leadership styles and emotional intelligence competencies, especially emphasizing the link to transformational styles. The results reveal an interesting combination of leadership styles and emotional intelligence competencies. Namely, the commanding and visionary leadership styles emerge as the most prevalent styles, and empathy and conflict management as the only emotional intelligence competencies with an above-average value. The least mastered EI competence in the production sector is the emotional self-control, opening a field of opportunities for development and improvement. Overall, this research reaffirms the link between leadership and emotional intelligence.

Key words: production; leadership, emotional intelligence; style; relationship.

1. Introduction

The strong relationship between leadership and organizational culture is pretty dynamic. Hence the potential of leadership is recognized in terms that it serves as a mechanism mediating between the forces of stability and the forces of change (Tushman, Romanelli, 1985), highlighting that leaders' decisions impact the outcomes manifested in reality. Literature underscores leaders' role in both "creating" and "maintaining" specific types of organizational culture (Kavanagh and Ashkanasy, 2006, Schein, 2004), suggesting their capacity to foster a culture where employees can generate, implement, and actualize new ideas and processes (Hogan, Coote, 2013). Furthermore, leadership literature suggests that comprehending and operating within a specific culture is a prerequisite for leadership effectiveness (Bass, Avolio, 1993) (Nguyen, Mohamed, 2010). Whereas Hosseini et al. (2020) assessed organizational culture across four dimensions: involvement, consistency, adaptability, and mission. They discovered that both leadership style and organizational learning significantly influence organizational culture.

Traditionally, the science about leadership has been linking the term "leadership" with a myriad of other organizational and psychological phenomena, such as emotional intelligence (Goleman, 2000), organizational commitment (Glazer et al. 2004) (Ipek, 2010), traits (Stogdill, 1974), effectiveness (1948) and many similar. Starting from Stogdill's (1948, 1974)

researches, who spearheaded the science about leadership, and has laid the groundwork for research on leadership traits, it has been discovered that leadership effectiveness and different leadership practices alter, depending on the different leadership behaviors. As the findings about transformational and transactional leadership emerged (Bass, Avolio, 1990), the emphasis on inspiration and motivation has been leveraged as a leadership trend. Nowadays, researches such as the ones by George (2004, 2016) have contributed to the growing interest in authentic leadership, with a focus on emotional intelligence, proposing a variable through which the leaders' effectiveness may be measured (Palmer, Burgess & Stough, 2001). Namely, research on emotional intelligence indicates that successful leaders were those who had higher levels of emotional intelligence - coped with workplace pressure, were calm, confident and predictable in moments of crisis (McCall & Lombardo, 1983a) (Yukl, 2010).

The discussion of leadership being strongly influenced by emotional intelligence has been suggested in the 90'ties by Daniel Goleman. Coherently, emotional intelligence, along with other leadership attributes, is recognized as a crucial component of effective leadership (Rosete & Chiarrochi, 2005; Yukl, 2010). It serves not only as a criterion for identifying potentially successful leaders but also as a tool for honing effective leadership skills across various industries (Palmer, Burgess & Stough, 2001). Studies suggest that leaders with higher emotional intelligence levels exhibit better coping mechanisms under workplace pressure, demonstrating traits like composure, confidence, and predictability during crises (McCall & Lombardo, 1983a; Yukl, 2010). So, understanding leadership is strongly related to understanding emotional intelligence and in that sense, it is strongly converted into research efforts.

This paper delves into the relationship between leadership and emotional intelligence, focusing on how emotional intelligence influences leadership styles within organizations. Specifically, it examines this dynamic within the production sector of the Republic of North Macedonia. The research question at the forefront is: "How do elements of emotional intelligence shape leadership styles within organizational contexts?". The need of such research is found in the research gap made by the two variables (leadership and emotional intelligence), put into the context defined by the production sector in the Republic of North Macedonia. Recognizing this opportunity, the paper investigates emotional intelligence competences, leadership theories, and

resulting leadership styles, basing the research model on traditional, as well as, on modern findings in the field of leadership. It also empirically examines the correlation between emotional intelligence elements and various leadership styles through a scientific approach (dissemination of a questionnaire), by employing a statistical tools for interpreting the results. The study formulates one primary and three secondary hypotheses, which are discussed in subsequent sections alongside relevant theoretical foundations. The manuscript has been garnering significant interest in the manufacturing sector, which is traditionally entrenched. Consequently, the results tend to reflect a more conventional perspective on leadership and emotional intelligence.

2. Emotional intelligence-based leadership

Emotional intelligence has long been a research focus for scholars in the organizational sciences, producing valuable insights and knowledge, both for the business and academic community. The main value that comes from these insights starts to emerge when, emotional intelligence starts to be linked with leadership, especially leadership effectiveness (Rosete, Ciarrochi, 2005) (Yukl, 2010), even with the possibility for people with higher emotional competence skills to emerge as leaders (Côté, Lopez, Salovey, Miners, 2010). One famous explanation of the reason why people with higher EQ emerge as leaders is that they are more empathetic and able to perceive the emotions of others (Olawoyin, 2018). Considering insights similar to these, people have learned that emotional intelligence can be learned, and EI skills can be mastered through time and effort, making EI to grow into a multimillion-dollar training industry (Kunnanatt, 2004; Adkins, 2004). Assessments of EI dimensions have facilitated training and development modules for customer service skills, conflict management strategies, and stress management programs (Rozell, Pettijohn, & Parker, 2004; Cherniss, 2000).

Research has also shown that at the group and organization level of application, EI indexes have critical implications for team building and enhancing team effectiveness (Druskat & Wolff, 2001) and for assessing capacity for organizational change and performance in various structural arrangements (Sy & Cote, 2004).

The key components of emotional maturity are related to managerial effectiveness and progress (Bass, 1990) (Yukl, 2010), which means that

emotionally mature leaders are those who can ensure work effectiveness and progress. In essence, they possess more valuable emotional prerequisites, both for functioning in stressful situations and under pressure, and for interpersonal communication.

Emotionally mature people are more aware of their strengths and weaknesses and are oriented toward self-improvement, rather than denying weaknesses and fantasizing about success. People with high emotional maturity are less self-centered (they care about other people), have more self-control (less impulsive, more able to resist hedonistic temptations), have more stable emotions (not prone to extreme mood swings or outbursts of anger), and they are less defensive (more open to criticism, more willing to learn from mistakes) (Yukl, 2010). Added to this is the fact that people with high emotional intelligence have stronger stress management skills and are better at making decisions under pressure (Olawoyin, 2018).

Research conclusions like these, point out to the importance of emotional intelligence in practicing leadership, both through the educational and training perspective, and in the practical, everyday leading, and require a deeper understanding of EI-components.

One basic approach that determines the components of emotional intelligence is a set of four skills: 1) identifying emotions (in oneself and in others), 2) using emotions, 3) understanding emotions, and 4) managing emotions (Taneva-Veshoska, Drakulevski, Gjurov, 2015) (Northouse, 2013). Another, deeper explanation of the EI components is the generic approach presented by Goleman, Boyatzis, and Rhee (1999), listing: Self-awareness, self-management, social awareness, and relationship management, as the main EI-clusters of competencies (Wolff, 2005) (table 1).

Table 1 Review of EI capabilities in their respective clusters
Source: Wolff, S. B. (2005). Emotional competence inventory 2.0.
HayGroup. McClelland Center of Research and Innovation. 0511-9889-
HAYG.

Cluster	EI capability
Self-awareness	**Emotional Awareness:** Recognizing one's emotions and their effects **Accurate Self-Assessment:** Knowing one's strengths and limits **Self-Confidence**: A strong sense of one's self-worth and capabilities
Self-management	**Emotional Self-Control:** Keeping disruptive emotions and impulses in check **Transparency:** Maintaining integrity, acting congruently with one's values **Adaptability:** Flexibility in handling change **Achievement:** Striving to improve or meeting a standard of excellence **Initiative:** Readiness to act on opportunities **Optimism:** Persistence in pursuing goals despite obstacles and setbacks
Social awareness	**Empathy:** Sensing others' feelings and perspectives, and taking an active interest in their concerns **Organizational Awareness:** Reading a group's emotional currents and power relationships **Service Orientation:** Anticipating, recognizing, and meeting customers' needs
Relationship management	**Developing Others:** Sensing others' development needs and bolstering their abilities **Inspirational Leadership:** Inspiring and guiding individuals and groups **Change Catalyst:** Initiating or managing change **Influence:** Wielding effective tactics for persuasion **Conflict Management:** Negotiating and resolving disagreements **Teamwork & Collaboration:** Working with others toward shared goals. Creating group synergy in.

3. Practicing leadership styles

Discussions and explorations of leadership can be traced back to ancient civilizations, where leaders were often admired and studied. However, the formal study of leadership as a discipline began to gain momentum in the early 20th century and this has been also attained in organizational life. In this context, one of the earliest influential works on leadership published is traced back to 1938 by Chester Barnard titled "The Functions of the Executive." This seminal work explored the nature of authority and leadership within organizations. In the following period so1940s and 1950s, researchers like Kurt Lewin, Douglas McGregor, and Rensis Likert conducted empirical studies on leadership behavior and group dynamics, laying the foundation for modern leadership theory. In the next decades, i.e. in the 60s and 70s the emergence of various leadership theories, including trait theories, behavioral theories, and contingency theories has been the focus.

Since then, the study of leadership has continued to evolve, with new theories, perspectives, and methodologies emerging over time. Leadership is now studied across various disciplines, including psychology, sociology, management, and organizational behavior, reflecting its interdisciplinary nature and significance in understanding human behavior and organizational dynamics.

The study of leadership, stemming from various aspects and theoretical foundations, yields an excess of approaches in defining leadership styles, influenced by context, leader behavior, leadership methods, skill sets, and more. This diversity in approaches leads to the modeling of different leadership styles or methodologies, grounded in a multitude of leadership principles. The evolution of leadership discussions demonstrates that since its emergence as a research topic, experts initially focused on studying the personal characteristics of leaders. Subsequently, research expanded to explore different dimensions of leadership across various situations and perspectives. Thus far, leadership theory has shown that it is researched and analyzed within a framework defined by personal characteristics (of leaders or followers), leader behavior, the leader's influence on followers, and the contextual situation in which leadership occurs. Often, research findings indicate that the most effective leadership style involves a combination of observed styles, tailored to the specific context of the leader and followers.

Fundamentally, leadership is a process of providing purpose, direction, and motivation to achieve organizational goals and enhance overall effectiveness. Regardless of the approach used to model leadership styles, the core components - leader, followers, influence, and purpose - remain central. When additional elements such as context, satisfaction, development (of leaders or followers), effectiveness, efficiency, task orientation, or people orientation are considered, the foundation for different leadership theories begins to emerge, giving rise to different leadership styles.

Although there has been research into the correlation between culture and organizational strategy, the connection between leadership and culture remains largely uncharted territory (Gupta, 2011). Complex systems leadership theory posits that leadership emerges within complex systems and interacts with elements like culture, norms, and trends; however, systematic research to fully define the extent and depth of the relationship between leadership and organizational culture is limited (Ogbonna, Harris, 2000).

4. Results

4.1. Methodology

This research focuses strictly on the relation leadership styles – emotional intelligence aiming to reveal which leadership styles are most dominant in the production sector in the Republic of North Macedonia, to perceive the level of each of the elements of emotional intelligence among leaders in this sector and to find the correlation between these two variables. Because of this, a descriptive and correlative analysis of the results was made.

Two questionnaires were used to measure these variables: 1) to measure the variable "emotional intelligence" - **Emotional Competency Inventory, Version 2**, by Goleman, Boyatzis, and McKee (2002); and 2) to measure the variable "leadership styles" – **Leadership and management – a communication styles questionnaire**, designed according to the example of George Litwin and Richard Stringer, based on the study of Goleman, Boyatzis, McKee (2002). A unified questionnaire was designed on the Google Forms platform, with a section and claims about emotional intelligence and a section with claims about leadership styles.

Each respondent, before starting to answer the statements related to the research variables under investigation. The sample of respondents is random

and all respondents who participated in the research did so of their goodwill, taking part of their time to answer the questionnaire through their smart devices.

4.2. Hypothetical framework

Based on the previously stated overview of the theory related to leadership, leadership styles, and emotional intelligence, and to empirically examine the phenomena related to this, the following hypotheses are defined:

H1: The commanding leadership style is dominant in the manufacturing sector in R. N. Macedonia.

H2: Empathy as an element of emotional intelligence is the least mastered skill among leaders in the manufacturing sector.

H3: Democratic leadership style is the least represented in the manufacturing sector in R.N. Macedonia.

H4: EI skills have the strongest correlation values with affiliative leadership style.

4.3. Descriptive statistics

The data was collected in the period from December 18, 2023, to February 18, 2024. The data were classified and analyzed with the computer software IBM SPSS 26, during which various descriptive analyses were performed. Bivariate correlation was conducted to test for correlations between variables. All Pearson assumptions (linearity, normality, homoscedasticity, and independence) were checked before analysis.

To check the validity of the results and their consistency within the framework of the used questionnaires, the value for Cronbach Alpha was first checked, which for the questions of this research is ChA=0.973. Given the fact that the Cronbach Alpha value is said to be closer to 1, the more reliable the results, it can be noted that the validity of the questions is high, as well as the consistency of the answers.

Demographics

At the end of the survey, the sample consisted of 125 participants (n = 57 male, n = 68 female). As for education, 40.8% (n=51) have completed secondary education, 48% (n=60) have graduated from undergraduate studies,

8.8% (n=11) have completed postgraduate studies (second cycle- master's), 2.4% (n=3) have completed postgraduate studies (third cycle - doctoral studies). The age of the respondents is from 18 to 58 years, divided into five age groups. 28% stated that they are in a leadership (management) position, while 72% are not placed in a management position. Of the respondents, 8% work in state-owned manufacturing firms, while 92% work in manufacturing companies.

Result analysis

As for the results obtained for the elements of emotional intelligence, they indicate that leaders generally possess low values of emotional intelligence skills, except for adaptability and influence, for which they have medium values in relation to the referents and empathy for which they have scored on average higher rating from the reference values. Namely, the elements of emotional self-awareness, accurate self-assessment, emotional self-control, transparency, and development of others were evaluated with low grades. This means that leaders first have a weakness to recognize their strengths and weaknesses, then they cannot or do not manage to keep unpleasant emotions and impulses under control, hence, they have a challenge to perceive the developmental needs of others and strengthen their abilities.

The results of the research show that as a medium developed abilities of emotional intelligence among leaders' ability to adapt and influence others stands out from the production sector in R. N. Macedonia. This means that leaders generally cope well with the changes coming to production, are flexible enough to understand the demands of the innovations that need to be implemented, and in addition, master effective methods of persuasion and influence, to implement those changes or news they have adapted to. The way of implementing the changes is not currently a topic of research, to specifically understand how it is realized for the employees, but it is enough that the respondents assessed that the leaders cope with the changes very well and exert influence.

The results of the research indicate empathy and conflict management as the only EI skills with above-average reference values (empathy M=3.564; referent mean interval =3.10-3.54; conflict management M=3.4660; referent mean interval = 2.95-3.26;), that is, the empathy and recognition of emotions in others and the resolution of conflicts between opposing parties. Such results

point to the fact that the second hypothesis: ***H2: Empathy as an element of emotional intelligence is the least mastered skill among leaders in the manufacturing sector",* may be disregarded.**

Table 2 Review of average values for the EI competencies from the research and the referent values from the ECI 2.0 technical manual

EI capability		Min	Max	Mean	Std. Deviation	Mean values (ECI 2.0)	Overall competence grade
Empathy		1,00	5,00	3.5640	1.10393	3,10-3,54	High
Emotional	**self-**	1,00	5,00	3.4040	1.00442	3,60-3,92	Low
awareness							
Accurate	**self-**	1,00	5,00	3.6720	.81035	3,78-4,07	Low
assessment							
Emotional	**self-**	1,00	5,00	3.3740	.65271	3,72-3,98	Low
control							
Adaptability		1,00	5,00	3.6700	.93520	3,50-3,84	Medium
Transparency		1,00	5,00	3.3780	1.05715	3,92-4,21	Low
Development	**of**	1,00	5,00	3.4540	1.09682	3,66-4,08	Low
others							
Influence		1,00	5,00	3.5160	.97641	3,55-3,88	Medium
Conflict Management		1,00	5,00	3.4660	.90270	2,95-3,26	High

Noting the results of the average values of the leadership styles of the leaders in the production sector in the Republic of North Macedonia, it is noted that all leadership styles are present, with the highest value and therefore the most represented commanding leadership style (M=3.6784) , and right after it, the second most represented is the visionary leadership style (M=3.5264), which could confirm the first hypothesis: ***H1: The commanding leadership style is dominant in the production sector in R N. Macedonia*.** The least represented leadership style is the democratic style (M=3.3536), exactly as predicted by the third hypothesis: ***H3: The democratic leadership style is the least represented in the production sector in the R.N. Macedonia, which could confirm this hypothesis.***

Table 3 Review of average values for the leadership styles in the production sector in R. N. Macedonia

Leadership style	N	Minimum	Maximum	Mean	Std. Deviation	Variance
COMMANDING	125	1,00	5,00	3.6784	.83082	.690
VISIONARY	125	1,00	5,00	3.5264	1.00146	1.003
PACESETTING	125	1,00	5,00	3.4704	.87076	.758
AFFILIATIVE	125	1,00	5,00	3.4656	1.05212	1.107
COACHING	125	1,00	5,00	3.4048	1.05080	1.104
DEMOCRATIC	125	1,00	5,00	3.3536	1.19492	1.428
Valid N (listwise)	125					

This phenomenon is particularly interesting to analyze, because according to the theory of transactional and transformational leadership (British DOD, 2021), the commanding leadership style is at the extreme of transactional leadership, while the visionary is at the extreme of transformational leadership. This means that the leaders who work in production in R.S. Macedonia, at the same time convey a clear vision and standards that are expected in the achievement of the goal, and demand that this vision be realized according to precisely defined procedures and how the defined work in production is established. What should be further pointed out is that in no case should this be taken into account as an isolated phenomenon, that is, only the commanding or visionary style dominates. On the contrary, these results say that these two leadership styles are the most represented by leaders in the manufacturing sector. If we were to talk about the most effective leadership style, the original answer is that a combination of all leadership styles is needed according to the situation Goleman (1999) and that none of them should be observed in isolation, and the most effective among them should be decisively sought.

The second end of the axis of representation of leadership styles indicates the fact that the least represented leadership styles in the production sector in RS. Macedonia are democratic (M=0.3536) and coaching (M=0.34048). Such an occurrence can be labeled as logical, considering the nature of work in production. Namely, one of the most characteristic features of production is the procedures - every production procedure is based on a strictly regulated and controlled procedure, according to the "if-then" principle for diagnosing errors. Hence, it is natural to marginalize leadership styles that involve group thinking and decision-making, learning through trial and error, mentoring by superiors, and participative work. Procedures provide automation of line work, hence the need for control and avoidance of

problems. This nature of things makes the commanding leadership style to dominate, and the democratic and coaching leadership style to be the least represented.

The analysis of correlations between leadership styles and emotional intelligence skills is given in table 4. From this analysis, it can be observed that all leadership styles have a strong association (correlation) with emotional intelligence skills, which directly indicates the connection of these two variables. When analyzing the correlations of these elements in more detail, the following can be observed:

The **affiliative leadership style** has the strongest correlations with the elements of emotional intelligence, with the highest correlation with the development of others (0.830) and empathy (0.767), while the weakest correlation is with emotional self-control (0.461). With such findings, the fourth hypothesis could be confirmed: *H4: EI skills have the strongest correlation values with the affiliative leadership style.*

The **democratic leadership style**, similar to the affiliative one, observes the highest values for correlations with empathy (0.837) and with the development of others (0.830) as elements of emotional intelligence, while weaker correlation values are observed for emotional self-control (0.419).

The **visionary leadership style** records the highest values for connection for the development of others (0.755) and for adaptability (0.732), which justifies its essence, while it records the lowest values for emotional self-control (0.466).

The **commanding leadership style** has by far the weakest correlation values for all the elements of emotional intelligence, although, it is observed that all these elements have a significant correlation, regardless of their values being weaker than those of the affiliative or democratic style. The commanding style records the highest correlation values for the variable development of others (0.431) and accurate self-assessment (0.428), and the weakest for empathy (0.266).

The "**pace-setter**" **leadership style** has lower correlation values with emotional intelligence, unlike other leadership styles, and this phenomenon can be attributed to its pronounced transactional nature (together with the commanding one), as opposed to the transformational nature of the other leadership styles. Namely, this leadership style records the highest values of correlation with adaptability (0.599) and for the development of others

(0.593), and the lowest for transparency (0.472), which is expected, given the fact that this leadership style is recommended to be practiced in the absence of time to complete a particular task or when to take the initiative in chaos and establish some order (British MOD, 2021). What is interesting to note is the fact that this leadership style is significantly correlated with the development of others as an element of EI, although they are not intrinsically related because the development of others corresponds more to the coaching leadership style.

Coaching leadership style, as expected, has the highest correlation results with the element "development of others" (0.817), which essentially corresponds to the nature of its practice, while the weakest correlation is with emotional self-control (0.509).

Correlations between emotional intelligence and leadership indicate consistently low correlation values of all leadership styles with the "emotional self-control" element. Namely, this leaves room to note that respondents from the production sector, who are included in the sample, have the lowest value for emotional self-control, regardless of which leadership style they practice.

Table 4 Correlation analysis between leadership styles and elements of emotional intelligence

Leadership style / EI competence	Empathy	Emotional self-awareness	Accurate self-assessment	Emotional self-control	Adaptability	Transparency	Development of others	Influence	Conflict Management
Affiliative	.767**	.663**	.720**	.461**	.737**	.715**	.830**	.728**	.717**
Democratic	.801**	.698**	.699**	.493**	.717**	.710**	.807**	.716**	.693**
Visionary	.702**	.682**	.686**	.466**	.732**	.678**	.755**	.668**	.674**
Commanding	.266**	.380**	.428**	.413**	.419**	.278**	.431**	.288**	.415**
Pace-setting	.474**	.520**	.548**	.515**	.599**	.472**	.593**	.478**	.535**
Coaching	.699**	.673**	.645**	.509**	.629**	.650**	.817**	.635**	.702**

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

5. Discussion

The results of this research indicated that emotional intelligence is strongly related to leadership styles, as part of leadership in general, which only confirms the theory of Goleman (2000) (Goleman, Boyatzis, Rhee, 1999).

Seen at the micro level - in the production sector in R. S. Macedonia, practice shows that the dominant and most frequently practiced leadership style remains the commanding style (in addition to the others), followed by the visionary leadership style. On the one hand, such results are expected, considering the nature of work in the production sector, but, on the other hand, it does not mean that the observance of strict procedures in production work should be followed by commanding and visionary leadership. In other words, it does not mean that if the nature of the work indicates a strict following of procedures, the management style of superiors should be followed by transactional - commanding leadership. The possibility is not excluded that the work procedures are respected, that the work achieves the necessary effect and that the leadership is not directive and in the direction of removing the possibilities for mistakes. This leaves room for further research, with other variables to examine whether, for example, increasing professionalism in work will lead to a change in leadership style in the manufacturing sector. Namely, if there would be no need for control and directive on a daily level, would the leadership style change?

Also, focus is placed on the combination of the two dominant leadership styles, which can be seen from the aspect of their essential contradiction - commanding-transactional, visionary-transformational, but also as a combination that could cause an overambitious setting of a vision and goals, which are insufficiently communicated (or accepted, relevant) to followers, so that an atmosphere of constant forcing of employees towards a vision they do not believe in, and materialized through toxic-ambitious transactional leadership, would be created.

An additional conclusion that is worth pointing out is that in the manufacturing sector, the transformational leadership styles - affiliative, coaching, and democratic - are placed in the background, which is probably related to the nature of work in manufacturing. In this regard, it can be seen

that the democratic leadership style is the least represented, that is, the leaders leave the least space for group thinking and decision-making in the process, which is different from the affiliative leadership style. Namely, the affiliative leadership style is the first in terms of representation after the dominant transactional, which indicates that when things work according to plan, in the direction of realizing the vision through certain procedures, leaders begin to tend towards affiliation and towards understanding the needs of employees. Connecting these findings with the fact that empathy has the highest value as a skill of emotional intelligence, it can be concluded that the source of empathy of leaders comes in the moments when the work works according to plan. Only such an explanation covers all the features raised by the findings of this research.

The findings from the testing of emotional intelligence abilities indicated generally poor results in the mastery of abilities, given the fact that out of nine abilities examined, five had low values (accurate self-assessment, emotional self-control, emotional self-awareness, transparency, development of others), two with medium values (adaptability and influence) and two with high values (empathy, conflict management). Such findings indicate the need for training to develop these skills in leaders, to increase the effectiveness of their leadership, as indicated by Rosete and Ciarrochi (2005), Yukl (2010), (McCall & Lombardo, 1983a).

Considering the variables with dominant values in this study, what is particularly significant in this domain is the fact that although strong correlations were obtained for all elements of emotional intelligence with all leadership styles, and although empathy had the weakest correlation values with commanding leadership style, according to the tabular values, empathy in command leaders in the manufacturing sector was found to be a strong trait as well as conflict management. In other words, the same leaders who in their daily communication with production employees, where they give directives and tasks, set goals, organize and tell how the work should be done, possess above-average empathy and the ability to recognize emotions in others and provide compassion, as well as to resolve conflicts in their workplace. Although, initially, such findings sound contradictory, the perspective would be indicated that regardless of how they know how to show empathy, it is not known if and how they follow up the handling of emotions in the direction of providing help or motivation.

What is particularly interesting and new about the results of this study is the fact that the commanding and visionary leadership styles are determined as the dominant leadership styles, which in their essence have a focus on the achievement of the goal and the absence of problems, and not on the needs of the followers. and, on the other hand, empathy and conflict management were shown to be the skills best mastered by leaders. This arrangement of the results indicates that the leaders in this sector, although they are focused on achieving production goals, give directives and directions on how to do things, and strive for feats, however, they know how to meet and face emotional needs. employees, as well as to resolve conflicts at the moment. What is significant about this is that these two EI skills relate to something that is happening at the moment – the expression of emotions and conflict and require their timely addressing, which is not traditionally a feature of commanding and visionary leadership styles. On the other hand, it is paradoxical that the results indicate that they have a poor command of the skills of their own emotional self-control and emotional self-awareness, and yet the average score for empathy is higher than the average.

The results of this study also showed that the affiliative leadership style has the strongest correlations with the elements of emotional intelligence. When considering what are the characteristics of affiliative leadership style – affiliative leaders focus on the needs of both individuals and teams, building relationships and creating a close relationship with followers, thereby building team harmony Goleman (2000) (British MOD, 2021); and the research showed that it has the highest correlation values with empathy (0.870), but also generally records the highest values with the other elements of emotional intelligence, compared to other leadership styles, it can be concluded that the emphasized use of emotional intelligence abilities in the practice of leadership, especially empathy, could lead to an emphasis on an affiliative leadership style.

5.1 Limitations, perspectives, and directions for future research

From a technical point of view, the fact that not all the elements of emotional intelligence predicted by ECI 2.0 have been examined, but only certain ones, according to the methodological review of the research, can be perceived as a limitation. Also, as a limitation, it can be noted that the research covers only the production sector, and the same can be carried out in other areas, which

will enable comparative analysis and concluding. This research also could not observe leaders in their daily interaction with followers, to obtain additional data from practical observation of their work, as recommended by transformational and transactional leadership experts (Howell and Avolio, 1993). However, it is necessary to emphasize that the results of the study correspond to theoretical predictions based on existing scientific achievements.

6. Conclusion

The nature of the work in the production sector may inflict leadership challenges to leaders, especially those who are not aware of their emotional intelligence competence. This is why modern perspectives regard emotional intelligence competencies, as a fundamental element for leadership practices, to that measure, that training and workshops are being organized (through developed training programs) in order to enhance or develop the EI skills in leaders (Kunnanatt, 2004; Adkins, 2004) (Rozell, Pettijohn, & Parker, 2004; Cherniss, 2000). Building on that motive, the results from the research conducted in the production sector in the Republic of North Macedonia, have shown that all Emotional intelligence competencies are in strong correlation with the leadership styles pointed out by Goleman (20000, thus confirming the traditional approach established by previous studies. The study has shown that the most dominant leadership style in this sector is the commanding leadership style, closely followed by the visionary style. In terms of emotional intelligence, the competencies of EI, represent a general opportunity for improvement, since out of nine tested EI-competences, two received above average grades, two average, and five below average mastering by the leaders. Empathy and conflict management have been graded as the most mastered competencies by leaders, but also, received the lowest correlational values with the commanding leadership style. This research not only confirmed that leadership and emotional intelligence go hand in hand in the organizational context but also revealed the necessity of improvement in the field of developing and enhancing the competencies of leaders in the production sector.

References

Adkins, S. (2004, February). Beneath the tip of the iceberg: Technology plumbs the affective learning domain. Training and Development Magazine, 28–33.

Ameriks, J., Wranik, T., Salovey, P., (2009). Emotional Intelligence and Investor Behavior. Research foundation of CFA institute. ISBN 978-1-934667-22-4.

Antonios D. Kargas & Dimitrios Varoutas (2015) On the relation between organizational culture and leadership: An empirical analysis, Cogent Business & Management, 2:1, 1055953, DOI: 10.1080/23311975.2015.1055953.

Arenas, F.J. Connelly, D., Williams, M.D. (2017). "Developing Your Full Range of Leadership - Leveraging a Transformational Approach". *Air University Press*. URL: http://www.jstor.com/stable/resrep13849.19.

Bapat, P. P., Protter, M. D. A., & Bhutta, Z. A. (2003). Values And Leadership. *BMJ: British Medical Journal*, *326*(7390), 657–658. http://www.jstor.org/stable/25454003

Barbars, L.D.A. and Dubkēvičs, L., 2010. The role of organizational culture in human resource management. *Hum. Resour. Manag. Ergon*, *4*, pp.25-34.

Bass, B. M. & Stogdill, R.M., (1990) *Bass & Stogdill's Handbook of Leadership*, 3rd ed. New York: The Free Press.

Bayers, R.J. (2011). "LEADERSHIP STYLES AND THE ORGANIZATION LIFE CYCLE". *Research paper*. The Faculty of the Adler Graduate School.

Benz, M. and Frey, B. S., 2003.,"The Value of Autonomy: Evidence from the Self-Employed in 23 Countries," working paper 173, Zurich:Institute for Empirical Research in Economics, University of Zurich.

Boyatzis, R. E., Goleman, D., & Rhee, K. S. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional*

intelligence: Theory, development, assessment, and application at home, school, and in the workplace (pp. 343–362). Jossey-Bass/Wiley.

British Ministry of Defence. (2021). *Army leadership doctrine.* AC 72029. Camberley Surrey: Centre for Army leadership.

Cameron, E., Green, M., 2012. *Making Sense of Change Management: A Complete Guide to the Models, Tools and Techniques of Organizational Change*. London: Kogan Page.)

Cameron, S , Quinn R. E.: Diagnosing and Changing Organizational Culture Based on Values Framework. Addison – Wesley Publishing Company. Inc. 1999. ISBN 978078798283

Carvalho, A. M., Sampaio, P., Rebentisch, E., McManus, H., Carvalho, J. Á., & Saraiva, P. (2023). Operational excellence, organizational culture, and agility: Bridging the gap between quality and adaptability. Total Quality Management & Business Excellence, 34(11–12), 1598–1628. https://doi.org/10.1080/14783363.2023.2191844

Cherniss, C. (2000). Social and emotional competence in the workplace. In R. Bar-On & J. Parker (Eds.), The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace (pp. 433–458). San Francisco: Jossey-Bass.

Collins, J. (2001), *Good to great*. Random House Business Books.

David, F.R. and David, F.R., (2017). *Strategic Management: A competitive advantage approach concept and cases*. Sixteenth Edition. Boston: Pearson.

De Dreu. C. K. W., Weingart. L. R., and Kwon. S., 2000., "Influence of Social Motives on Integrative Negotiation: A Meta-Analytic Review and Test of Two Theories,", Journal of Personality & Social Psychology. Washington DC: American Psychological Association.

Deal, T.E. and Kennedy, A.A., 1983. Culture: A new look through old lenses. *The journal of applied behavioral science*, *19*(4), pp.498-505.

Denison, D., Hooijberg, R., Lane, N. and Lief, C., 2012. *Leading culture change in global organizations: Aligning culture and strategy*. John Wiley & Sons.

Druskat, V., & Wolff, S. (2001). Group emotional intelligence and its influence on group effectiveness. In C. Cherniss & D. Goleman (Eds.), The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations (pp. 132–155). San Francisco: Jossey-Bass.

Fernandez, J.E., Hogan, R.T., (2002). Values-Based Leadership. The Journal for Quality & Participation.

Finkelstein, S., D.C. Hambrick, and A.A. Cannella (2008), *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards* (Oxford, UK: Oxford University Press); and

French. J. R. P. Jr. and Raven. B., "The Bases of Social Power," in D. Cartwright (ed.). 1959. *Studies in Social Power.* Ann Arbor, MI: University of Michigan, Institute for Social Research.

Giacomantonio. M., De Dreu. C. K. W., and Mannetti. L., 2010., "Now You See It, Now You Don't: Interests, Issues, and Psychological Distance in Integrative Negotiation," Journal of Personality & Social Psychology. Washington DC: American Psychological Association.

Goethals, G. R., Allison, S.T., Kramer, R.M., Messick, D.M. (2014). *Conceptions of Leadership-Enduring Ideas and Emerging Insights.* Jepson Studies in Leadership. New York: Palgrave Macmillan.

Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence.* Harvard Business School Press.

Graber, D. R., & Kilpatrick, A. O. (2008). Establishing values-based leadership and value systems in healthcare organizations. *Journal of Health and Human Services Administration*, *31*(2), 179–197. http://www.jstor.org/stable/41288084.

Gupta, B. (2011). A comparative study of organizational strategy and culture across industry. Benchmarking: An International Journal, 18, 510–528. http://dx.doi. org/10.1108/14635771111147614.

Hackman. J. R. and Oldham. G. R. 1976., "Motivation Through the Design of Work: Test of a Theory," *Organizational Behavior and Human Performance*; and Hackman J. R. and Oldham G. R., *Work Redesign.*1980, MA: Addison-Wesley.

Hambrick, D.C. (2007), "Upper echelons theory: An update". Academy of Management Review 32: 334–343;

Hambrick, D.C., and Mason, P.A. (1984), "Upper echelons: The organization as a reflection of its top managers", Academy of Management Review 9: 193–206.

Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations , 2nd ed. (Thousand Oaks, CA: Sage).

Hosseini, S. H., Hajipour, E., Kaffashpoor, A., & Darikandeh, A. (2020). The mediating effect of organizational culture in the relationship of leadership style with organizational learning. Journal of Human Behavior in the Social Environment, 30(3), 279–288. https://doi.org/10.1080/10911359.2019.1680473

House, R.J., Hanges, P.J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004) *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, LA: Sage.

Huczynski, A.A., Buchanan, D.A., (2013). Organizational Behavior. Harlow: Pearson education.

Kraemer Jr., H., M. (2011). From Values to Action: The Four Principles of Values-Based Leadership. San Francisco: Wiley.

Kramer, R. M., (2014), "Power and Influence at the Top: Effective and Ineffective Forms of Leader Behavior". *Jepson studies in leadership: Conceptions of Leadership- Enduring ideas and emerging insights*, New York: Palgrave MacMillan.

Krings, F. & Facchin S., (2009) "Organizational Justice and Men's Likelihood to Sexually Harass: The Moderating Role of Sexism and Personality," *Journal of Applied Psychology* 94, no. 2

Kunnanatt, J. (2004). Emotional intelligence: The new science of interpersonal effectiveness. Human Resources Development Quarterly, 15, 489–495.

Lewicki. R. J., 1981. "Bargaining and Negotiation," *Exchange: The Organizational Behavior Teaching Journal.*

Lombardo, M. M., & McCauley, C. D. (1988). The dynamics of management derailment.

Lund, D.B., 2003. Organizational culture and job satisfaction. *Journal of business & industrial marketing*, *18*(3), pp.219-236.

McCall, M. W. Jr., & Lombardo, M. M. (1983b). What makes a top executive? Psychology Today, February, 26–31.

McCall, M. W., Jr., & Lombardo, M. M. (1983a). Off the track: Why and how successful executives get derailed. Technical Report No. 21. Greensboro, NC: Center for Creative Leadership.

McEnrue, M.P., Groves, K. (2006). Choosing Among Tests of Emotional Intelligence: What Is the Evidence? HUMAN RESOURCE DEVELOPMENT QUARTERLY, vol. 17, no. 1. Wiley Periodicals, Inc. Published online in Wiley InterScience (www.interscience.wiley.com) • DOI: 10.1002/hrdq.1159

Naquin, C. E.,2003., "The Agony of Opportunity in Negotiation: Number of Negotiable Issues, Counterfactual Thinking, and Feelings of Satisfaction," *Organizational Behavior & Human Decision Processes.* Amsterdam: Elsevier.

Northouse, P.G., (2013). *Leadership: Theory and Practice*. Los Angeles: SAGE.

Ogbonna, E., & Harris, L. C. (2000). Leadership style, organizational culture and performance: Empirical evidence from UK companies. The International Journal of Human Resource Management, 11, 766–788.

http://dx.doi.org/10.1080/09585190050075114 Pendhazur, E. J. (1982). Multiple regression in behavioural.

Olawoyin, R. (2018). EMOTIONAL INTELLIGENCE: Assessing Its Importance in Safety Leadership. *Professional Safety*, *63*(8), 41–47. https://www.jstor.org/stable/48690086

Ouchi, W.G., Price, R.L., (1978) Hierarchies, clans, and theory Z: A new perspective on organization development. Organizational Dynamics.

Pendleton, D., & King, J. (2002). Values And Leadership. *BMJ: British Medical Journal*, *325*(7376), 1352–1355. http://www.jstor.org/stable/25453102

Peterson. R. S. and Behfar. K. J. 2003. "The Dynamic Relationship Between Performance Feedback, Trust, and Conflict in Groups: A Longitudinal Study," *Organizational Behavior 'Human Decision Processes.* Amsterdam: Elsevier.

Raven. B. J. 1993. "The Bases of Power: Origins and Recent Developments," Washington DC: Journal of Social Issues.

Robbins, S. P., & Judge, T. (2013). *Organizational behavior*. Upper Saddle River, N.J., Pearson/Prentice Hall

Rothaermel. F.T., (2017). *Strategic Management.* New York: McGraw-Hill Education.

Rozell, E., Pettijohn, C., & Parker, R. (2004). Customer-oriented selling: Exploring the roles of emotional intelligence and organizational commitment. Psychology and Marketing, 21, 405–424.

Rumelt, R. (2011), *Good Strategy, Bad Strategy: The Difference and Why It Matters* (New York: Crown Business);

S. Côté, P. N. Lopez, P. Salovey, and C. T. H. Miners, "Emotional Intelligence and Leadership Emergence in Small Groups," Leadership Quarterly 21 (2010).

Sayeed, O. B., & Shanker, M. (2009). Emotionally Intelligent Managers & Transformational Leadership Styles. *Indian Journal of Industrial Relations*, *44*(4), 593–610. http://www.jstor.org/stable/27768233

Schein, E. (2004). *Organizational culture and leadership*. San Francisco: Jossey-bass.

Schein. E. H. (1983). The Role of the Founder in Creating Organizational Culture," *Organizational Dynamics* (Summer 1983), pp. 13–28.

Schein. E. H. (1996). "Leadership and Organizational Culture," in F. Hesselbein, M. Goldsmith, and R. Beckhard (eds.) (1996).*The Leader of the Future.* (San Francisco: Jossey-Bass)

Shin. S. J. and Zhou. J., (2003). "Transformational Leadership, Conservation, and Creativity: Evidence from Korea," *Academy of Management Journal* .

Shriberg, D.,, Shriberg, A. (2011). Practicing Leadership – principles and Applications. 4th edition. New Caledonia: Josh Willey and sons, Inc.

Sy, T., & Cote, S. (2004). Emotional intelligence: A key ability to succeed in the matrix organization. Journal of Management Development, 23 (5), 437–455.

Taneva Veshoska, A., Drakulevski, Lj., Gjurov, L. (2015). *Leadership*, Skopje: Akademska Kniga.

Ten Velden. F. S., Beersma. B., and De Dreu. C. K. W., 2010., "It Takes One to Tango: The Effect of Dyads' Epistemic Motivation Composition in Negotiation," *Personality and Social Psychology Bulletin*. NJ: SAGE.

Tharp, B.M., 2009. Four organizational culture types. *Hawort Organizational Culture White Paper*.

Van Velsor, E., & Leslie, J. B. (1995). Why executives derail: Perspective across time and cultures. Academy of Management Executive, 9 (4), 62–72.

Wang, X., Howell, J. M., (2010). "Exploring the Dual- Level Effects of Transformational Leadership on Followers," *Journal of Applied Psychology 95*, no. 6.

Warrick, D.D., 2017. "What leaders need to know about organization culture". *Business Horizons*, Amsterdam: Elsevier.Wootton, S., and Horne, T.,

2003. *Strategic Thinking: A nine step approach to strategy and leadership for managers and marketers*. London: Kogan page.

Yardley, I., Kakabadse, A., Neal, D. (2012). *From Battlefield to Boardroom - Making the difference through values-based leadership*. New York: Palgrave Macmillan.

Yukl, G. (2010), *Leadership in Organizations*, 7th ed. (Englewood Cliffs, NJ: Prentice Hall).

Yukl, G. "Use Power Effectively," in E. A. Locke (ed.). 2004. *Handbook of Principles of Organizational Behavior.* Malden, MA: Blackwell.

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