The Comparison of Attributes of Social Intelligence and Machiavellianism in Managerial Work

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Abstract

This paper aims to contribute on a theoretical and empirical level to the solution of questions related to the use of social intelligence and Machiavellianism in the management profession, based on the theoretical treatment of the issue. It sets out to specify mutual differences and relationships relating to selected attributes of methodologies used to determine social intelligence and Machiavellianism in the conditions of managerial work. The research sample consisted of 234 participants (131 women) aged 28 to 40 (mean = 28.72; SD = 6.67). The respondents worked in both the private and public sectors in managerial and non-managerial positions. The data from the respondents were obtained by questionnaire methods, processed and analysed by mathematical-statistical methods at the descriptive and inductive statistical level, as well as more advanced statistical methods. The methods provided data on basic sociodemographic characteristics, social intelligence (MESI questionnaires) and Machiavellianism (VYSEDI). The results of the project contribution brought knowledge at the level of theoretical, empirical, as well as in the practical application of the acquired knowledge. Within the established hypotheses, we found statistically significant differences in selected attributes of social intelligence and Machiavellianism within the managers' workplace setting, as well as differences between managers and non-managers. We also identified mutual correlations between selected attributes in relation to age. On the basis of the presented results, findings and knowledge, as well as the summary and refinement of the results for practical applications, it can be concluded that the goal of the contribution has been fulfilled.

Keywords

social intelligence, machiavellianism, managers, organisation

1 Introduction

This paper aims, based on the theoretical elaboration of the issue, to contribute at a theoretical and empirical level to addressing questions related to Machiavellian behaviour among managers. Specifically, it sets out to examine the differences between social intelligence and Machiavellian manifestations among managers. The results of the conducted research have yielded several findings at both theoretical and empirical levels, some of which also relate to the practical application of acquired knowledge.

2 Literature review

Social intelligence is a significant indicator of successful handling of social situations; therefore, scholarly attention has been focused on managerial work. This construct is closely related to the effectiveness of managerial work from a social perspective. The validity of such considerations is supported by numerous studies that, in various contexts, have paid attention to analyses of the relationships between situational characteristics and behaviour. At the same time, psychological factors play an important role in ensuring good decision-making and well functioning management in business (Frankovský et al., 2009).

Managerial abilities enable leaders to manage available resources successfully with a focus on minimising costs and maximising productivity, efficiency, and profits (Kovács and Spens, 2007). For the performance of managerial functions, a manager should be equipped with skills that allow them to perform required activities, utilise knowledge and

skills, and distinguish between effective and ineffective performance. According to Šuleř (2008), this also involves demands placed on managers at different levels, and a certain level of their personal potential is important for their development. A manager should assess their own level and subsequently identify the needs for their development to achieve successful performance. Monitoring the level of managerial abilities is part of measuring the managerial level of a leading employee. Albrecht (2005) defines social intelligence in the context of managerial work as the ability to get along with people. He characterises it as a combination of basic understanding of people and a set of skills necessary for successful interaction with them. It is, therefore, the ability to get along well with others and motivate them to collaborate with us.

For effective managerial work, it is important for managers to possess social abilities, skills, and knowledge, as well as developed social intelligence. Their ability to collaborate, self-evaluate, reflect on themselves, work in teams, proceed systematically, handle conflict situations, and communicate is crucial (Miško et al., 2022). Additionally, conscious development of personal values, classifying new information, understanding relationships, critically observing and assessing phenomena, circumstances, and possibilities, seeking new solutions, and weighing chances and risks are also essential for their success (Belz and Siegrist, 2001).

It is interesting to note that the early discussions on social intelligence are linked to the debate about its ethical context, which continues to this day. The results of analyses by Frankovský and Birknerová (2012) confirm that social intelligence is not an ethical category. Statistically significant correlations between the factors of the social intelligence methodology and manipulation indicate that a higher level of manipulation is associated with higher levels of social abilities. In this context, it is also noteworthy that the manipulation factor positively correlates with social abilities and simultaneously with factors such as deceit and cynicism.

In the multidimensional understanding of social intelligence, a five-factor model of this construct was proposed by Habib et al. (2013). The individual attributes of social intelligence were specified as social manipulation, social facilitation, social perception, extraversion, and social adaptability. The authors base their model on the analysis of the definition of the social intelligence construct, which has been viewed progressively as a personality trait (e.g., Moss and Hunt, 1927; Thorndike, 1920;

Vernon, 1933), a problem-solving skill, and knowledge of social rules (Barnes and Sternberg, 1989). In recent times, it has also been considered as interpersonal competencies facilitating effective human behaviour (Bar-On, 2005). According to the authors, social intelligence is a central area of social research, and its growing popularity is associated with the increasing importance attributed to factors such as social development, social skills, social success, interpersonal relationships, mental health, and positive psychology (Dong et al., 2008).

Understanding social intelligence is closely related to describing manipulative behavior, which is associated with the term Machiavellian intelligence in the literature. Jakobwitz and Egan (2006) discuss Machiavellianism as part of social intelligence. Makovská (2005) also claims that individuals typically do not include negative elements of behaviour in social situations under social intelligence. There are debates about whether Machiavellian intelligence should form a subcategory of social intelligence. Neutral Machiavellian traits are often mentioned, such as diplomatic behaviour and foresight. Social intelligence, according to the author, is perceived more as a positive, desirable, and prosocial phenomenon. Kosmitzki and John (1993) describe social intelligence as a neutral category in connection with an ethical perspective because it includes the use of manipulative social techniques. It is a construct that can be used in both socially positive and socially negative senses. Goleman (1997) supports this view, stating that in interpersonal intelligence, individuals often use the ability to manipulate others and adopt a cynical attitude. Wróbel (2008) adds that such individuals use their knowledge of social behaviour and developed social skills to make others unaware that they are being subjected to deliberate and planned actions. Machiavellianism thus involves manipulation for the purpose of achieving personal goals, maintaining power over others, and is based on unethical behaviour, deception, flattery, cynicism, and the like (Grams and Rogers, 1990). Such individuals are persuasive liars, directing lies towards manipulation and self-presentation (Vernon et al., 2008). They cannot effectively collaborate with others, lack empathy, are self-centred, and go uncompromisingly after their goals (Andrew et al., 2008). Byrne and Whiten (1988) describe the results of research on social behaviour and social skills in people and primates in natural conditions, detailing complex structures of their social hierarchy and well-defined competitive, dictatorial, and cooperative relationships (including purposeful, strategic deception). They label

Machiavellian intelligence as the ability to deliberately and successfully manipulate individuals to achieve their own power-motivated goals. According to Christie and Geis (1970), such individuals lack interest in traditional morality and show relatively few emotions in interpersonal relationships. It is a personality pathology with low commitment to ideology. Their studies indicate that Machiavellianism correlates positively with psychopathology. Frankovský and Birknerová (2012) conducted an analysis of the relationships between the factors of social intelligence and Machiavellianism. They found that a higher level of cynicism and the use of lies for personal gain correlate with the ability to persuade others and use them for personal benefit, i.e., the ability to manipulate. Cynicism, in the sense of a defensive reaction, is also correlated with social irritability. The absence of a negative correlation, according to the authors, indicates that social intelligence is not perceived as an ethical category but has a neutral charge. Schwarz (2006) adds that individuals with high social intelligence attract others, while those with low social intelligence are unattractive to others. The cause of low social intelligence is a lack of insight; these individuals often have to deal with their personal problems and do not understand the impact they have on other people. As a result, managers with higher social intelligence attract the attention of others who are willing to follow them. Conversely, managers with lower social intelligence are unattractive to others, perceived as a burden, and an obstacle to effective work (Albrecht, 2005).

3 Methodology and research methods

Based on the presented goal of the paper and the concept of the research, research hypotheses were established, focusing on the comparison of social intelligence and Machiavellianism concerning selected socio-demographic characteristics:

- H1: We assume that there are significant differences in the assessment of selected attributes of social intelligence and Machiavellianism between managers and executives.
- H2: We assume that there are significant differences in the assessment of selected attributes of social intelligence and Machiavellianism that relate to the workplace setting of managers.
- H3: We assume that there are significant correlations between the age of managers and how managers assess selected attributes of social intelligence and Machiavellianism.

4 Research sample

The research sample consisted of 234 respondents (131 women and 103 men) working in the business sector. The average age of respondents was 28.72 with SD 6.67 years old. 118 respondents had a university education, and 116 respondents had secondary education. According to the type of organisation, 119 respondents were working in a private organisation, and 115 respondents were working in a public organisation. The research was conducted during September and October 2023. The examined demographic data included the gender of the respondents, their educational level, and the type of organisation and place of residence.

5 Research methods

For research purposes, two methodologies were used, specifically the MESI methodology and the VYSEDI methodology.

The MESI methodology by Frankovský and Birknerová (2014) for determining social intelligence based on a psychometric approach is a development continuation of the EMESI methodology (Frankovský and Birknerová, 2013), which was inspired by the PESI methodology (Kaukiainen et al.,1995). This methodology determined the degree of perception of social intelligence as a performance characteristic. The MESI methodology contains 21 items that are assessed on a 5-point Likert scale 0 – never, 4 – very often. Three factors were extracted by factor analysis (Frankovský and Birknerová, 2014). The authors described these factors as:

- Manipulation: people who score higher on this factor are able to persuade others to do anything. They know how to use them to their advantage and convince them to stand on their side. They use the lies of others for their own benefit.
- Empathy: individuals scoring higher in this factor can recognise other people's intentions, feelings, and weaknesses. They can adapt to new people and can anticipate their wishes, which they are also able to fulfill.
- Social irritability: persons characterised by a higher score in this factor are unnerved by contact with other people. Other people's feelings upset them, and adapting to other people causes them problems. The weaknesses and wishes of others distract them. They are unsettled by people who are willing to do anything for them.

VYSEDI methodology by Frankovský et al. (2017) was designed for the purpose of detecting Machiavellian

manifestations in business behaviour in their work (Dotazník zisťovania machiavellistických prejavov v obchodnom správaní – VYSEDI (príručka)). Three factors were extracted by factor analysis: calculation (VY), self-assertion (SE) and diplomacy (DI). The new VYSEDI methodology contains statements referring to the respondent's opinion on manipulation between people. The individual items of the questionnaire were inspired by the publication "Il Principe" (Machiavelli, 2007). The questionnaire contains 17 items, to which the respondents answer using the scale 0 - definitely not, 1 – no; 2 – rather no than yes; 3 – yes rather than no; 4 – yes, 5 – definitely yes. Three factors were extracted by factor analysis using the Principal Component method with Varimax rotation, which confirmed the existence of the assumed factor structure of Machiavellian manifestations in business behaviour. These factors were characterised as:

- Calculation: respondents who score higher in this factor believe more that control over people must be maintained at all costs. These respondents hold the view that it is necessary to tell others what they want to hear and it is necessary to acquire knowledge in order to be able to use it in controlling others. Calculated people are of the opinion that when two individuals are competing, it is necessary to recognise whose victory is more advantageous to them, and in any case, it is beneficial to base their power on the control of other people.
- Self-assertion: respondents who score higher in this factor are characterised by the fact that they believe that only such a person is reliable, who relies on himself and his own strength. A successful man or woman must always remember to avoid allies stronger than himself/herself. Also, this factor adheres to the opinion that whoever helps another to seize power undermines his or her own position. Consequently, the one who wants to stay in power must consider all the necessary harsh measures in advance and implement them at once so that he does not have to return to them later.
- Diplomacy: respondents who score higher in this factor are characterised by the constant gathering of information that can later be used to their advantage. Skillful diplomacy is used to control others and false and indirect communication is preferred. Respondents surround themselves with capable people and society in general and show them generosity and appreciation at the right moment.

6 Results

The data from the participants were gathered through questionnaire methods and subsequently processed using the IBM SPSS, Statistics program (22). The analysis employed mathematical-statistical methods, including descriptive and inferential statistics, specifically the t-test for two independent samples and the Pearson correlation coefficient. The hypothesis that there are statistically significant differences in selected attributes of social intelligence and Machiavellianism between managers and executives was tested using the t-test for two independent samples. It can be observed that the research hypothesis was confirmed, as statistically significant differences were found in selected attributes of social intelligence and Machiavellianism between managers and executives. The overall results are summarised in Table 1.

The results of the analysis indicate that there are statistically significant differences in selected attributes of social intelligence and Machiavellianism between managers and executives. Statistically significant differences were observed in the levels of self-assertion and manipulation. Concerning self-assertion, as an attribute of Machiavellianism, it was found that the level among managers (M = 2.984) is higher than among executives (M = 2.752). Regarding manipulation, as an attribute of social intelligence, it was found that the level among executives (M = 1.820) is higher than among managers (M = 1.595). In other attributes of social intelligence and Machiavellianism, no statistically significant differences were found between managers and executives.

Table 1 Comparison of social intelligence and Machiavellianism based on work position of respondents

	Work position	N	M	SD	t	p
Calculation	Managers	124	2.236	0.834	−0.923	0.357
	Executives	110	2.343	0.929		
Self-assertion	Managers	124	2.984	0.715	2.219	0.027
	Executives	110	2.752	0.866		
Diplomacy	Managers	124	3.397	0.597	1.335	0.183
	Executives	110	3.507	0.661		
Manipulation	Managers	124	1.595	0.786	−2.193	0.029
	Executives	110	1.820	0.783		
Empathy	Managers	124	2.443	0.567	−1.277	0.203
	Executives	110	2.536	0.544		
Social irritability	Managers	124	1.499	0.503	1.240	0.216
	Executives	110	1.408	0.605		

Table 2 Comparison of social intelligence and Machiavellianism based on residence

	Residence	N	M	SD	t	p
Calculation	Urban areas	130	2.318	0.90	0.049	0.626
	Rural areas	104	2.261	0.870		
Self-assertion	Urban areas	130	2.850	0.903	−0.235	0.814
	Rural areas	104	2.875	0.667		
Diplomacy	Urban areas	130	3.513	0.633	1.581	0.115
	Rural areas	104	3.382	0.629		
Manipulation	Urban areas	130	1.743	0.778	0.617	0.538
	Rural areas	104	1.677	0.810		
Empathy	Urban areas	130	2.576	0.546	2.609	0.010
	Rural areas	104	2.318	0.90		
Social irritability	Urban areas	130	2.261	0.870	0.0488	0.626
	Rural areas	104	2.850	0.903		

The hypothesis that there are statistically significant differences in selected attributes of social intelligence and Machiavellianism based on managers' place of residence was tested using the *t*-test for two independent samples. This allowed us to compare managers living in rural areas with those living in urban areas in various attributes of social intelligence and Machiavellianism. It can be noted that the research hypothesis was partially confirmed, as statistically significant differences were found in selected attributes of social intelligence and Machiavellianism based on managers' places of residence. The overall results are summarised in Table 2.

The analysis results found statistically significant differences in selected attributes of social intelligence between managers and executives from urban and rural areas. Statistically significant differences were found in the level of empathy within social intelligence.

In terms of empathy, as an attribute of social intelligence, it was found that the level among managers and executives from urban areas (M = 2.576) is higher than among managers and executives from rural areas (M = 2.387). No statistically significant differences were found in other attributes of social intelligence and Machiavellianism.

As part of the research, we also found the correlation between selected attributes of social intelligence and Machiavellianism and the age of managers and executives. Through the Pearson correlation coefficient (Table 3), a statistically significant correlations were found between the age of managers and selected attributes of social intelligence and Machiavellianism.

Table 3 Relationships between age and selected attributes of social intelligence and Machiavellianism among managers and executives

		Calculation	Self-assertion	Diplomacx	Manipulation	Empathy	Social irritability
Age	R	−0.069	−0.007	−0.203**	−0.022	0.024	−0.008
	p	0.291	0.916	0.002	0.735	0.716	0.907

* *p* < 0.05; ** *p* < 0.01

7 Discussion

Our research, which focused on selected attributes of social intelligence and Machiavellianism, found differences in several attributes of social intelligence and Machiavellianism. Specifically, differences were observed in self-assertion (characteristic important for maintaining power and relying on oneself) and diplomacy (necessary for surrounding oneself with successful people and constantly gathering information) within the attributes of Machiavellianism. Differences in social intelligence attributes were noted in manipulation (characteristic for persuading others) and empathy (important for adapting to others and understanding them). Managers, as expected, scored high in the dimensions of diplomacy, empathy, and self-assertion. Conversely, executives showed higher values in the Machiavellian attribute of manipulation.

The results of analyses realised by Ruisel and Halama (2007) confirm that social intelligence is not an ethical category. The statistically significant correlations were found between the attributes of social intelligence and manipulation indicate that a higher level of manipulation is related to higher levels of social abilities. In this context, it is also noteworthy that the factor of manipulation positively correlates with social skills and simultaneously with factors like deceit and cynicism. According to the authors, social intelligence is a central area of social research, and its growing popularity is associated with the increasing importance attributed to factors such as social development, social skills, social success, interpersonal relationships, mental health, and positive psychology (Vernon, 1993).

Socially adept managers can apply social intelligence in challenging and stressful managerial situations or when resolving conflicts. However, they can also use it for purposes of deception, deceit, or manipulation of others (O'Sullivan et al., 1965). In this sense, social intelligence is positioned between personality characteristics

of prosocial behaviour on one hand and an area closely related to manipulation and other undesirable forms of behaviour on the other hand (Barnes and Sternberg, 1989; Bar-On, 2005; Cantor and Kihlstrom, 1987).

Andrew et al. (2008) indicating that the position an employee currently holds in an organisation partly determines their behaviour. The placement of an individual in the organisational structure is fundamental to explaining their behaviour and attitudes. According to our results, managers scored higher than executives in self-assertion. However, higher scores were recorded for executives in manipulation. In terms of managerial performance, it cannot be assumed that managers and executives will behave the same way. Both managers and executives bring typical behaviors shaped by their experiences into the organisation.

Various studies have pointed out specific management tactics for managers and leaders (Anderson, 2004; Guadagno and Cialdini, 2007; Voelck, 2003). On the contrary, Frankovský et al. (2017) found statistically significant differences in the examination of selected manipulation attributes between managers and executive employees in their work: Sociálna inteligencia – významná osobnostná charakteristika manažéra a coping. In the studied manipulation attributes, no statistically significant differences were found.

As Aghazadeh (1999) argues, managers still face the challenge of thinking globally but acting locally, especially since operational managers and human resources management professionals must form partnerships and jointly create and implement various output-oriented functions of the organisation. In the context of work as a production factor, the number of employees, their qualifications, and above all their quality, resilience to stress, and problem-solving ability significantly impact overall business performance.

According to Somogyi et al. (2013), increasing knowledge about empathy and developing empathic behaviour in managers should be implemented through educational and developmental programmes. The ability to "get into someone else's world" is a skill that managers should develop. Empathy suggests that understanding others, simply through comprehension, can lead to additional benefits for the organisation, beyond those derived from existing practices. In fact, many organisations have found that the added value of empathy stems from knowing their employees better. Enhancing managerial empathy can be useful for supporting and improving organisational work.

Comparing managers and executives based on their place of residence, we came to interesting findings. This comparison was based on the assumption that people live in slightly different communities in the urban and in rural areas. Our results showed differences between urban and rural respondents in the empathy factor. Managers and executives living in rural areas scored higher in empathy. The results from the study by Frankovský et al. (2017) confirmed the existence of a statistically significant difference in the responses of these two groups of respondents when assessing the cognitive processing factor in their work: Sociálna inteligencia – významná osobnostná charakteristika manažéra a coping. Respondents from rural areas were more likely to consider whether they harmed someone in some way, to think about what might have happened to them to behave this way, and to seek information from other people to explain the situation. Emotions and cognitive processes are closely intertwined, according to Zibrínová and Birknerová (2015). Emotional stimuli are preferred based on our cognitive experiences. On the other hand, emotions strongly influence the processing of cognitive information.

Stefano and Wasylyshyn (2005) state that successful, empathetic managers-leaders are usually hardworking, achieving set goals. However, they are capable of empathetically meeting the wishes, needs, and desires of their subordinates. Ultimately, they achieve what they want without obstacles in their work. In other words, empathy and social intelligence are important variables in determining the performance of a manager and their team, which is also a unit of the organisation. According to a study by Health Systems, which involved 1171 employers from the US Air Force, employers with the best performances were those who scored high for trust, empathy, interpersonal relationships, problem-solving, skills, and optimism. Empathy is an advanced ability that builds trust, improves communication, and supports relationships within and outside the organisation. Personal and professional development of empathy promotes a leadership atmosphere that respects individuals and lays the foundation for individual and organisational learning (Garner, 2009).

The area investigated in our research was the age of managers and how it relates to the attributes of social intelligence and Machiavellianism. According to our results, the preference for diplomacy increases with the age of managers. They try to gather information that they can later use to their advantage. In the study by Frankovský et al. (2017) called: Sociálna inteligencia – významná osobnostná charakteristika manažéra a coping, a clear trend was observed that as managers get older, they reject manifestations of Machiavellianism more. The older managers,

in the authors' view, are those who act only when they are sure that what they are doing is morally right. With age, these employees believe that it is better to be modest and honest than important and dishonest.

Based on the presented results, it can be hypothesised that the profession of a manager cannot be viewed as a unified, homogeneous entity. On the contrary, it is necessary to specify both general characteristics of this profession and the specific requirements of a particular manager's profession. The effort to interpret and adjust people's behaviour is typical for a range of professions. From this perspective, addressing the studied questions has an interdisciplinary significance, incorporating both professional job requirements and personality traits.

8 Conclusion

Managerial work is directly linked to handling challenging situations. The effectiveness of managing demanding situations has an impact on the functioning and efficiency of the entire organisation. In the presented research, we focused on addressing questions related to specifying differences between selected attributes of social intelligence and Machiavellianism in managerial work in the context of selected socio-demographic characteristics. The conducted research was oriented towards three main areas: specifying mutual differences within selected attributes of social intelligence and Machiavellianism. Based on the presented results, findings, and insights, as well as their summary and specification of contributions for practical applications, we can conclude that the paper's goal has been achieved.

Acknowledgement

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