

doi: 10.26529/cepsj.1159

A Model of Transformational Leadership in the Organisational Culture of Preschool Institution

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∞ The culture of an organisation refers to the common and dominant values and norms, as well as the beliefs and perceptions of its employees. Organisational culture influences employee behaviour and attitudes. The culture of the institution predetermines the tone of the environment, which can affect employee satisfaction. The basic premise of this paper is established in the connection between the characteristics of the leader and the transformational model of leadership in the organisational culture of the preschool institution. This research aims to determine whether the assessments and self-assessments of leaders and preschool teachers differ in the frequency of using the transformational leadership style and to determine the relationship between the transformational leadership style and the leader's personality traits. The research was conducted in a private Croatian preschool institution, which consists of 10 kindergartens. A total of 51 participants in 9 kindergartens participated in the research. The study used a quantitative research approach. The research results show that preschool teachers and leaders do not differ significantly in estimates of the frequency of application of the transformational leadership style and that there is a significant correlation between some characteristics of the leader and the transformational model of preschool leadership.

Keywords: organisational culture, preschool institution, preschool teachers, transformational leadership

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Model transformacijskega vodenja v organizacijski kulturi predšolske ustanove

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≈ Kultura organizacije se nanaša na skupne in prevladujoče vrednote in norme ter prepričanja in zaznave zaposlenih. Organizacijska kultura vpliva na vedenje in odnos zaposlenih. Kultura ustanove vnaprej določa ton okolja, kar lahko vpliva na zadovoljstvo zaposlenih. Osnovno izhodišče prispevka temelji na povezavi med značilnostmi vodje in transformacijskim modelom vodenja v organizacijski kulturi predšolske ustanove. Namen raziskave je ugotoviti, ali se ocene in samoocene vodij in vzgojiteljev razlikujejo v pogostosti uporabe transformacijskega sloga vodenja, ter določiti povezavo med transformacijskim slogom vodenja in osebnostnimi značilnostmi vodje. Raziskava je bila izvedena v zasebni hrvaški predšolski ustanovi, ki obsega deset vrtcev. V njej je sodelovalo 51 udeležencev iz devetih vrtcev. V raziskavi je bil uporabljen kvantitativni raziskovalni pristop. Rezultati kažejo, da se vzgojitelji in vodje v vrtcih ne razlikujejo bistveno v ocenah pogostosti uporabe transformacijskega sloga vodenja ter da obstaja pomembna povezanost med nekaterimi značilnostmi vodje in transformacijskim modelom vodenja v vrtcih.

Ključne besede: organizacijska kultura, predšolska ustanova, vzgojitelji, transformacijsko vodenje

Introduction

'Organisational culture' is a term describing the dominant beliefs and values within an organisation. The more pronounced the organisation's culture, the less need there is for the development of formal regulations that serve to guide behaviour. Transformational leadership is one of the newest forms of leadership and is, therefore, the least researched in the context of preschool institutions. Hey (2006) states that interest in transformational leadership has been the result of two phenomena since the 1980s. The first phenomenon refers to important global economic changes, such as greater competition, high product flow and changing demographic structures that created an unstable environment, beginning in the 1970s. The second phenomenon refers to the fact that the theoretical basis of leadership is based on the research of behaviours, situations, and characteristics, but some atypical leadership qualities were not considered.

The primary goal of a transformational leader is to increase the perception of success in an organisation and motivate its members (Bass, 2008). Transformational leaders make employees willing to deal with the problems and difficulties they face and give them autonomy to increase efficiency and effectiveness (Bass et al., 2003). The collegial model of leadership in education is associated with participatory, transformational, and interpersonal leadership models. Transformational leadership is in line with the collegial model because it assumes that all employees share the same values and interests, and thus all stakeholders are involved in achieving educational goals. (Tokić Zec, 2021). The transformational leadership style of kindergarten leaders affects the organisational culture of kindergarten.

Organisational culture of educational institution

Stoll and Fink (1996) state that the culture is at the same time a product and a process. As a product, it represents the achievements of the people who preceded us; as a process, it is permanently revitalised and recreated as new members embrace old traditions and as they themselves become teachers. Bruner (2000) believes that culture is used to recognise one's abilities, shape the mind, construct one's worlds, and create self-concepts. The implementation of culture is a co-construction process that includes the collaborative construction of knowledge of all stakeholders, whose activities are intertwined, connected, and interdependent. Brust Nemet and Mlinarević (2016) state that culture is marked by attitudes, common ideas and habits, and the way of life of members of a certain community that are passed down through the generations.

Tokić Zec (2021, p. 131) defines organisational culture as the organisation of 'daily work of employees who are focused on a common goal set on a common vision, mission and values of the institution and are motivated to improve the educational process and institution'. Furthermore, it is determined by 'quality relations, collegiality, trust, teamwork, joint activities, clear rules and an atmosphere of security' (Tokić Zec, 2021, p. 131).

Sušanj (2005, p. 67) categorises the function of the organisational culture as follows:

1. The culture of the organisation has the role of setting boundaries, meaning that it marks the difference between organisations;
2. It gives a sense of identity to its members;
3. It supports the development of collective affiliation;
4. It enhances system stability by providing standards of conduct;
5. It serves as a mechanism for determining the meaning of the environment that affects an individual's attitudes and behaviours.

Visković (2018) defines the culture of an institution or organisation as a hypothetical construct of values, beliefs, and attitudes that influence the formation of norms as written and unwritten rules of conduct. Brust Nemet and Mlinarević (2016) point out that lifelong learning and education are part of the culture of the institution. The implementation of education and lifelong learning is possible when the educational system becomes ready to monitor changes and bring them into the overall work culture and when the bearers of the educational process become ready to learn and take responsibility for achieving the goals of the educational process. Organisational change 'must begin and end with a change in man, his behaviour, attitude, values and way of thinking' (Belak & Ušljebrka, 2014, p. 81).

Theory of transformational leadership

Transformational model theory is defined as a leader's approach that causes changes in individuals and social systems. Transformational leadership increases motivation, morale and characteristics of employees in different ways, creates positive changes in employees with the ultimate goal of developing employees into leaders. In addition, transformational leadership determines the quality of cooperation between teachers and leaders in creating a quality work environment so that the education and work in kindergarten can be carried out effectively and efficiently, which impacts the development of teacher performances (Hafsari, 2020).

Transformational leadership is closely associated with the 'learning organisation', which is a term referring to an organisation in which people are willing to develop their abilities to create the results they want, in which different forms of thinking are nurtured, in which people learn how to work as a team and in which assumptions are set freely (Senge, 2009). The same author points out, when talking about the learning organisation, that its core is based on five disciplines of learning: systems thinking, personal development, identification of mental models, building a shared vision and team learning. The learning organisation is based on two important assumptions: knowledge is an important and main source of any organisation and represents a significant advantage among competitors, knowledge as a key part of the organisation represents the total knowledge of all employees. The culture of the institution is an important component for the learning organisation (Seme Stojnović & Hitrec, 2014).

Slunjski (2018) states that transformational leadership occurs when two people communicate in such a way that both parties develop a level of ethics and motivation to help each other. If such a level of communication is to be achieved, it is necessary to move away from the authoritarian leadership style and attempt to build a learning organisation in order to strive for a transformational leadership style, which, according to Seme Stojnović and Hitrec (2014), is one of the best contemporary leadership styles with the active participation of all stakeholders. In order to connect the involvement and participation of all stakeholders, it is important to develop the spread of employee interests at the level of the entire organisation, encourage understanding and acceptance of the goals and mission of the organisation in which they work, and take into account the well-being of others (Seme Stojnović & Hitrec, 2014). Furthermore, if the organisation begins to influence the development of systems thinking, it will be possible to understand better the interrelationships in life and the perception of the whole rather than parts (Senge, 2009). Thus, it reaches a level at which we see ourselves and our world in a new way.

Personal development is the next element closely related to transformational leaders and transformational leadership. Senge (2009) points out that vision is different from purpose. He compares the purpose with the general movement; the vision is a specific destination, a picture of the desired future. A shared vision is very important in connecting people; it allows people to change according to the company. People have a sense of belonging and togetherness. It creates a common identity. A transformational leader is expected to encourage personal development because the main strategy is simple: be a role model. He or she is the one who enables co-workers to create vision without fear; research and commitment to the truth are the norm; opposing the status quo is

necessary, as is implementing the principles of personal development in everyday life (Senge, 2009). Consequently, employees' professional development will be truly valued and will provide on-the-job training, which is also important for personal development. The transformational leader connects employees (and him/herself) with a sense of identity toward the institution's mission, vision, and shared identity. He or she is a role model for employees, inspires them, challenges them to take on greater challenges, and aligns tasks with their capabilities by understanding and knowing employees.

Bass et al. (2003, p. 208) list four dimensions of transformational leadership:

1. **Idealised influence:** It refers to the social charisma of the leader and whether he or she feels confident and committed to ideals.
2. **Inspirational motivation:** The leader conveys optimism with his visions that are attractive and inspiring to employees. Employees have a strong sense of purpose and are motivated to act. Employees are optimistic, encouraged, believe in the future and their abilities, and put more effort into their tasks.
3. **Individualised consideration:** The leader sets challenges for employees, gives them support and empathy and maintains communication. As a result, employees need self-development and intrinsic motivation for their tasks.
4. **Intellectual stimulation:** Leaders encourage creativity in employees and take risks, looking for ideas and assumptions of employees. They encourage independent thinking.

Transformational leadership facilitates redefining mission and vision, restructuring systems and commitments to achieve a goal. It is a relationship of mutual stimulation and sublimity that turns followers into leaders and can turn leaders into moral verticals. It must have a starting point in moral foundations. Hasanah (2020) interviewed a kindergarten principal to determine how she implements a transformational leadership style in her daily work through the four dimensions of transformational leadership. The results reveal that the principal uses all dimensions of transformational leadership and that this approach can create a change and improve the quality of kindergarten. Suharyati et al. (2016) surveyed 144 preschool teachers; their study aimed to determine whether the organisational culture of kindergarten, transformational leadership, and motivation are related to the innovation of educators. The quantitative and qualitative research results show a positive correlation of three factors (organisational culture, transformational leadership and motivation) with the innovation of educators (Tokić Zec, 2021, p. 64).

Characteristics of a transformational leader

Hafsari (2020, p. 489) defines leadership as 'the process of influencing others to take steps or actions towards a common goal'. The role of leadership exercised by the principles of educational institutions is a direct link with the institution's culture, because it carries with it the responsibility to shape and maintain norms and values and beliefs. As part of his professional experience, the principal him/herself has values and beliefs and can determine the tone and direction of the development of the institution's culture (Staničić, 2006). The same author emphasises several basic characteristics of a leader: communicativeness, innovation, creativity, vision, flexibility, encouraging change. Transformational leaders have integrity and high emotional intelligence, motivate people with a shared vision of the future, and communicate well. They inspire team members because they expect the best from everyone and consider themselves responsible for their actions. Transformational leaders set clear goals and have good problem-solving skills (Staničić, 2006).

Hey (2006) states four phases of organisational change under the transformational leader:

- To implement a change, it is necessary to make a convincing case;
- Encourage a shared vision;
- The change requires leadership;
- The change needs to be implemented in everyday work.

A transformational leader will achieve a shared vision by involving all employees in regularly shaping and reshaping strategic or other plans, seeking broad input and encouraging everyone to think about a new and better future. Inspiring a shared vision can also be achieved through conscious role modelling strategies and coaching. Change requires leadership, and special attention should be paid to the leader's emotional resistance that may arise in response to change, which can be discerned by carefully recognising the individual needs of followers. It is necessary to instil a sense of urgency and encourage cooperation and self-confidence of followers.

The current study

The research aimed to examine the connection between the personality traits of a leader and the transformational model of leading a preschool institution.

The research problems and hypotheses are the following:

1. To determine whether assessments and self-assessments of the frequency of using a transformational leadership style differ among leaders and preschool teachers.
H1: Preschool teachers and leaders will not differ in estimates of the frequency of applying transformational leadership style in the work of leaders.
2. Establish a connection between the transformational leadership style and the personality traits of the leader.
H2: There is a connection between some personality traits of a leader and a transformational model of running a preschool. The assumption is that leaders who more often apply a transformational leadership style will be more extraverted, more agreeable, and have higher scores on the intellect scale.

Method

Participants

The total number of participants was 51 from the preschool institution DIDI, a private preschool institution with 60 employees; 80% of the employees participated in this research. There were two categories of participants. The first was kindergarten leaders who assessed their own leadership styles and personality traits. The second was preschool teachers who assessed the leaders' leadership style and personality traits in their kindergarten. Leaders used a multi-factor leadership questionnaire (a 'leader form') to assess leadership style, and preschool teachers used a multi-factor leadership questionnaire (an 'evaluator form') to assess leadership style.

Table 1 shows the socio-demographic characteristics of kindergarten leaders. A total of nine leaders participated in the research; eight were female and one male. The majority of leaders are aged 36 to 45 (44%); significantly, most leaders are aged 26 to 45 (7 of 9 leaders). All involved leaders have a bachelor's degree (4) or a master's degree (5). Most leaders (7) have up to five years of work experience, and two have between 11 and 15 years of experience.

Table 1*Socio-demographic characteristics of leaders*

		N	%
Gender	Male	1	11
	Female	8	89
Age	18 to 25 years	1	11
	26 to 35 years	3	33
	36 to 45 years	4	44
	46 and older	1	11
Education	Bachelor's degree	4	44
	Master's degree	5	56
Years of experience	0 to 5 years	7	78
	11 to 15 years	2	22

Table 2 shows the socio-demographic characteristics of the preschool teachers' sample. The data show that a total of 42 female preschool teachers participated in the research. Almost half of them (48%) belong to the age group between 18 and 25, have a secondary school diploma (62%) and have five or fewer years of work experience as a preschool teacher. The remaining age groups are 26 to 35 years of age (40%), 36 to 45 years of age (10%) and 46 to 55 years of age (2%). A total of 21% of preschool teachers involved in the research have a bachelor's degree, and 17% have a master's degree. Only 9% of preschool teachers have six or more years of work experience.

Table 2*Socio-demographic characteristics of preschool teachers*

		N	%
Gender	Female	42	100
Age	18 to 25 years	20	48
	26 to 35 years	17	40
	36 to 45 years	4	10
	46 to 55 years	1	2
Education	Secondary school	26	62
	Bachelor' degree	9	21
	Master's degree	7	17
Years of experience	0 to 5 years	38	90
	6 to 10 years	3	7
	11 to 15 years	1	2

In order to investigate whether kindergartens differ significantly according to socio-demographic characteristics, chi-square tests were calculated for each of them, and the results showed that there is no statistically significant difference between the individual nine kindergartens according to any of the included characteristics. In other words, the samples are homogeneous according to gender, age, education, and work experience of the preschool teachers involved.

Instruments

Several questionnaires were used in the research. They contained instructions for completing and a brief explanation of the purpose of the research. Socio-demographic data were examined through basic questions on gender, age, level of education and work experience. The International Personality Item Pool (IPIP) was used to examine personality traits, and the transformational leadership model was measured using the Multifactor Leadership Questionnaire, Croatian edition (MLQ, Naklada Slap, 2010, according to Avolio & Bass).

The IPIP consists of 50 items. This questionnaire examines personality traits according to Goldberg's personality model (1993). Extraversion, agreeableness, emotional stability, conscientiousness and intellect are the five personality traits for which ten items are defined in the questionnaire. Extraversion refers to the tendency to be outgoing, assertive, active, and excitement seeking. Agreeableness is a tendency to be kind, gentle, trusting, and warm. Emotional stability is the opposite of neuroticism, which is the tendency to be anxious, fearful, and moody. Conscientiousness is defined by achievement and dependability. Finally, intellect is the tendency to be creative, imaginative, and perceptive (Judge & Bono, 2000). Participants responded to what extent a particular statement refers to a person they assess by selecting on a multiple Likert-type scale in which 1 means 'completely incorrect', 2 means 'mostly incorrect', 3 means 'neither true nor false', 4 means 'mostly correct' and 5 means 'correct'.

The MLQ consisted of 45 items, nine of which related to management outcomes (satisfaction with the leader, additional effort and effective leaders), and 36 items related to leadership. Thirty-six items describe three leadership styles: transformational style (Idealised Influence-Attributed, Idealised Influence-Behaviour, Inspirational Motivation, Intellectual Stimulation, Individualised Care), Passive-Avoidant Leadership Style (Passive Leadership by Laissez Faire), and transactional leadership style (Active Exception Leadership and Conditional Rewarding) and make up the nine scales.

Data collection procedure

The research was conducted in October 2020 in the preschool institution DIDI, which consists of 10 kindergartens; the research was conducted in nine kindergartens. Preschool teachers and leaders were introduced to the aim of the research and voluntarily completed the questionnaires. All ethical norms of research were met.

Results and discussion

Descriptive statistics of the scales used

Descriptive values of the scales were calculated. There are nine leadership style scales, of which five explore individual aspects of the transformational style, and the remaining four measure the degree to which leaders use other styles. In addition to each scale individually, the total score obtained as the average score from all five transformation scales together is also shown. This result indicates the overall level of transformational leadership style, used in later analyses. The remaining five scales (extraversion, agreeableness, conscientiousness, emotional stability and intellect) are subscales of the IPIP questionnaire and measure individual personality dimensions. Descriptive statistics (i.e. minimum, maximum, arithmetic mean, standard deviation, asymmetry and flatness) are presented separately for leaders' self-assessment (Table 3) and preschool teachers' assessment (Table 4).

Table 3

Descriptive data of used scales for leaders

	Minimum	Maximum	M	SD	Asymmetry	Flatness
TRANSFORMATIONAL LEADERSHIP SCALE						
Idealised Influence (attributions)	1.5	3.0	2.4	.54	-.476	-.765
Idealised Influence (behaviour)	2.3	3.8	3.3	.50	-1.085	.585
Inspirational Motivation	2.3	4.0	3.4	.49	-1.683	4.270
Intellectual Stimulation	2.8	4.0	3.4	.47	.038	-1.098
Individualized Care	3.5	4.0	3.8	.20	-.216	-1.041
Transformational style total	2.7	3.6	3.2	.32	-.710	-.704
OTHER LEADERSHIP STYLES SCALES						
Conditional Rewarding	1.5	3.8	3.1	.67	-1.984	4.479
Active Exception Leadership	3.0	4.0	3.4	.31	.816	.349
Passive-Avoidant Leadership	0.0	1.8	1.0	.63	-.261	-1.237
Laissez-faire	0.0	0.5	0.2	.17	.254	-.040

	Minimum	Maximum	M	SD	Asymmetry	Flatness
PERSONALITY TRAITS						
Extraversion	3.2	4.5	3.7	.46	.658	-.772
Agreeableness	4.1	5.0	4.6	.38	.016	-2.066
Conscientiousness	4.3	4.9	4.6	.23	.495	-1.591
Emotional stability	3.5	4.9	4.0	.44	1.161	.935
Intellect	2.9	3.9	3.4	.29	.268	.525

Note. $N = 9$.

The results in Table 3 show that the minimum total self-assessment score on the transformational leadership style is 2.7, and the maximum is 3.6. The arithmetic mean is $M = 3.2$, and the standard deviation, $SD = .32$. Since the scale ranges from 0 to 4, such results indicate a tendency of results toward the upper part of the curve, meaning that participants are more prone to higher scores on a transformational leadership style. Asymmetry and flatness show how much the distributions of the results deviate from the normal distribution. It is generally considered that values from -1 to 1 on asymmetry and from -2 to 2 on flatness indicate distributions of results within normal limits. However, in this case, it should be taken into account that this is a small sample of results ($N = 9$) which can significantly affect these values. Therefore, it is not uncommon for several scales to have asymmetry and flatness, indicating significant deviations from the normal distribution. However, when the five transformational leadership scales are merged into a common result, it is seen that the asymmetry and flatness indicate the results corresponding to the normal distribution. Furthermore, scales that measure other leadership styles are not relevant in this paper.

Table 4 shows the same descriptive indicators but on the results of preschool teachers. It is important to emphasise that descriptive statistics are not presented individually for all 42 preschool teachers, but the average is calculated for each assessed leader. In other words, if, for example, five preschool teachers assessed the same leader, the average of their results for that leader was calculated. In this way, each leader received an unambiguous assessment from their subordinates for each trait examined. This assessment was later used in further analyses in the paper. Given that several preschool teachers evaluated the same leader, the presentation of results on the entire sample of 42 educators would not indicate the actual results but the personal equations of preschool teachers (tendency to choose higher or lower values on a scale), or variance among results for the same leader would indicate a difference between preschool teachers rather than actual differences among leaders. Because such data are of little importance for this research, whose primary goal is to determine

the relationship between leadership style and personality traits, all further results were presented on the leaders' self-assessments and on the sample (i.e., unified assessments of the preschool teachers group for each leader).

Table 4

Descriptive data of scales used for preschool teachers after calculated averages for each leader

	Minimum	Maximum	M	SD	Asymmetry	Flatness
TRANSFORMATIONAL LEADERSHIP SCALE						
Idealised Influence (attributions)	2.3	3.6	3.1	.40	-.758	.921
Idealised Influence (behaviour)	2.7	3.4	3.0	.28	-.045	-2.070
Inspirational Motivation	2.8	4.0	3.3	.37	.168	-.471
Intellectual Stimulation	3.2	3.7	3.4	.20	-.172	-1.606
Individualised Care	3.3	3.9	3.6	.24	-.045	-1.425
Transformational style total	2.9	3.6	3.3	.27	-.267	-1.047
OTHER LEADERSHIP STYLES SCALES						
Conditional Rewarding	2.8	3.5	3.1	.29	.112	-1.407
Active Exception Leadership	2.9	3.8	3.4	.25	-.463	.518
Passive-Avoidant Leadership	0.5	1.8	1.1	.48	.171	-1.924
Laissez-faire	0.2	1.6	0.6	.46	1.855	3.153
PERSONALITY TRAITS						
Extraversion	3.8	4.6	4.3	.27	-.236	-1.159
Agreeableness	4.0	4.6	4.4	.21	-.278	-.098
Conscientiousness	3.8	4.9	4.5	.33	-1.686	3.432
Emotional stability	3.7	4.6	4.1	.34	-.249	-1.440
Intellect	3.0	3.7	3.4	.22	-.242	-.144

Note. $N = 9$.

The results (Table 4) show that the average result for all leaders on overall transformational leadership style is $M = 3.3$ ($SD = 0.27$), which is slightly higher than the self-assessments of leaders, for whom the average was 3.2 (Table 3). The minimum is 2.9, and the maximum is 3.6, which shows a tendency towards higher results on the scale. In other words, preschool teachers also evaluate that leaders use transformational leadership style. Other research results (Lesomo, 2013; Hasanah, 2020) also showed that the prevailing leadership style in educational institutions was the transformational style. Regarding the asymmetry and flatness of the results, it can be seen that a lesser number of variables differs from a normal distribution. When it comes to the variable of the greatest

interest for this research, it is conscientiousness, while all other variables (overall transformational style, extraversion, agreeableness, emotional stability and intellect) show normal distribution. Transformational leadership style in kindergarten is important for both preschool teachers and leaders because they together make kindergarten a place of positive organisational culture and innovations (Suharyati et al., 2016).

Comparison of assessment and self-assessment of the leadership style

In further analysis, the assessment and self-assessment of the application of the leadership style of the kindergarten leaders are compared. In order to determine if there is a difference between the two, t-tests were calculated for each of nine kindergartens. Average assessments, self-assessments, and differences among them are presented in Table 5.

Table 5

Comparison of assessment and self-assessment in the application of transformational leadership model

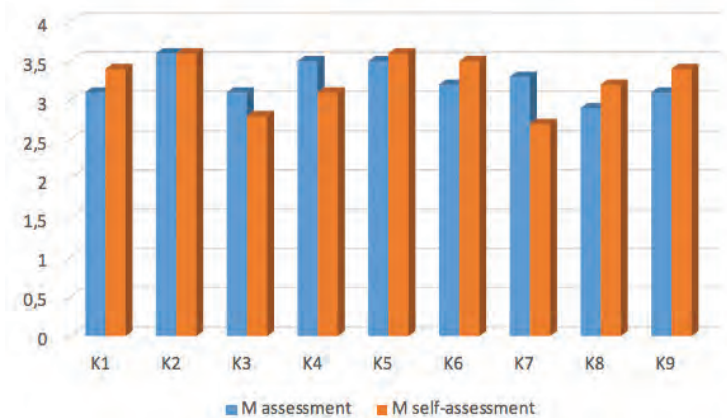
	N	M assessment	M self-assessment	t	df	p
K 1	4	3.1	3.4	-.49	3	.660
K 2	3	3.6	3.6	.36	2	.751
K 3	4	3.1	2.8	2.00	3	.139
K 4	2	3.5	3.1	3.50	1	.177
K 5	5	3.5	3.6	-.66	4	.543
K 6	8	3.2	3.5	-1.18	7	.276
K 7	6	3.3	2.7	3.43	5	.019
K 8	5	2.9	3.2	-1.30	4	.265
K 9	5	3.1	3.4	-2.25	4	.087

Note. K-kindergarten.

The results in Table 5 indicate that almost all kindergartens (8 out of 9) do not differ in how leaders themselves assess the extent to which they use a transformational leadership model with the assessments of their subordinates. In only one kindergarten (no. 7) is there a difference between the self-assessment of the leader and the average assessment of the preschool teacher ($t_{(5)} = 3.43$; $p < .05$). At the same time, the leader herself estimates that she uses the transformational model of leadership less than the preschool teachers estimate. The comparison of the above results is more clear in Figure 1.

Figure 1

Comparison of assessment and self-assessment of the frequency of using the transformational model of leadership (by kindergarten)



Transformational leaders are highly valued by their followers, so pre-school teachers and leaders must have the same assessments of the leadership style. Having the same perception of the way kindergarten is led shows that leaders create a quality work environment; thus, the work in kindergarten can be carried out effectively and efficiently, which impacts the development of pre-school teacher performance (Hafsari, 2020). Transformational leaders are seen as 'satisfying and inspirational, they are goal and vision setters, and because of this, their followers are inspired to do more and do better' (Morrison, 2018, p. 69). Transformational leaders can make a significant difference in an organisation's everyday life, which affects not only workers but also children and the quality of everyday interaction.

The relationship between the transformational model of leadership and the personality traits of the leader

To verify the second hypothesis of this study, Pearson's and Spearman's correlations between the tendency for transformational leadership style and the five personality traits (extraversion, agreeableness, conscientiousness, emotional stability, and intellect) were calculated. It has been shown that Pearson's and Spearman's method of calculating correlations gives the same general results (in terms of sign and significance of correlation, while the correlations themselves differ slightly), so only Pearson's correlations are shown. As in the previous chapters, the self-assessments of the leader and the average assessments of

the preschool teachers are presented separately. The relationship in preschool teachers' assessments is shown in Table 6.

Table 6

The relationship between transformational leadership and personality traits – assessment of preschool teachers

	1.	2.	3.	4.	5.	6.
1. Transformational style						
2. Extraversion	.922*					
3. Agreeableness	.360	.051				
4. Conscientiousness	.763*	.648	.165			
5. Emotional stability	.407	.399	.243	.624		
6. Intellect	.779*	.603	.604	.516	.198	

Note. $N = 9$. * $p < .05$; ** $p < .01$.

According to Table 6, there is a statistically significant and positive correlation between transformational leadership style and extraversion ($r = .922$, $p < .01$), transformational leadership style and conscientiousness ($r = .763$, $p < .05$) and transformational leadership style and intellect ($r = .779$, $p < .05$). The research results indicate that kindergarten leaders who are more prone to transformational leadership style are also more extraverted, have higher levels of conscientiousness and higher scores on the intellect scale. Leaders high in conscientiousness tend to be organised, responsible, persistent, and achievement-oriented, while being high in intellect includes having wide interests and being imaginative and insightful (Amponsah & Asamani, 2015). Extraverted leaders are talkative, energetic, and assertive. These personality traits are important when working in the kindergarten environment with preschool teachers, parents and children. Amponsah and Asamani (2015) conducted similar research on the sample of teachers, and the results showed that conscientiousness had the strongest relationship with transformational style. Leaders' self-assessments are shown in Table 7.

Table 7

The relationship between transformational leadership and personality traits – self-assessments of leaders

	1.	2.	3.	4.	5.	6.
1. Transformational style						
2. Extraversion	.148					
3. Agreeableness	.759*	.504				
4. Conscientiousness	-.505	-.113	-.389			
5. Emotional stability	-.512	.158	.010	.003		
6. Intellect	-.252	.049	-.248	.465	-.133	

Note. $N = 9$. * $p < .05$; ** $p < .0$.

As with leadership outcomes, leadership assessments differ from preschool teachers' assessments. According to Table 7, the results of self-assessments of kindergarten leaders show that there is only a statistically significant correlation between transformational leadership and agreeableness ($r = .759$, $p < .05$). This correlation is positive, meaning that leaders who evaluate higher use of transformational leadership also have higher scores on self-assessment of agreeableness as a personality trait. This result is supported by the research of Judge and Bono (2000), whose results showed a positive correlation between agreeableness and transformational leadership. Leaders see themselves as approachable, cooperative, and able to get along with others (Amponsah & Asamani, 2015) so that others are free to communicate their ideas.

Due to the small samples on which the correlations were calculated, whether differences in leadership outcomes and personality traits exist was calculated as an additional analysis using the t-test. For this purpose, the results on the scale of transformational leadership are divided into two groups: low and high. The median value was used as a division criterion. Although such a procedure is not usually recommended on scale results, this procedure is applied here because the t-test, as a method, copes well with small samples for which there is an adequate correction. Due to earlier deviations of some scales from the normal distribution, the nonparametric Kruskal-Wallis test was also used as a control test. The results of the comparison on the assessments of preschool teachers are shown in Table 8.

Table 8

Differences in leadership outcomes and personality traits between leaders with low and high transformational leadership style - assessment of preschool teachers

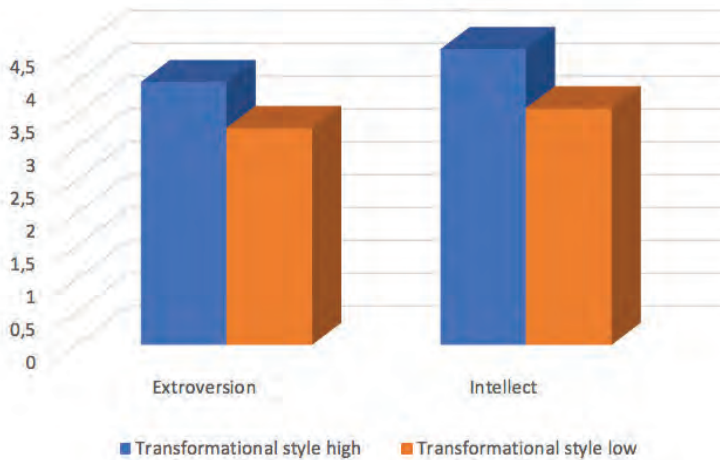
	t	df	p	p (Kruskal-Wallis)
Extraversion	-5.33	7	.001	.014
Agreeableness	-0.78	7	.460	.623
Conscientiousness	-1.68	7	.138	.138
Emotional stability	-1.04	7	.334	.461
Intellect	-2.54	7	.039	.049

Note. $N = 9$.

Table 8 shows that, according to preschool teachers, there is a statistically significant difference between leaders with low and high levels of transformational leadership style in extraversion ($t_{(7)} = 5.33, p < .05$) and intellect ($t_{(7)} = 2.54, p < .05$). The directions of these differences are shown in Figure 2.

Figure 2

Directions of differences in extraversion and intellect depending on low or high tendency for transformational leadership – preschool teachers' assessment



According to Figure 2, it can be seen that the results are higher on the two observed characteristics in leaders more prone to transformational leadership style. The transformational style is more often applied by leaders who are more extraverted and have higher scores on the intellect scale.

Table 9

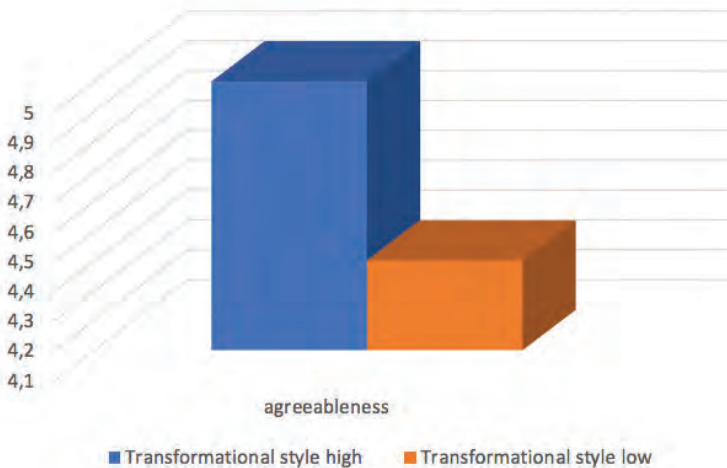
Differences in leadership outcomes and personality traits between leaders with low and high transformational leadership style - leaders' self-assessments (N=9)

	t	df	p	p (Kruskal-Wallis)
Extraversion	-1.02	7	.343	.262
Agreeableness	-3.38	7	.012	.024
Conscientiousness	0.38	7	.714	.548
Emotional stability	1.42	7	.198	.167
Intellect	-0.23	7	.826	.714

According to the results of the leaders (Table 9), between those with low and high scores on the scale of transformational leadership, there is a statistically significant difference in agreeableness ($t_{(7)} = 3.38, p < .05$). The direction of these differences is shown in Figure 3.

Figure 3

Directions of differences in agreeableness depending on low or high tendency for transformational leadership - leaders' self-assessment



According to Figure 3, leaders who are more inclined to a transformational leadership style have higher results in terms of agreeableness. In other words, according to self-assessments of kindergarten leaders, the transformational style is more often applied by leaders who are more friendly and kind.

The current research aimed to examine the connection between the personality traits of a leader and the transformational model of leading a preschool institution according to assessments of preschool teachers and self-assessments of kindergarten leaders.

The first hypothesis (*H1: Preschool teachers and leaders will not differ in estimates of the frequency of application of transformational leadership style in the work of leaders*) is partially confirmed. There is a difference in assessment only in one kindergarten, where the leader assesses a less frequent application of the transformation style than preschool teachers. Feijen (2017) conducted research that showed that behaving as a transformational leader affects team learning, innovation, and team performance positively. Therefore, transformational leadership is a suitable leadership style within early childhood settings. It produces better follower outcomes (e.g., higher motivation, higher competency, more self-respect) and organisational outcomes (e.g., higher teacher motivation, increased child outcomes, higher worker productivity). Thus, having a transformational leader is highly beneficial for early childhood settings (Babb & Gesler, 2021).

The second hypothesis (*H2: There is a connection between some personality traits of a leader and a transformational model of running a preschool*) is confirmed. Leaders who more frequently apply transformational leadership style will be more extraverted, agreeable, and have higher scores on the intellect scale. This result of personality traits is in line with the research of Judge and Bono (2000), who also proved that extraversion, agreeableness, and intellect positively predict transformational leadership. Patrick (2011) researched educational environments and concluded that intellect, agreeableness, and extraversion were identified to foster positive social relationships with subordinates. Simić and Runić Ristić (2017) showed a statistically significant positive relationship between the transformational leadership style and extraversion and intellect. Easley (2019) also proved a positive relationship between extraversion and a transformational leadership style. The link between transformational leadership and preschool improvement is seen to be via a collaborative organisational culture in which there is a common understanding of shared mission and vision (Lesomo, 2013).

Conclusion

The modern preschool institution is based on a series of assumptions. It must be a place of equal participation, quality of life, and joint learning of children and adults. All professionals can practice professional and responsible behaviour and are part of the curriculum of early and preschool education,

influencing and developing it. Freedom and respect for each individual are the fundamental values of the organisation of the preschool institution, development and leadership of both the preschool institution and each kindergarten in it. The acceptance and practice of continuous learning form the backbone of a modern preschool institution where all stakeholders share power and responsibility in the educational process and become co-responsible for its overall performance and quality level.

The primary influence on the culture of an organisation is exerted by the founder and leader. With his culture and personality traits, the leader can significantly contribute to the development of a quality institution for early and preschool education. A modern institution for early and preschool education presupposes a modern way of leading. The transformational model of leadership, one of the youngest models, is based precisely on the personality of the leader. Transformational leaders challenge assumptions and beliefs and encourage followers to be innovative and creative, approaching old problems in new ways. Transformational leaders empower followers by convincing them to propose new and controversial ideas without fear of ridicule. Kindergarten leaders who work with preschool teachers must create a positive, open and innovative organisational culture, part of which is the transformational style of leadership.

In this paper, two hypotheses were set. The first hypothesis that preschool teachers and leaders mostly do not differ in their estimates of how often leaders apply a transformational leadership style has been partially confirmed. The second hypothesis that there is a significant connection between some characteristics of the leader and the transformational model of running a preschool institution has been confirmed.

The importance of the results of this research is to point out the need for additional professional development and reflective approach of preschool principals and kindergarten leaders in the context of preschool leadership so that their cooperation with other stakeholders is focused on teamwork and collaborative culture, lifelong learning, and creating a common mission and vision. Transformational leadership leads to better relationships between people in an organisation, and it should be nourished in preschool institutions. The research results showed that leaders who more often apply the transformational leadership style will be more extraverted, more agreeable, and have higher scores on the intellect scale, which are important personality traits for kindergarten practice. The shortcoming of the presented research is a small number of participants, so the ability to generalise from the results is reduced. In order to obtain a broader picture of this issue, it would be good to include more preschool institutions, especially preschool leaders.

Acknowledgement

The paper is based on the diploma thesis paper of Ana Cvjetičanin, entitled 'Transformational model of preschool leadership' defended at the Faculty of Education in Osijek, edited and supplemented.

References

- Amponsah, M. O., & Asamani, L. (2015). Personality traits of teachers and desired leadership styles. *British Journal of Psychology Research*, 3(5), 1–15.
- Babb, L., & Gesler, D. (2021). *Putting transformational leadership into practice*. <https://www.childcareexchange.com/files/2021/03/5025856.pdf>
- Bass, B., M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207–218.
- Bass, B., M. (2008). *The Bass handbook of leadership: Theory, research and managerial applications*. Free Press.
- Belak, S., & Ušljebrka, I. (2014). Organizacijska kultura kao čimbenik uspješne provedbe organizacijske promjene [Organisational culture as a Factor in the Successful Implementation of Organizational Changes]. *Oeconomica Jadertina*, 4(2), 80–98.
- Bruner, J. S. (2000). *Kultura obrazovanja* [The culture of education]. Educa.
- Brust Nemet, M., & Mlinarević, V. (2016). Procjene učitelja o kulturi škole [Teachers' Assessments of the School Culture]. *Život i škola*, 62(1), 93–104.
- Easley, S. (2019). *The relationship between leadership style and personality type among college students*. Dominican University.
- Feijen, B. (2017). *The effect of network manager characteristics on team learning: The Big Five and transformational leadership*. Tilburg University.
- Goldberg, L. R. (1992). The development of markers for the Big-five factor structure. *Psychological Assessment*, 4(1), 26–42.
- Hafsari, A. S. (2020). The influence of the transformational leadership of kindergarten heads, job satisfaction, work spirit of work on the performance of kindergarten teachers in the Pelangi Cluster, South Banjarmasin District. *Journal of K6 Education and Management*, 3(4), 486–495.
- Hasanah, M. S. (2020). The implementation of transformational leadership to improve school quality, advances in social science, education and humanities research. In A. Komariah, T. C. Kurniatun, D. A. Kurniady, R. Anggorowati, A. G. Abdullah, & A. B. D. Nandiyanto (Eds.), *4th International Conference on Research of Educational Administration and Management* (pp. 166–169). Atlantis Press.
- Hey, I. (2006). Leadership of stability and leadership of volatility: Transactional and transformational leaderships compared. *The Online Journal*, 4(4), 1–13.
- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85(5), 751–765.

- Lesomo, F. K. (2013). *Influence of school managers leadership styles on preschool teachers motivation: Case for Nkundori Division Nakuru County* (Master's thesis). University of Nairobi.
- Morrison, C. (2018). *Transformational leadership and quality in head start programs* (Doctoral dissertation). Governors State University.
- Patrick, C. L. (2011). Student evaluations of teachings: Effects of the Big Five personality traits, grades and the validity hypothesis. *Assessment and Evaluations in Higher Education*, 36(2), 239–249.
- Seme Stojnović, I., & Hitrec, S. (2014). *Suvremeno vođenje u odgoju i obrazovanju* [Contemporary leadership in education]. Golden marketing-tehnička knjiga.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of learning organisation*. Doubleday.
- Simić, J., & Runić Ristić, M. (2017). The relationship between personality traits and managers' leadership styles. *European Journal of Social Sciences Education and Research*, 11(2), 195–200.
- Slunjski, E. (2018). *Izvan okvira 3. Vođenje: prema kulturi promjene* [Outside the box 3. Leadership: Towards the culture of change]. Element.
- Staničić, S. (2006). *Menadžment u obrazovanju* [Management in education]. Vlastita naklada.
- Stoll, L., & Fink, D. (1996). *Changing our schools: Linking school effectiveness and school improvement*. Open University Press.
- Suharyati, H., Abdullah, T., & Rubini, B. (2016). relationship between organisational culture, transformational leadership, working motivation to teacher's innovativeness. *International Journal of Managerial Studies and Research*, 4(3), 29–34.
- Sušanj, Z. (2005). *Organizacijska klima i kultura: konceptualizacija i empirijsko istraživanje* [Organizational climate and culture: conceptualization and empirical research]. Naklada Slap.
- Tokić Zec, R. (2021). *Procjene odgojitelja, učitelja i sveučilišnih nastavnika o organizacijskoj kulturi odgojno-obrazovne ustanove* [Preschool teachers, primary school teachers and university instructors' perceptions on organizational culture in educational institutions] (Doctoral dissertation). Sveučilište J. J. Strossmayera u Osijeku, Filozofski fakultet.
- Visković, I. (2018). Kultura zajednica u kojoj odrasta dijete rane i predškolske dobi [Culture of the communities in which children are growing up]. In A. Višnjic Jevtić & I. Visković (Eds.), *Izazovi suradnje: Razvoj profesionalnih kompetencija odgojitelja za suradnju i partnerstvo s roditeljima*. (pp. 15–65). Alfa.

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