Trust and communication in the context of leaders and employees

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Abstract. The article deals with the topic of communication and trust in leadership which affect the success of cooperation and organizational performance. The paper summarizes the theoretical basis of trust and communication and examines what leaders must do to develop them and achieve the expected results and outcomes. The study focuses on Zenger and Folkman's model related to the two

aspects of leaders' qualities: warmth and professional competence. The empirical analysis is conducted on a dataset obtained from a Hungarian nationwide omnibus study where 999 responses were collected. The methodology is based on the application of Confirmatory Factor Analysis and Binary Logistic Regression. The research confirmed that trust and communication are significant factors of leadership success, whereas warmth is measured to have twice as much importance as professional competence in building the former two. This is the first study where the Zenger and Folkman's model is controlled in a Central and Eastern European country in the context of leaders and employees.

1. INTRODUCTION

The level of cooperation among organisations' members and how leaders can get employees to collaborate are crucial in terms of the effectiveness of organisations and essential for the leaders how to earn enough trust to actually be followed. In today's VUCA world, trust is increasingly appreciated in all aspects of business life and managers need to focus more on the development of their trust-building skills.

This article covers the topic of leadership and trust, which affect the success of cooperation and organisational performance. Its purpose is to examine what leaders must do to achieve expected results and outcomes. Cooperation is significantly influenced by how the organisation's members judge each other.

Over the past decades, numerous studies have examined the theoretical basis of trust as a construct. Other works have focused more on helping leaders understand how to obtain trust and build a trustworthy relationship, as well as which factors may moderate this relationship. Ever since Bales (1950) made a distinction between socio-emotional (warmth-oriented) and task-oriented (competence-oriented) leadership, decades of scientific debate have considered their extent and significance. The asymmetry between the two (e.g., Reeder et al., 1992) and the emotions (including the halo effects) arising from these judgements form the backbone of the quantitative analytical approach. Similarly, this study aims to facilitate a deeper understanding of this topic. For this reason, major studies from the 1990's to the 2020's related to the factors of warmth and competence in leadership, the definitions and conceptualizations of trust and their effects on performance, as well as the correlation between trust and communication have been reviewed to answer the research questions.

Two research questions have been identified based on Zenger and Folkman's factor analysis of 2021, related to communication factors shape the areas of warmth and competence.
1. Is it possible to identify Zenger and Folkman's (ZF) factors and identify their model?
2. What are the factors related to effective communication and building trust?

The results show that warmth is an essential component of leadership, but professional competencies are required for effective communication and leadership trust. As a result of the digitalisation processes these days, building trust and warmth is becoming a more and more challenging task for managers, which together with the alienation effects of the Covid pandemic are altering the leadership models, as well (Jarjabka et al., 2020).

The research confirmed that trust and communication are distinguished factors of leadership success, whereas warmth is measured to have twice as much important as professional competence in building the former two.

The limitation and the applicability of the research originate from the same root, as to what extent the results are universal, whether they are culture-specific or not as the research was conducted only with Hungarian interviewees.

This article is structured as follows. The first section provides an overview of the theoretical background. Subsequently, the methodology is explained. The next section presents and discusses the analyses. Finally, the conclusions, practical implications, limitations, and further research topics are presented and discussed.

2. LITERATURE REVIEW

2.1. Two traits that influence our judgments and relationships: warmth and competence

The factor determining the quality and effectiveness of our cooperation is how we perceive our partners, their actions and what we think about them, i.e., our opinion of them. A high number of psychological research confirms that two trait dimensions - warmth (e.g., friendliness, trustworthiness, empathy, kindness) and competence (e.g., intelligence, power, efficacy, and skill) – govern our social judgments (Asch, 1946; Cuddy et al., 2008; Fiske et al., 2007). The items of warmth are related to sociability and morality, meanwhile, the mix of competence items is related to capability and agency (Abele et al., 2016). Warmth (or its absence) shows us others' positive or negative intentions toward us; based on it, we can distinguish friend from foe. Competence indicates whether the other is capable of conducting those intentions; in the case of a foe, we should prepare for fight or flight, or in the case of a friend for collaboration (Cuddy et al., 2011). This influencing effect also prevails in the organisational environment; therefore, it is vital to understand the mechanism and examine its impact on professional and organisational outcomes. "Moreover, these dimensions appear to be relevant across cultures, arguably because they are rooted in evolutionary adaptations…" (Cuddy et al., 2011, p. 76).

The fact that we can decide who a friend is and who is not is based on inferences about warmth, and it seems that it has a more significant impact on the overall attitudes toward others. However, there are some cases within organisational contexts when competence takes primacy. When evaluating of the self and relations to others, people usually weigh competence more heavily (Wojciszke & Abele, 2008; Wojciszke et al., 1998; Fiske 2018).

"The competence-only versus competence and warmth distinction captures a shift that has occurred in conceptions of good leadership" (Cuddy et al., 2011, p. 77). Competence may still be essential and primary, but warmth has gained significance. In judgments on the fundamental warmth and competence dimensions, two different effects could arise. A contrast effect occurs when the two traits are negatively correlated – perceivers infer that a surplus of one trait means a deficit of the other (Judd et al., 2005). The halo effect is when the perceiver assumes that the two properties go hand in hand. Both effects can lead to bad decisions, for example, hiring the wrong person for a position. Contrast effects tend to occur in the comparative context (comparisons between multiple individuals) (e.g., high warmth = low perceived competence), whereas in non-comparative contexts, halo effects occur. (Judd et al., 2005; Kervyn et al., 2009).

To understand the significance of the two factors, it is crucial to see that there is an asymmetry between them; perceived warmth could be quite easily lost and hard to regain compared to competence (Singh & Teoh, 2000; Tausch et al., 2007).

Warmth and competence judgments shape emotions and behaviours in social interactions. Different emotions (admiration, contempt, envy, and pity) arise in us depending on whether we judge someone's

warmth and competence high or low. We respond to these emotions with different patterns of behavioural responses (active facilitation, active harm, passive facilitation, and passive harm (Caprariello et al., 2009; Cuddy et al., 2004, 2008; Fiske 2018).

Warmth and competence lead people's judgments of groups (i.e. stereotypes), as well (Cuddy et al., 2008; Fiske 2018).

Then, several researchers also began to apply these findings to the leadership area; now, the focus is on the main findings of Zenger and Folkman (Zenger & Folkman, 2013, 2016; Zenger et al., 2011). They used data from the 360-degree assessments of more than 70,000 leaders over the years to investigate their likeability and competencies. Among other things, they found that when researching leadership effectiveness, leaders were supposed to be effective without being sympathetic. This is technically true, but the chances are very low (Zenger & Folkman, 2013). This stimulated Zenger and Folkman to further develop their research. The combination of competence and warmth dimensions can assist leaders in proceeding to higher levels and ensure higher employee engagement (Zenger & Folkman, 2021).

In conclusion, we can state that warmth and competence are crucial for leadership effectiveness. However, warmth is more important in the context between leaders and employees. Therefore, the following hypothesis was formulated:

H1. Warmth and professional competence are two distinguished factors in the context between leaders and employees.

2.2. Trust and communication in leadership

If we consider someone warm, this judgment entails the possibility of developing trust, which is of enormous importance in leadership. The importance of trust in management was also recognized and researched early on, and researchers from different disciplines have studied trust for at least six decades (Argyris, 1964; McGregor, 1967; (Argyris, 1964; McGregor, 1967; Baquero, 2023; Mitterer & Mitterer, 2023). The apparent practical reason for researching trust is that it significantly impacts various outcomes relevant to teams and organizations.

In these studies, a myriad of definitions of trust has been formulated. The authors agree that trust is a multidimensional construct, and the most widely used definition was established by Rousseau et al. (1998) as a starting point. They proposed the following definition of trust: "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another" (Rousseau et al., 1998, p. 395). However, researchers have operationalized the definition in different ways and for different types of leadership referents (leadership, team, organizational or inter-organizational level). Following the purpose of the authors and studies, we encounter a highly diverse and overlapping approach. Some authors write about trust factors, others about trust bases, conditions, etc. For example, Gabarro (1978) identified nine "bases" of trust: integrity, motives, consistency of behavior, openness, discreetness, functional/specific competence (knowledge and skills related to a particular task), interpersonal competence, business sense and judgment. Butler and Cantrell (1984) investigated the importance of trust conditions. Later Butler (1991) tried to understand and measure conditions that lead to trust in a specific person. His purpose was to develop a content theory of trust conditions, like availability, competence, consistency, discreetness, fairness, integrity, loyalty, openness, promise fulfilment, and receptivity.

Some authors and studies defined the critical components of trust, like willingness to be vulnerable (Butler, 1991; Mayer & Davis, 1999), positive expectations and assessment of others' intentions, sincerity, motivations, character, reliability, and integrity (Butler, 1991; Mayer & Davis, 1999; Rousseau et al., 1998). McAllister (1995) categorized interpersonal trust into two dimensions: cognitive and affective. Reliability, integrity, honesty, and fairness of a referent are related to the cognitive dimension of trust. At the same time, affective forms of trust are about the relationship with the referent. Several authors discussed the

effect of two forms of trust. Legood et al. (2023) highlighted in their critical review there is a lack of clear and consistent empirical support for the distinctiveness of cognition-based and affect-based trust.

The different points of view logically required the systematic processing of the approaches, entailing the examination of the multidimensional construct model. Mayer et al. (1995) developed a well-known, influential model, separated trust from its antecedents (ability, benevolence, and integrity), and examined organizational trust across levels and the moderating factors of trust. Some authors elaborated on the list of antecedents and moderators (Whitener et al., 1998; Williams, 2001).

Dirks and Ferrin (2002) provided a theoretical framework in their meta-analysis to clarify the different approaches to trust in leadership. They distinguished between two qualitatively different theoretical perspectives of trust in leadership that appear in the literature: relationship-based and character-based perspectives. The former view focuses on the nature of the leader-follower relationship (Konovsky & Pugh, 1994; Whitener et al., 1998). The second perspective focuses on the follower's perception of the leader's character and how it influences their sense of vulnerability in a hierarchical relationship (Mayer et al., 1995). Burke et al. (2007) found that trust has been examined as a relatively unchanging trait, a process, or an emergent state in their systematic processing of earlier works. Traits refer to individual characteristics, which are relatively stable, and they have been described as an individual difference called propensity to trust.

Trust has also been conceptualized as an emergent state, like a cognitive, motivational, or affective state. Trust as a state is dynamic; depending on the situation, it can play the role of input, process, and outcome. (Marks et al., 2001). From this perspective, trust is rather an attitude, which can develop depending on the situation (e.g., swift trust; Coppola et al., 2004; Jarvenpaa et al., 1998; Jarvenpaa & Leidner, 1999). Trust can be both the input and output of a relationship, which is connected and guaranteed by the process of trust building. Research that has conceptualized trust as a process has primarily investigated the development of trust (Khodyakov, 2007). Dirks et al., 2022 found in their research "…that leader and unit performance is a function not only of absolute trust level, but is also affected by the direction and magnitude of change in trust across time periods, with the highest levels of effectiveness being associated with leaders who exhibited an increase in trust from the group over time" (Dirks et al., 2022. p. 1).

Burke et al. (2007) placed trust in a different context, regarding leadership functions as a well-developed integrative model. Their model includes selected antecedents to trust in leadership (ability, benevolence, and integrity), moderators at the individual, team, and organizational levels, and proximal and distal outcomes of trust in leadership.

The final result makes trust research important, and the researchers examined the consequences from several points of view. Trust between leaders and employees impacts organizational citizenship behaviors (OCBs), communication, performances, attitudes and intentions, like organizational commitment, job satisfaction, commitment to decisions made by the leader, cooperation, and information-sharing learning (Connell et al., 2003; Dirks & Ferrin, 2001; Legood et al., 2020).

Despite the growing popularity and number of the construct, there is no agreement in the literature on the conceptualization of trust.

From a practical point of view, the effects of trust and the tools of trust building are ahead of its concept. Based on their qualitative study, Soderberg and Romney (2022) concluded that trust could be considered the glue that holds human communities together. 'Therefore, developing trust is an important responsibility for leaders to pursue' (Soderberg & Romney, 2022, p. 182). They demonstrated how leaders could engender feelings of trust among followers. They presented two ways that leaders could build trust within their organizations: (1) by demonstrating humility in their communication and (2) by exhibiting compassion in their behavior. Their 'data identified five specific ways that leaders can communicate with others in order to help build trust. These include 1. Providing positive and negative feedback; 2. Asking and encouraging questions of others; 3. Coordinating employees' task responsibilities; 4. Actively listening; and 5. Avoiding and eliminating gossip' (Soderberg & Romney, 2022, p. 181).

Many authors emphasize the importance of communication. Just to mention a few: "Communicating, which is one of the oldest social process, is an integral part of every area of human life, both personal and professional" (Rogala & Bialowas, 2016, p. 1). 'Communication is still the most important skill…. The best leaders and managers practice the nuances of how they communicate every day" (Becker & Wortmann, 2021, pp. 10-11).

Therefore, effective communication is important not only for the interpersonal but for the organizational level. Rogala and Bialowas also stated that "communication in an organization is not only a simple transfer of the information necessary for employees to perform their duties but also affects the relationship between employees, their motivation, job satisfaction, commitment, energy, and efficiency…The primary purpose of internal communication is to provide information, but it also fulfils functions relating to control, motivation, as well as meeting social needs" (Rogala & Bialowas, 2016, p. 21).

Venus, Stam, and van Knippenberg clearly summarized in their paper the connection between the leader communication and organizational effectiveness. In their view, "the core function of organizations is to attain desired end states. Accordingly, a key responsibility for organizational leaders is to motivate and inspire employees to accept these end states…To this end, leaders must engage in persuasive communication, … the ability to persuasively communicate a vision is the sine qua non of outstanding leadership" (Venus et al., 2013, p. 1).

In the SAGE handbook of organizational communication Fairhurst and Connaughton reviewed that "ommunication has played an increasingly central role in leadership studies due to the emergence of a social and cultural lens – focusing on how culture and social interaction impact leadership – appearing alongside (the strong inner motor of) an individual and cognitive lens" (Fairhurst & Connaughton, 2014, p. 401). They also stated that scholars moved to the view of communication as a complexity and as a "relational phenomenon between people even objects …and as a medium by which collectives mobilize to act and the focus isn't just on leaders, but all actors…who can be transformative agents" (Fairhurst & Connaughton, 2014, p. 401). Therefore, we formulate the following hypothesis:

H2. Warmth is more significant and has a greater impact on building trust in leadership and effective communication.

3. METHODOLOGY

To connect the theory to the real world, an empirical analysis was conducted on a dataset obtained from a nationwide omnibus research where 999 respondents were collected in spring 2022 with an expectation of being representative by gender, age, territorial distribution and educational background. The response collection was carried out by the dunnhumby, a Hungarian specialised market research company. The database is not accessible online; therefore, the basic characteristics are provided to show its structure: 47% of the respondents are women; 21% live in the capital, 35% have a residency in county centres, 28% in other cities, while 16% in smaller towns; from an educational perspective, 47% has a higher education degree, 50% secondary education, and 3% at maximum elementary school; the respondents are 47 years old with 16 years of standard deviation.

As stated before, the starting point was the theory of Zenger and Folkman (2021), who carried out their research by using an item set of 20 questions. They performed a factor analysis with 49 key behaviours, succeeded in identifying two fundamental factors, and selected the top 20 aspects related to the two areas (warmth and competence)

The basic descriptive statistics for the 20 questions can be seen in Table 1. It is to be highlighted that the two indicators which are selected to be the dependent variables are the Trust and Communication. Also the Warmth (W) and Professional competence (PC) factors-related indicators are listed independently.

Descriptive statistics of the 20 questions

ID	Indicators	Valid N	Mean	Median	Mode	Std. Dev.	Skewness	Kurtosis
TRUST	Building Trust with Others	972	8.79	9	10	1.58	-1.505	2.212
COMM	Communicating Effectively	972	9.00	10	10	1.43	-1.627	2.478
W1	Building Positive Relationships	975	8.81	9	10	1.53	-1.419	1.617
W2	Collaboration and Teamwork	972	8.79	9	10	1.55	-1.540	2.612
W3	Helping Others Develop	976	8.66	9	10	1.55	-1.345	1.761
W4	Providing Honest Feedback	971	8.75	9	10	1.60	-1.438	1.882
W5	Open to Feedback from Others	970	8.67	9	10	1.58	-1.375	1.961
W6	Willingness to Change	971	8.41	9	10	1.65	-1.128	1.101
W7	Ability to Inspire and Motivate	974	8.65	9	10	1.65	-1.462	2.152
W8	Integrity and Honesty	965	8.98	10	10	1.53	-1.872	3.837
W9	Encouraging Input from Others	974	8.51	9	10	1.65	-1.310	1.956
PC1	Solving and Anticipating Problems	977	8.84	9	10	1.52	-1.493	2.004
PC2	Ability to Champion Change	975	8.58	9	10	1.61	-1.261	1.443
PC3	Strategic Perspective	970	8.59	9	10	1.57	-1.137	0.773
PC4	Drive for Results	975	8.42	9	10	1.62	-1.198	1.793
PC5	Technical/Professional Expertise	971	8.51	9	10	1.69	-1.162	0.976
PC6	Establishing Stretch Goals	966	8.06	8	10	1.81	-0.980	0.802
PC7	External Perspective	949	8.24	9	10	1.76	-1.064	0.832
PC8	Taking Initiative	974	8.47	9	10	1.61	-1.106	0.916
PC9	Challenging Standard Approaches	937	7.28	8	8	2.02	-0.563	-0.010

Source: Compiled by the authors

As the next step, we decided to check existence of the modified ZF model. The modification is explained by the fact that the two dependent variables are no longer part of the factors. The identified factors should be verified (along with the theory) by the use of a Confirmatory Factor Analysis (CFA), which starts from the assumption that the items are constructing the latent variables. Therefore, it can be used as a theory control to understand the main factors of the warmth and the professional competence of the leaders. With the CFA we can check whether the two factors exist or not, and along with the pre-established criteria, they can be considered valid or not. According to Pituch and Stevens (2015), the CFA factors will correlate with each other; therefore, multi-collinearity occurs, but the model general goodness of fit values can prove their existence. The general inconsistency test, the Cronbach's Alpha (Alpha) is a strong indicator, but we also consider other statistical indicators: goodness of fit, average variance extracted (AVE), and composite reliability statistics (CR). For Alpha and CR, a minimum acceptance level can be set as 0.5 (Fornell & Larcker, 1981), even if the good level of reliability is 0.7 or above.

The following measures are used: the root mean squared error of approximation (RMSEA) with acceptance criteria of lower than 0.1, the comparative fit index (CFI) and the Tucker-Lewis index (TLI) with acceptance criteria of higher than 0.8, the standardised root mean squared residual (SRMR) with acceptance

criteria of lower than 0.1 and the coefficient of determination (CD) with acceptance criteria of higher than 0.8. (Pituch & Stevens, 2015).

Finally, if the model exists, the composite reliability (CR) and average variance extracted (AVE) values will be considered for the factors. For the former one, values greater than 0.7 are expected, whilst for the latter one, values greater than 0.5 can be considered acceptable. (Hair et al., 2010)

After the CFA, we investigate the relationship between warmth and professional competencies and Building Trust with Others and Communicating Effectively. The latter two are the dependent variables. As both of them have extremely high ratios of maximum values (10), 46,2% and 52,4% respectively, we decided to transform them into dummy variables where 1 is equal to 10 and 0 is equal to all of the other variables. As a result, the application of a binary logistic regression is the logical choice, as this allows the demonstration of the TRUST and COMM in the case of categorical variables, even if the error is logistically distributed.

In addition, other variables were involved and set as control factors (gender, educational attainment, economic activity, household income level, marital status, workplace region, age, children under 14 years, participating in leader training, willing to work as a leader in 5 years from now, and actually being a leader). A logarithmic transformation of the age was made, which preserves the proportion of deviations among the respective factors. The three control variables were divided into dummy variables, setting as a reference category in the case of the gender the female, for educational attainment the elementary school, for the economic activity the worker, for the household income level much higher than the average, for the marital status the married, for the workplace region the Central Hungary, and for the rest the no answer. Reference values are presented in brackets in all cases, after the respective factor. The Standardised Beta values can be interpreted as ceteris paribus the given variables effect on the independent value.

The general equation (Pituch & Stevens, 2015) of the investigated model can be seen in *Equation*.

$$\text{logit}(p)=\beta_0+\beta_1 X_1+\beta_2 X_2+\beta_3 Z_1 [\![+\beta]\!]_4 Z_2+\beta_5 Z_3+\cdots+\beta_{14} Z_{11}+\varepsilon \quad (1)$$

where:

$\text{logit}(p)$ = the probability of being capable of building trust/effective communication;

$X_1 - X_2$ independent variables of binary logistic regression: warmth and professional competence;

$Z_1 - Z_{11}$ control variables of binary logistic regression;

ε = random error.

The control variables are as follows:
- gender, reference category: female
- educational attainment, reference category: elementary school
- economic activity, reference category: worker
- household income level, reference category: much higher than the average
- marital status, reference category: married
- workplace region, reference category: Central Hungary
- LN Age
- children under 14 years, reference category: no
- participating in leader training, reference category: no
- willing to work as a leader in 5 years from now, reference category: no
- and actually, being a leader reference category: no

4. EMPIRICAL RESULTS AND DISCUSSION

In this section, we show the results of the CFA and the binary logistic regressions. As for the CFA, it can be seen in Table 2 that all of the pre-established statistical expectations are met, and the existence of the two factors is confirmed. We also analysed whether the 18 items construct one factor or not:

The unrestricted two-factor model ($\chi2$=554.809 p=0.000 RMSEA=0.060 CFI=0.966 TLI=0.962 SRMR=0.028 CD=0.982) had a significantly better model fit than the single-factor model ($\chi2$=710.365 p=0.000 RMSEA=0.070 CFI=0.954 TLI=0.948 SRMR=0.032 CD=0.967). As a result, the two factors should be applied.

Therefore, H1 is proven. Warmth and professional competence are two distinguished factors in the context between leaders and employees.

Table 2

Confirmatory Factor Analysis results

ID	Latent variable	AVE, CR, Alpha	Est.	S.E.	t	p
W1			8.806	0.049	178.04	0.000
W2			8.821	0.048	184.49	0.000
W3			8.668	0.050	173.36	0.000
W4		AVE=0.640	8.769	0.051	171.54	0.000
W5	Warmth	CR=0.941	8.672	0.050	172.19	0.000
W6		Alpha=0.941	8.400	0.054	156.79	0.000
W7			8.666	0.053	164.37	0.000
W8			8.984	0.049	181.84	0.000
W9			8.531	0.053	161.13	0.000
PC1			8.850	0.049	181.97	0.000
PC2			8.580	0.053	162.16	0.000
PC3			8.592	0.052	164.54	0.000
PC4		AVE=0.578	8.448	0.053	159.35	0.000
PC5	Prof. comp.	CR=0.924	8.490	0.055	153.16	0.000
PC6		Alpha=0.941	8.087	0.059	137.64	0.000
PC7			8.226	0.058	140.95	0.000
PC8			8.487	0.053	159.99	0.000
PC9			7.305	0.066	109.87	0.000

$\chi2$=554.809 p=0.000 RMSEA=0.060 CFI=0.966 TLI=0.962 SRMR=0.028 CD=0.982
Source: Compiled by the authors

The general features of the model (explanatory power, F value, significance, constant value, and a number of elements) are below Table 3. For the TRUST, the Chi-square value of Omnibus Tests of Model Coefficients is 638.670, *df* is 29, and p is 0.000, the classification accuracy increased from 53.8% to 82.7%, the *Nagelkerke* R2 is 63.1%. For the COMM, the Chi-square value of Omnibus Tests of Model Coefficients is 510.736, *df* is 29, and p is 0.000, the classification accuracy increased from 53.9% to 79.3%, the *Nagelkerke* R2 is 54.6%. In sum, both of the binary logistic regression models can be considered strong in social science research.

The rest of the Table 3 contains exponential beta values and the corresponding significance values. Given these conditions, exponential beta values – ceteris paribus – mean a chance quotient, i.e., how many

times more likely the characteristic of Building Trust with Others and Communicating Effectively will be in line with the function of the given variable, filtering out the effect of the other variables.

<div align="right">Table 3</div>

<div align="center">Binary logistic regression results for TRUST and COMM</div>

Binary logistic regression independent and control variables	TRUST		COMM	
	Sig.	**Exp(B)**	**Sig.**	**Exp(B)**
Professional Competencies	0.000	3.697***	0.000	1.792***
Warmth	0.000	5.041***	0.000	4.835***
Gender: Male (Female)	0.041	0.658**	0.089	0.722*
Educational attainment level: Secondary education without a diploma (Elementary school)	0.717	1.416	0.468	0.517
Educational attainment level: Secondary education with a diploma (Elementary school)	0.830	1.212	0.456	0.532
Educational attainment level: Tertiary education (Elementary school)	0.794	1.264	0.569	0.616
Economic activity: Student (Worker)	0.615	0.629	0.069	4.143
Economic activity: Retired (Worker)	0.126	0.614	0.087	0.598
Economic activity: Other (Worker)	0.631	1.169	0.844	0.943
Household income level: Much lower than the average (Much higher than the average)	0.396	2.190	0.148	3.416
Household income level: Lower than the average (Much higher than the average)	0.452	0.605	0.536	1.474
Household income level: Average (Much higher than the average)	0.700	0.791	0.503	1.459
Household income level: Higher than the average (Much higher than the average)	0.410	0.603	0.937	1.046
Household income level: Don't know (Much higher than the average)	0.125	0.333	0.608	1.417
Marital status: Single (Married)	0.123	1.560	0.329	0.773
Marital status: In relationship (Married)	0.382	0.790	0.604	0.880
Marital status: Divorced (Married)	0.130	1.903	0.902	0.954
Marital status: Widow (Married)	0.232	0.572	0.496	1.402
Workplace region: Northern Hungary (Central Hungary)	0.029	2.038	0.897	1.040
Workplace region: Northern Great Plain (Central Hungary)	0.386	1.284	0.663	1.128
Workplace region: Southern Great Plain (Central Hungary)	0.615	1.170	0.490	0.821
Workplace region: Central Transdanubia (Central Hungary)	0.243	1.473	0.608	1.173
Workplace region: Western Transdanubia (Central Hungary)	0.030	2.194**	0.946	1.023
Workplace region: Southern Transdanubia (Central Hungary)	0.668	0.860	0.304	1.422
LN Age	0.778	0.892	0.075	0.510*
Children under 14 years: Yes (No)	0.400	0.808	0.505	1.165
Participating in leader training: Yes (No)	0.960	1.011	0.436	0.848
Willing to work as a leader in 5 years from now: Yes (No)	0.823	1.052	0.075	0.685
Actually being a leader: Yes (No)	0.056	1.645*	0.486	1.182

TRUST: Nagelkerke R2: 0.631 Cox & Snell R2:0.472 -2 Log likelihood: 740.602 Constant: -0.467 n=999

COMM: Nagelkerke R2: 0.546 Cox & Snell R2:0.409 -2 Log likelihood: 829.557 Constant: 3.120 n=999

Note: *** p<=0.01, ** p<=0.05%, * p<=0.1

Source: Compiled by the authors

5. CONCLUSION

The authors intended to make several contributions and advances with this article and they hope to provide new issues for future research.

According to the results, it can be stated that both of the ZF factors are significantly affecting building trust in leadership and effective communication. On the other hand, analysing the mere numbers, some differences can be identified.

First, in the case of building trust in leadership, a higher professional competence means a higher likelihood of building trust in leadership (3.697 times higher), while warmth causes a slightly greater impact (5.041 times higher chance). Second, in the case of effective communication, professional competence means a relatively smaller chance (1.792 times higher) compared to warmth (4.835 times higher chance). This means that both professional competence and warmth play a significant role in building trust in leadership and effective communication, but warmth has a relatively and absolutely more significant impact in the case of effective communication, and in both cases warmth is characterised by a greater impact.

H2. Warmth is more significant and its impact is more than double in determining building trust in leadership and effective communication.

This research examined whether professional competencies or warmth elements contribute more to more effective communication and trust leadership. The separate selection of warmth and competence elements is justified; the research on leadership styles was also based on separating these two characteristics (Bales, 1950; Stogdill, 1948; Stogdill, 1974). According to Zenger and Folkman (2021), combining the dimensions of competence and warmth can help managers reach higher levels and provide employees with higher levels of commitment. They believe warmth and competence are crucial to leadership effectiveness, but warmth is more important in the context between managers and employees. Other authors mention (Abele & Wojciszke, 2007; Wojciszke & Abele, 2008) that it may depend on whether competence or warmth takes precedence in the life of an organisation. According to Judd et al. (2005), competence is still essential and primary, but the warmth has become increasingly important. Our findings supported Zenger and Folkman's (2021) statement that both factors (professional competencies and warmth) are essential. Still, warmth is more important; i.e., warmth is more important than professionalism both for building trust with others and communicating competencies effectively.

According to Soderberg and Romney (2022), building trust is the responsibility of leaders, which can be achieved by demonstrating humility in their communication and exhibiting compassion in their behaviour. According to Venus et al. (2013), there is a relationship between managerial communication and organisational effectiveness, and persuasive communication is essential for outstanding leadership. Based on our findings, there is a big difference in effective communication regarding professional competencies and warmth, while in the case of a trust, there was no such difference. Most of the literature says that warmth is more important than professional competencies, and this was also evident in our case. Still, the difference is not as significant as in the case of effective communication, where warmth is much more critical. Based on our results, the difference is significant in both cases, and warmth plays a much more significant role.

For answering the question what is more important for building trust in a leader: warmth or competence, we focused on the main findings of Zenger and Folkman (2021). They concluded that both warmth and competence are crucial in leadership effectiveness. Although among the eleven aspects of warmth they listed, effective communication is only one of the aspects; however, we can say that all of these aspects assume effective communication such as building positive relationships, collaboration and teamwork, helping others develop, providing honest feedback, open to feedback from others, ability to inspire and motivate, encouraging input from others need effective communication. Even, integrity and honesty, building trust with others, and willingness to change presupposes effective communication.

However, it can also be seen that for a competent leader effective communication is inevitable. Zenger and Folkman listed nine aspects of competence: solving and anticipating problems, ability to champion change, strategic perspective, drive for results, technical/professional expertise, establishing stretch goals, external perspective, taking initiative, challenging standard approaches. It is unquestionable that many of these aspects are based on the trusted relations with colleagues and these are necessary to attain desired end states, which is the key responsibility for organisational leaders.

However, In spite of all this, we can conclude that warmth is crucial, but effective communication and trust leadership also require professional competencies.

Implications

This paper provides insights for academia. In the research, communication is linked to the professional competencies, which is probably due to the cultural differences as the power-distance indicator and even the masculinity index have a medium effect. This leads to the different perceptions of communication, and as a result, it is rather connected to the delegation and the teamwork-based task distribution than to the warmth elements (e.g., Danis, 2003).

The theory was controlled in a Central and Eastern European country the first time; this can be further developed and repeated in other neighbouring countries to enable a cross-country comparison. This can be used as a basis for similar research.

Even higher education can benefit from this study. A high number of undergraduates have the intention of becoming a leader. Moreover, higher education institutions also consider it important to provide future leaders with knowledge that can be applied in practice in addition to the theoretical foundation.

The primary aim of higher education is to develop professional competencies (Kuráth & Sipos, 2020); however, it can be stated based on our survey that the development of character-related competencies is also needed. This would be as vital as that of developing professional competencies.

With the help of the research findings we obtained additional information how to develop students' and managers' competence.

Finally, the study also conveys a message for practitioners, too. It is essential that the management should allocate the necessary resources and take efforts to develop not only managers' professional skills but to make them shift from the respective competence areas to warmth.

Research limitations and future research

The main limitations of the study are as follows:
- The sample is from one Central and Eastern European country, Hungary. This simplifies the situation as the impacting cultural elements and cross-country comparison are not considered.
- A sample from one country may offer a good basis for investigating and evaluating this topic, but the study lacks a deeper understanding of the specific characteristics.
- The post COVID-19 effects were not considered.
Based on the limitations, the following future research efforts and areas may be identified.
- A comparative analysis (with similar samples) in some other CEE / EU countries identifying culture-specific sub-factors may be the next step in further research.
- As a side effect of the Covid pandemic, online communication has gained more emphasis and become more dominant in working situations. This shift in the modes of communication implies that the feeling of warmth has become more difficult to perceive and both the verbal and nonverbal communication skills of managers should be adapted to this situation. This implies some research managers' techniques, methods and skills have changed to build trust and warmth. The growing proportion of the new

employment modes and the alienation effects of the Covid pandemic has resulted in changes in the leadership models (Jarjabka et al., 2020), establishing a need for further primary research.

- Another effect of the Covid pandemic is the growing number of atypical jobs, which needs an effective response from managers' side. Building trust and the feeling of warmth in atypical jobs may be regarded as an independent sub-field in leadership studies.

- For a better and deeper understanding of the motifs and the factors, a qualitative analysis is planned for a focus group, in order to be able to formulate in what way the elements of managers' different communication skills should be developed to build trust among employees in a more successful way.

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