

1 Article

# 2 Investigating the Links of Interpersonal Trust in 3 Telecom Companies in Poland

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9

10 **Abstract:** The purpose of this paper is to examine if there are links between interpersonal trust and  
11 competences, relations and cooperation in Polish telecom companies. It examines what factors affect trust in  
12 coworkers and managers in sustainable organizations. The paper surveys a sample of 175 employees of telecom  
13 companies in Poland by means of a questionnaire. The results indicate that the competences, relations and  
14 cooperation are related to interpersonal trust. Regression analysis showed that the competences and relations  
15 predict a significant variance in trust amongst coworkers. Additionally, cooperation contributes to prediction  
16 of trust in managers. Given the importance of trust in sustainable organizations, a better comprehension of what  
17 factors are related to team confidence provides valuable information for stakeholders. The results provide  
18 valuable clues how to improve interpersonal trust in sustainable organizations.

19 .

20 **Keywords:** interpersonal trust; sustainable organizations; competences; relations; cooperation

21

## 22 1. Introduction

23 The contemporary company, which aspires to be a sustainable organisation in the long term,  
24 should not only make sure it gains profits out of its activity, but also to carry out the sustainable  
25 development strategy and to be socially responsible. The sustainable activity of organisations arises  
26 from the needs and expectations of the outside environment, as well as of the internal stakeholders.  
27 However, it is above all the result of the accurate management and involvement of all staff and  
28 managers. Research demonstrates that companies do not adopt sustainability strategies out of public  
29 relations motives, but that the adoption of such strategy reflects “substantive changes in business  
30 processes” [1,2]. Sustainability is a concept in management of the organisation of the future, because  
31 it facilitates flexibility in adapting companies to the constantly changing environmental conditions  
32 and it even helps them operate in the times of crisis and chaos.

33 Sustainability is considered to be a crucial challenge for organisations seeking competitive  
34 advantage, but also for organisations facing other kinds of problems such as, for example, talent  
35 retention. 70% perceive sustainability as a key element in their management programmes [5]. The  
36 organisations which include in their strategy the practices and activities in line with the sustainability  
37 idea are called sustainable enterprises [1,4,6]. What distinguishes a sustainable enterprise is, among  
38 others, the fact that its dominating capital is a social capital based on good relationships and  
39 cooperation between the enterprise and its external and internal environment, including its  
40 employees. Building social capital is based principally on trust and thus it is emphasized that trust is  
41 one of the main components of sustainable enterprises [7].

42 Trust is one of the crucial conditions of sustainable management [8]. Many scholars allude to the  
43 fact that organizational trust is a crucial element of successful cooperation [9-11]. Organizational trust  
44 impacts various areas of management: communication [12], negotiation [13], and leadership [18].  
45 Subsequently, it is an important factor supporting organization functioning. Understanding how  
46 trust works in organization is an essential challenge in contemporary economy.

47 The acknowledged trust model that illustrates the factors affecting trust consists of three basic  
48 elements: ability, benevolence and integrity [19]. It has been empirically confirmed that indeed those  
49 factors have an impact on trust development [20]. However, most of the studies have been focused  
50 mainly on analyzing trust between subordinates and managers [21-24]. It has been noticed that there  
51 is not enough studies assessing the trust between co-workers [93]. Therefore, in this study, we want  
52 to verify the trust condition both among employees and between employees and leaders. We want to  
53 establish what factors affects trust, using the following independent variables: competences, relations  
54 and cooperation. The primary goal of this study is to understand which of these factors are related to  
55 trust. The research mentioned in this paper aims to verify whether there are links between  
56 competences, relation, cooperation with trust. More specifically, we decided to examine whether the  
57 higher levels of competences, relation or cooperation are associated with higher level of trust. Thus,  
58 we want to provide a guidance on how to improve factors that are related to high trust. Additionally,  
59 we want to encourage the development of specific business practices that helps to maintain  
60 sustainable organization.

61 This paper is organized as follows. First we analyse the theoretical background and present the  
62 literature on sustainability, trust, and relation of trust and competences, relation and cooperation.  
63 Secondly, we outline the mythology used in this study to verify research problems, followed by  
64 results. Finally, we discuss the conclusion and practical implication from this research.  
65

## 66 2. Research context

67 The telecom services sector is among the fastest developing sectors in the modern economy. It is  
68 a sector of high technologies with high innovation and considerable investments. Productivity and  
69 profitability in the telecom companies are often significantly above the average in the non-financial  
70 business economy. Turnover and value added in telecom services steadily increase, in spite of lower  
71 tariffs and communication pricing [105]. The telecom services market encompasses both wireless and  
72 wireline services. These services are one of the most profitable segments in the IT industry. In 2015  
73 global telecom services produced approximately 1.1 trillion euros in revenues. The great significance  
74 and potential in this industry was recorded in Europe, where in 2015 it produced around  $\frac{1}{4}$  of total  
75 revenue [104]. The research was conducted in a group of telecom companies providing  
76 telecommunication activity in Poland. In Poland the telecommunications sector turnover amounted  
77 to approximately 10 billion euros in 2014 [105]. The statistics show that on average in the OECD  
78 countries in 2011 people working in the Information and Communication Technology (ICT) sector  
79 represented 3,7% of business sector employment [106]. In Poland in 2014 the telecommunications  
80 sector employed 48.794 people [107].

81 Poland has been developing dynamically in recent years. According to Eurostat data the average  
82 real GDP growth in Poland in the years 2006-2016 was 3,5% per annum, whereas the average real  
83 GDP growth in EU'28 was 0,7% [108]. In 2016 the total value of the telecommunications market in  
84 Poland amounted to PLN 39.47 billion zlotys [109]. Percentage of the ICT sector in GDP in Poland in  
85 2015 was 3,14% (including ICT services 2.88% and ICT manufacturing 0,27%) [www6]. The  
86 telecommunications services market is developing very rapidly due to the fact that companies are  
87 constantly improving the quality of their networks and thus offer better services.

88 Materials and Methods should be described with sufficient details to allow others to replicate  
89 and build on published results. Please note that publication of your manuscript implicates that you  
90 must make all materials, data, computer code, and protocols associated with the publication available  
91 to readers. Please disclose at the submission stage any restrictions on the availability of materials or  
92 information. New methods and protocols should be described in detail while well-established  
93 methods can be briefly described and appropriately cited.

94 Research manuscripts reporting large datasets that are deposited in a publicly available database  
95 should specify where the data have been deposited and provide the relevant accession numbers. If  
96 the accession numbers have not yet been obtained at the time of submission, please state that they  
97 will be provided during review. They must be provided prior to publication.

98 Interventionary studies involving animals or humans, and other studies require ethical approval  
99 must list the authority that provided approval and the corresponding ethical approval code.

### 100 3. Conceptual framework

101 *Sustainability* in an enterprise is defined by Grudzewski and Hejduk as: „an ability to constant:  
102 1) learning, 2) adapting and developing, 3) revitalisation, 4) reconstruction, 5) reorientation, in order  
103 to maintain a stable and distinctive position on the market by offering outstanding value for  
104 customers both in the current time and in the future (in compliance with the paradigm of innovative  
105 growth), due to organic variability characteristic of business models and stemming from new  
106 possibilities and targets and ensuing responses to them, while balancing interests of various  
107 groups”[26].

108 The concept of sustainability consists in applying the rules of sustainable development and a  
109 constructive combining of resources, aims and strategic factors which are indispensable for the  
110 existence and development of organisations [27,28]. It should be emphasised that it is the  
111 organization itself which determines and identifies the common areas (denominators) in the  
112 economic, social and environmental questions, [29], which it wants to achieve. However, it may seem  
113 that an effective management of the social responsibility of a company is impossible because of the  
114 difficulty in combining varied and sometimes discrepant aims of functioning in an effective  
115 development strategy [30].

116 Organizational sustainability is a ring which encircles (joins) the economic, societal and  
117 environmental goals of an organization [31]. Sustainable organisations are capable of surviving and,  
118 at the same time, satisfying a triple bottom line of economic, environmental and human performance  
119 [32]. This is because sustainable development ensures simultaneous benefits in all these three fields.  
120 Much research demonstrates that sustainable enterprises achieve in the long term better results than  
121 other companies [1, 2, 33] What makes it possible is the construction of a so-called sustainable  
122 business model which maintains equilibrium between the stakeholders’ and shareholders’ interests.  
123 At the same time, the enterprise implements management rules based on value and societal  
124 responsibility [34].

125 Organizations which operate in accordance with the sustainability model may be described with  
126 the following distinctive features:

- 127 — knowledge and trust considered as dominating forms of capital [35],
- 128 — focus on teamwork and constant learning [35],
- 129 — promotion of a proactive role of organisations in controlling the impact of business on  
130 the natural environment, social environment and human resources [36],
- 131 — taking into account social relationships (external and internal) in the activities aimed at  
132 ensuring long-term organisational effectiveness.

133

134 As can be seen from the above, what is emphasised is the significance of human capital as an  
135 essential factor necessary to meet the sustainable targets of an organisation [5]. Highlighted is human  
136 development as the basis for a sustainable development of companies [38]. Building sustainable  
137 organisations is based on focusing on employees’ skills, competences, motivations and behaviour  
138 [39]. The practices of human resources management help to build sustainable organizations as a  
139 community of people, which with time develop structures and behaviours and discover ways in  
140 which an entrepreneur becomes a sustainable employer [40].

141 Viewing a person in the light of the sustainability concept seems to combine contemporary  
142 approaches based on the human behaviour patterns. Namely, it is a combination of: knowledge,  
143 particular skills, particular talents and attitudes adopted in the workplace and in the process of work  
144 [35].

145

146 The concept of sustainability is connected with corporate social responsibility. CSR is defined as  
147 voluntary actions and commitment aimed at achieving positive social and environmental changes  
148 [41]. CSR’s activities attempt to meet the needs of different groups of stakeholders. The concept of

149 CSR is strongly focused on dialogue and cooperation between an enterprise and its stakeholders [42].  
150 Sustainable organisation should thoughtfully shape its relationships with all the stakeholders in  
151 order to achieve long-lasting results; conduct business in compliance with their expectations;  
152 dutifully meet the commitments and use transparent business practices [43]. The CSR projects result  
153 from a strategic thinking through which companies endeavor to transform threats into opportunities  
154 [44]. An example of such threats is the turnover of key employees who have knowledge and skills  
155 that are essential for the enterprise to operate.

156 For that reason high sustainability organisations focus on non-financial tools for building  
157 employees' commitment and motivation [103 p. 23]; while trust and cooperation are crucial for  
158 building social capital in these organisations [45].

### 159 3.1. Definition of trust

160 Sustainable organization is based on trust [46]. Moreover, trust is a significant element  
161 responsible for achieving competitive advantage [92]. General definition of trust refers to the  
162 reciprocal assumption made by an individual in regard of other party action and its consequences  
163 [47]. Trust can be understood as a positive attitude that guides behaviour, which is based on person's  
164 attitude? concerning cooperative relationship. It refers to confidence in positive consequences of the  
165 action of other parties [48]. Organizational trust means obtaining positive expectations towards  
166 organization [24].

167 There are various scientific approaches categorizing trust. The classification by Shapiro,  
168 Sheppard, and Cheraskins [49] organized business trust into three categories: deterrence-based trust,  
169 knowledge-based trust, and identification-based trust. The analysis conducted on this model argues  
170 that this is a hierarchical concept of developing trust: one level of trust can occur / surface only once  
171 the prior one is completed [111]. Another approach was presented by McAllister [50] who introduced  
172 two kinds of trust: cognition related and affect-based. This concept states that the cognition-based  
173 trust depends on competency and reliability of the other side. The affect-related trust is established  
174 on the interpersonal relationship. Additionally, Stranes, Truhon and McCarthy [51] list three form of  
175 organizational trust:

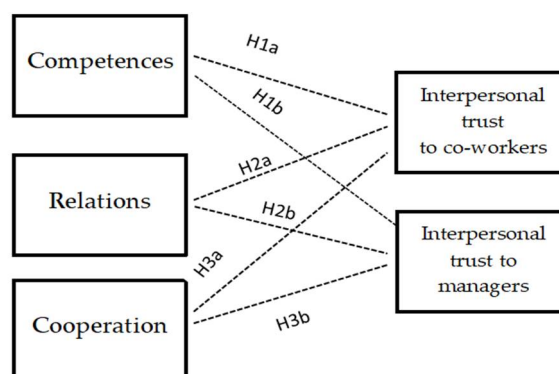
- 176 • Interorganizational trust – which refers to trust between two organizations;
- 177 • Intraorganizational trust – it describes trust between subordinates and managers or workers  
178 and organization;
- 179 • Interpersonal trust – it concerns trust within relations and interconnections in teams.

180 Furthermore, Ting [91] distinguishes two types of interpersonal trust within organizations:  
181 towards managers and towards fellow employees. This can lead to a conclusion that there are two  
182 different aspects of interpersonal organizational trust. The first one refers to whether a subordinate  
183 trusts their supervisor. The second one focuses on trust relations between coworkers [52].  
184 Summarizing, interpersonal trust consists out of two dimensions: trust towards managers and trust  
185 towards fellow employees. This paper aims to explore both types of interpersonal trust in the  
186 business environment.

187 Additionally, Mayer, Davis, and Schoorman [19] focused on behavioral aspects of trust. In their  
188 research they emphasized the factors determining a trust development: competences, benevolence  
189 and integrity. According to this model trustworthiness depends on: competence- which concerns the  
190 skills and abilities of the other person; benevolence –which reflects the relations and attachment  
191 between two sides of the trust process [19,pp. 718]; integrity – is related to behavioural consistency  
192 [19,pp. 719]. Understanding the conditions that can impact organizational trust provides information  
193 on how to improve organizational effectiveness.

194 The research framework in this study, based on the previous findings in literature, emphasizes  
195 the two aspects of interpersonal trust in organizations: rational trust based on competences of other  
196 parties and the relation-oriented one, which focuses on the bonds between involved persons. Rational  
197 aspects of trust will be analyzed through competences and self-efficacy, and relation elements of trust  
198 will be examined through relations and cooperation. We will study both horizontal (between co-  
199 workers) and vertical (between supervisor and subordinate) trust relations. The research problem

200 focuses on the links between interpersonal trust and competences, relations and cooperation. It has  
 201 been described in Figure 1.



202  
 203

204 **Figure 1.** Conceptual model

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### 211 3.2. Competences

212 Generally competency is understood as a predisposition based on one's knowledge, abilities and  
 213 attitudes [90]. There are a number of definitions of competences in literature. The first group refers  
 214 to visible employee's performance or behaviour [53; 102, 54, 55). The second group describes  
 215 competency as a standard or quality indicator [101]. The third group understands this term as an  
 216 individual's characteristic [94]. Summarizing, the meaning of competency depends on the research  
 217 approach.

218 For the purpose of this study, competency is used as an indicator of reliability in trust building  
 219 relations. We adopt the view that competency is understood as an ability or knowledge that helps to  
 220 deal with work related tasks.

221 There are numerous ways of assessing competences depending on their application [56]. Since  
 222 competences understood as a work-related ability can be successfully measured using quantitative  
 223 methods [57], we adapt this approach in our study.

224 Furthermore, many scholars identified ability or competency as a significant factor that  
 225 influences organizational trust [19, 22, 58, 48, 96]. Consequently, rational-based trust is established  
 226 on the reasoning that the other party will be able to fulfill his/her obligations. Subsequently,  
 227 competency provides information that guides trust-related behaviors. Competency serves as a  
 228 cognitive display of other persons trustworthiness [22]. Hence, the hypothesis states:

229

230

H1: Competency perception is positively related to the interpersonal trust.

### 231 3.3. Relation and trust

232 Focusing on the relationship aspect of trust, Colquitt, and Rodell state [59] that relationships  
 233 among employees are an important trust enhancing element. Furthermore, Tan and Lim [60] implied  
 234 that benevolence is related with trust rather than ability. The emotional bonds among employees  
 235 create a platform for trust development [58]. It has been confirmed that emotional aspects of trust are  
 236 associated with emotions [112]. Therefore, to examine this assumption the second hypothesis has  
 237 been formulated:

238 H2: The strength of a relationship is positively related to the interpersonal trust.

### 239 3.4.. *Cooperation and trust*

240 It has been acknowledged that cooperation is associated with trust (99, 100 14]. Cooperative  
241 conditions of trust lead to an increase in team confidence [61]. The two-way relation between trust  
242 and cooperation has been confirmed [62]. In the context of interpersonal trust, cooperation is  
243 perceived as a condition determining trustworthiness. Kanter [63] acknowledged that cooperation is  
244 the core stone for building team confidence. Moreover, she recognized that cooperation creates a  
245 network of connections which helps to establish trust-relations. Hence, the importance of cooperation  
246 in the trust developing model. We assume that high level of cooperation is associated with high level  
247 of organizational trust. Thus, the third hypothesis reflects this aspect of trust condition:

249 H3: The degree of successful cooperation is positively related to the interpersonal trust.

251 Additionally, the formulated hypothesis will be verified both in the vertical and horizontal  
252 relations in organization. Usually those are independent patterns of connections. Therefore, this  
253 study examines the links between trust in co-workers and trust in managers. Consequently, we  
254 hypothesized the following:

256 H1a: Competency perception is positively related to the interpersonal trust between co-workers.

257 H1b: Competency perception is positively related to the interpersonal trust in managers.

258 H2a: The strength of relationship is positively related to the interpersonal trust between co-  
259 workers.

260 H2b: The strength of relationship is positively related to the interpersonal trust in managers.

261 H3a: The degree of successful cooperation is positively related to the interpersonal trust between  
262 co-workers.

263 H3b: The degree of successful cooperation is positively related to the interpersonal trust in  
264 managers.

## 266 4. Method

### 267 4.1. *Sampling*

268 The empirical research applied in this study was used to analyse the association between trust  
269 (dependent variable) and competences, relations and cooperation (independent variables). Data were  
270 collected via questionnaire among employees of telecom companies (n=175). The register of  
271 telecommunication companies operating in Poland developed by the Office of Electronic  
272 Communications was used as a framing sample (it includes all organizations providing  
273 telecommunications activity in Poland, which are obliged to register under the Telecommunications  
274 Act, 2004). Choosing business enterprises (llc, stock offering companies) we established the research  
275 population, and consequently got the research sample n=175. The questionnaire has been distributed  
276 via e-mails (108 questionnaires) and in person by author (67 questioners). The respondents'  
277 confidentiality has been assured. The basic introduction to the research topic has been offered in the  
278 headline of the survey. Data were entered and coded using Excel.

279 There were 34,86% (61) women and 65,14%(114) men in the sample. 84%(147) persons declared  
280 they were members of Telecom organizations, 13,14% (23) IT and 2,86% (5) from others. The number  
281 of the companies respondents questioned varied; enterprises with 251 and more employees - 77,14%  
282 (135), 13,14% (23) organizations where 51-250 persons were employees and 7,43% (13) with 11 to 50  
283 persons employed. More than a half of respondents had over 10 years professional experience 60%  
284 (105), 22,86% (40) 1 to 5 years, 13,71% (24) between 6 to 10 years and 3,43% (6) less than a year. The  
285 following employees' positions has been represented: director 5,14% (9), manager 18,29% (32),  
286 specialist 67,43% (118), expert 3,43% (6), analyst 1,71% (3), assistant 0,57% (1) and 3,43% (6) were

287 qualified as others. 67,43% (118) of respondents had a Master's degree, 17,71% (31) Bachelor's  
 288 degree, Engineer's degree 11,43% (20), 1,14% (2) got high school diploma, while 2,29% (4)  
 289 questionnaires were left blank.

#### 290 4.2. Measures

291 There were 4 items in this questionnaire: trust, competences, relations, cooperation. Each item  
 292 consists of statements that were based on indicators. All items in the questionnaire were rated on a  
 293 5-point Likert-type scale (1 „strongly disagree”, 5 „strongly agree”). Likert scale is the appropriate  
 294 tool to measure the trust within an organization [65-67, 98]. The respondents were asked to refer to  
 295 the team they currently work with when answering questions. The Cronbach's alpha for items in this  
 296 measure was: trust 0.76, competences 0,87, relations 0,84, cooperation 0,94.

297 The indicators have been operationalized according to the conceptualization presented in table 1.  
 298  
 299

**Table 1.** The conceptual framework

Variable		Dimension	Theoretical background
Dependent variable	Interpersonal Trust	Trusting Supervisor	Ermisch, Gambetta, Laurie, Siedler, Uhrig, 2009; Oh, Park, 2011; Wu, Lin, Hsu, Yeh, 2009;
		Trusting Coworkers	Moye, Henkin, 2006; Rotter, 1967
Independent variables	Competences	Team Competences	Margerison, 2001; Meyer, Brünig, Nyhuis, 2015; Waters, Sroufe, 1983; Knoll, Gill 2010; Robotham, Jubb, 1996;
		Relations	Wiese, Botha, van Heerden 2015; Tierney, 1999; Forret, Love, 2008; Hornsey, Hogg, 2000
	Cooperation	Emotional Bonds	Price, 2013; Shih-Tse Wang, 2014; Graf, Ausserhofer, Schwendimann, Zúñiga, 2015
		Team Cooperation	Nonose, Kanno, Furuta 2014; Sun , Qi, 2004;
		Team Cohesion	Grossman, Rosch, Mazer, Salas, 2015; Knott, Geyer, Sidman, Wiese, 2011; 2007 Team Cohesion

300

Source: own elaborations

## 301 5. Results

302 Trust among respondents has been generally high. However, the average trust in coworkers  
 303 (M=4,04) was higher than the average trust towards managers (M=3,69). Whereas the average  
 304 generalized trust (M=3,96) was lower average trust declared to fellow employees, but higher than the  
 305 average trust towards managers. Table X provides the percentage of responses to questions relating  
 306 to interpersonal trust. The generalized trust was used as an indicator for a person's individual  
 307 attitude towards others and helps to estimate the results. 65% of respondents trust coworkers ( 24%  
 308 „strongly agree” and 40% “rather agrees”). Only 3,43%( disagree 2,86% and strongly disagree 0,57%)  
 309 disagree with the statements relating to trusting coworkers. This indicates that trust in fellow  
 310 employees is very high (higher than generalized trust). In comparison 12% declared that they don't  
 311 trust their leader (3,43% rather disagree and 8,57% strongly disagree with the statement referring to  
 312 trusting the leader).

313

314 **Table 2.** Interpersonal trust

	Profile of responses						
	M	N	1	2	3	4	5
Trust coworkers	4,04	175	1	5	22	105	42
Trust leader	3,70	175	6	15	38	83	33
Generalized trust	3,96	175	1	8	27	100	39

315 Notes: 5- Strongly Agree, 4- Rather Agree, 3 -Neither agree nor disagree,  
 316 2- Rather disagree, 1 –Strongly disagree

317 Source: own elaboration

318

319 In conclusion, it illustrates that in the research sample there is a high level of trust among  
 320 employees. It also implies the greater distrust (four times more) towards managers than towards peer  
 321 employees.

322 Verification of hypotheses

323 H1

324 Both H1a and H1b were strongly supported. Their moderate positive correlation between trust  
 325 in co-workers and level of team's competences evaluation ( $r= 0,438$ ;  $p=0,000$ ) and trust in manager  
 326 and competences ( $r=0,298$ ;  $p=0,000$ ) was found. The result of correlation analysis is presented in table  
 327 3. It implies that the competences are related positively to the organizational interpersonal trust.

328 **Table 3.** Intercorrelation matrix

	1	2	3	4	5	6
1. Competences	1					
2. Cooperation	,800**	1				
3. Relations	,720**	,730**	1			
4. Generalized trust	0,107	0,084	0,094	1		
5. Trust to co-workers	,468**	,535**	,499**	,425**	1	
6. Trust to manager	,431**	,480**	,389**	,185*	,624**	1

Notes: \*  $p<0.05$ ; \*\*  $p <0.01$

329

Source: own elaboration

330

331 To further explore these relations the one-way ANOVA analysis was conducted. To examine the  
 332 links between trust in co-workers and competences level, the three groups of trust in co-workers have  
 333 been distinguished: low trust level ( $M=3,21$ ,  $SD=1,07$ ), medium trust level ( $M=4,12$ ,  $SD=0,73$ ), and  
 334 high trust level ( $M=4,5$ ,  $SD=0,55$ ). There was a significant difference in mean competences evaluation  
 335 ( $F(2,172)=24,91$ ,  $p <0,001$ ) between the different levels of trust. Those with low level of trust in peers  
 336 have the lowest average level of trust. Those with the highest level of trust were characterized by the  
 337 highest competences assessment level. Post hoc t-test comparisons using the Bonferroni correction,  
 338 with adjusted alpha ( $(\alpha_{\text{altered}}=.05/3)$  0,016) per test) confirmed that there were statistically significant  
 339 differences in competences between low trust group ( $M=3,21$ ,  $SD=1,07$ ) and high trust group ( $M=4,5$ ,  
 340  $SD=0,55$ ),  $t(37)=-5,88$ ,  $p=0,000$ . The verification describes statistically significant differences between  
 341 competences in medium and high trust groups ( $t(99)=3,38$ ,  $p=0,000$ ), as well as low and medium  
 342 ( $t(34)=-4,25$ ,  $p=0,000$ ). Hence, this supports the H1a hypothesis.

343

344 To analyze whether there were statistically important differences in relations between  
 345 competences and trust in manager, the one-way ANOVA analysis was conducted on three groups:

346 low trust ( $M=3,78$ ,  $SD=0,98$ ), medium trust ( $M=4,11$ ,  $SD=0,78$ ), and high trust ( $M=4,48$ ,  $SD=0,57$ ). There  
347 was a significant effect of competences on trust in manager ( $F(2,172)=7,96$ ,  $p<0,001$ ). Further post hoc  
348 test using altered alpha value (0,016), confirmed that the significant differences between low trust  
349 ( $M=3,78$ ,  $SD=0,98$ ), and high trust group ( $M=4,48$ ,  $SD=0,57$ ) in mean competences ( $t(90)=-4,36$ ,  
350  $p<0,001$ ). These results indicate that competences level affects trust in manager in organization. In  
351 consequence, it supports the H1b hypothesis.

352  
353 There was a positive correlation between trust in co-workers and relationship ( $r=0,499$ ,  $p<0,000$ ).  
354 Additionally, emotional bonds were positively correlated to trusting fellow employees ( $r=0,419$ ,  
355  $p<0,000$ ). These results demonstrate the links between relations and interpersonal trust in co-workers.  
356 The one-way ANOVA analysis indicates that there is a significant difference between trust in co-  
357 workers depending on relations ( $F(2,172)=23,174$ ,  $p<0,001$ ). Post hoc t-test with Bonferroni correction  
358 ( $\alpha_{\text{altered}}=.05/3$ ) 0,016, back up this result ( $t(41)=-6,15$ ,  $p<0,000$ ) The high trust group ( $M=4,35$ ,  $SD=0,65$ )  
359 was characterized by higher level of average relation in comparison to low trust group ( $M=2,96$ ,  
360  $SD=0,2$ ). The relationship varied among low and medium trust groups as well ( $t(37)=-4,59$ ,  $p=0,000$ )  
361 and medium and high ( $t(98)=2,93$ ,  $p=0,002$ ). It provides further support for H2a hypothesis.

362 The correlation between trusting manager and relationship ( $r=.389$ ,  $p=0,000$ ) vouches that the  
363 confidence in a manager is connected to the relationship in the organization. Additional one-way  
364 ANOVA analysis suggested significant difference between trust in managers and average relations  
365 ( $F(2,172)=8,11$ ,  $p<0,001$ ). It has been confirmed by the series of post hoc t-tests ( $\alpha_{\text{altered}}=.05/3$ ) 0,016,  
366  $t(89)=-3,87$ ,  $p=0,001$ , since relations were significantly different in low trust ( $M=3,54$ ,  $SD=1,14$ ) and  
367 high trust ( $M=4,30$ ,  $SD=0,72$ ) groups. Moreover, relations were different for low and medium ( $M=4$ ,  
368  $SD=0,79$ ) groups. It supports the H2b hypothesis.

369  
370 There was moderate significant correlation between cooperation and trust in co-workers  
371 ( $r=0,486$ ,  $p=0,000$ ) and group cohesion ( $r=0,535$ ,  $p=0,000$ ). The one-way ANOVA variance analysis  
372 indicated that cooperation is significantly different for low, medium and high trust groups ( $F(2,172)$   
373  $=21,398$ ,  $p<0,001$ ). The series of post hoc t-test with Bonferroni correction and adjusted alpha,  
374 emphasizes that cooperation was much more positively evaluated in a group, which was  
375 characterized by high trust between co-workers ( $M=4,26$ ,  $SD=0,79$ ) than in low trust group ( $M=2,82$ ,  
376  $SD=1,21$ )  $t(42)=-5,51$ ,  $p<0,001$ . Cooperation was a significant factor that distinguishes trust in fellow  
377 employees between low and medium ( $M=3,88$ ,  $SD=0,88$ ) groups ( $t(37)=-3,61$ ,  $p<0,001$ ), as well as  
378 medium and high ( $t(89)=3,45$ ;  $p<0,001$ ). Statistically important was the difference between average  
379 cooperation and low and medium trust ( $t(37)=3,61$ ,  $p=0,000$ ). By illustrating the positive links between  
380 cooperation and trust in peers, this calculation supports H3a hypothesis.

381  
382 The H3b hypothesis was also confirmed. The moderate significant correlation was discovered  
383 between trusting the manager and cooperation ( $r=.431$ ,  $p=0,000$ ). Moreover, the cohesion was also  
384 correlated to trusting supervisor ( $r=.480$ ,  $p=0,000$ ). Further examination of this relation was conducted  
385 using one-way ANOVA analysis. The test ( $F(2,172)=10,65$ ,  $p<0,001$ ) established that average  
386 cooperation is different in low, medium and high trust groups. Those who trust manager the least  
387 ( $M=3,37$ ,  $SD=1,15$ ) were characterized by the lowest level of cooperation. In contrast, those trusting  
388 their supervisor the most ( $M=4,30$ ,  $SD=0,76$ ) have the highest cooperation scores. Further series of  
389 post hoc t-tests with adjusted alpha value (0,0167) revealed that high and low level of trust in manager  
390 was statistically connected to cooperation ( $t(87)=-4,61$ ,  $p<0,001$ ). Similarly, cooperation levels  
391 significantly differ in medium and low trust groups ( $t(68)=-2,32$ ,  $p=0,011$ ). Average cooperation varies  
392 in low and medium trust groups ( $t(105)=3,01$ ,  $p=0,001$ ). This provided further support for H3b  
393 hypothesis.

394 The generalized trust, used as an indicator of an average individual trust level was not  
395 significantly correlated to any variable.

396 In pursuance of establishing the determinants of interpersonal trust the linear multiplied  
397 Regression analysis was conducted. In H1a, H2a, H3a we proposed that trust in coworkers is

398 predicted by competences, relations and trust. Findings from statistical analysis suggest that  
399 combined competences, relation and cooperation account for statistically significant proportion of  
400 variance in trust in co-workers  $F(3,171)=25,62851$ ,  $p<0,001$  and accounted for 31 per cent of the  
401 variance in trust in co-workers with adj.  $R^2$  of 0,31. The Beta weight for cooperation was not  
402 statistically significant ( $\beta=0,151$ ,  $t=1,558159$ ,  $p=0,12$ ). This indicates that only competences ( $\beta=0,215$ ,  
403  $t=2,785$   $p=0,002$ ) and relations ( $\beta=0,287$ ,  $t=3,119$ ,  $p=0,005$ ) contributed to the variance in trusting  
404 co-workers.

405 A multiply linear regression was calculated to examine the relations between competences,  
406 relations and cooperation and trust in managers. Results from analysis indicate that together those  
407 factors explain 20 per cent of the variance in trust in managers ( $F(3,171)=14,655$ ,  $p<0,001$ ) with adj.  
408  $R^2 = 0,204$ . The cooperation was the only component that predict the trust in managers ( $\beta=0,295$ ,  
409  $t=2,820$ ,  $p=0,005$ ).

## 410 6. Discussion

411 The research hypotheses were formulated to show that interpersonal trust is partly connected  
412 by two main factors. The first condition involves a cognitive process of rationally analyzing second  
413 agent trustworthiness based on his/her abilities. The second factor refers to an emotional perception  
414 of the state of the relationship between co-workers based on relations and cooperation in teams. In  
415 our research, both cognitive and emotional aspects of interpersonal trust were examined to provide  
416 understanding of the specific patterns that are associated with an increased level of organizational  
417 trust.

418  
419 The verification of H1a hypothesis has implications for the importance of strengthening the  
420 cognitive aspect of interpersonal trust. Competences are correlated with trust infellow employees.  
421 These findings align with [22, 58]. However, our results are focused on a specific sector. The presented  
422 study analyzes the telecoms sector and helps to examine its unique characteristics. The telecom  
423 employees trust towards their co-workers is associated with the team's competences. Similarly, the  
424 examination of H1b hypothesis points to the fact that the recognition of competences affects trust in  
425 managers. This corresponds with the literature on trust antecedents [23]. The further analysis  
426 indicates that perception of abilities is an important factor related to trust. This is a significant finding,  
427 which emphasizes the role of competences in organizational confidence.

428  
429 H2a hypothesis suggests that emotional conditions related to trust play an important role in  
430 building trustworthiness. The analyses provide an insight illustrating that those employees who have  
431 good interpersonal relations and emotional bonds have a higher level of trust. Furthermore, our  
432 research supports previous studies indicating the connection between trust and interpersonal  
433 relations [58].

434 Additionally, emotional aspect of trusting the supervisor is also confirmed (H2b). It is in  
435 alignment with earlier findings [21]. The main contribution of this study indicates that the  
436 interpersonal relationship is strongly connected with organizational trust. Furthermore, the increased  
437 positive interaction will facilitate interpersonal trust.

438 The examination of H3 hypothesis provides support for links between cooperation and trust.  
439 Cooperation is correlated with organizational confidence. This corresponds with both theoretical  
440 assumptions [88] and practical studies [83, 97]. It demonstrates the importance of good cooperative  
441 patterns that are enhancing organizational trust. The interpersonal trust relationship model is  
442 illustrated in Figure 2.

443

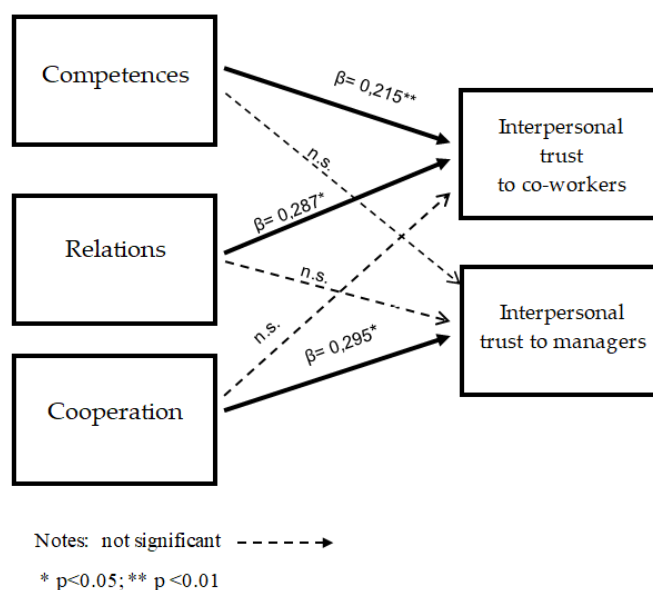


Figure 2. Relationship model

Overall, the study confirmed results of McAllister [50] who recognized cognitive and affective fundamentals of trust. Our findings support that in order to strengthen organizational confidence both ability and competences as well as relations and cooperation should be improved. According to these results, the organizational practices that facilitate trust should emphasize both cognitive and emotional aspects of trustworthiness. Developing competences, creating opportunities for interaction and improving cooperation are core elements of organizational interpersonal trust.

More precisely, our study assessed what factors determine interpersonal trust in organizations. Consistent with our hypotheses, we found that trust in co-workers is related to competences and relations. However, cooperation was not a significant predictor of trust in fellow employees. It implies that creating opportunities to bond and maintain good relationship among peers in organizations and additionally building work-related ability and skills help to improve the interpersonal trust between co-workers. On the contrary, in order to build trust in managers, one should stress the need for successful cooperation which determines the trust in supervisors. Thus, it seems that it is important for employees to demonstrate proficiency to be considered trustworthy. Furthermore, positive group interaction leads to improved group trust. The managers should focus on maintaining successful cooperation to build own credibility. The core components for building organizational confidence are competence, relations (for co-workers) and cooperation (for managers).

Practical implications from our study indicate the significance of cognitive and affective factors in trust building. One of the most important conclusions of this study is that it provides evidence of the importance of creating trust-enhancing organizations by improving employees' competences and additionally providing space for binding activities that will nurture interpersonal relations. Employees' trust is associated with ability and relationship. Hence by providing adequate support (such as training and integration opportunities) one is able to improve interpersonal trust in organizations.

In conclusion, our findings implicate that interpersonal trust in sustainable organizations is associated with cognitive and affective factors. Since trust is a core element of sustainable development [89], implementation of practices that enhance team confidence improves the way organizations function. Additionally, understanding various aspects influencing interpersonal trust in sustainable organizations helps to reinforce the development of organizational trust. There are two basic strategies that can help to improve trust: firstly, strengthening competences and abilities; secondly, building mutual relationships and improving cooperation. According to our results, it is especially important to develop and subsequently maintain positive trust-oriented bonds between

480 employees and managers. Sustainable management includes encouraging confidence and improving  
 481 the quality of social aspects of work by strengthening trust. Our study provides a guidance, which  
 482 specifies core aspects of establishing interpersonal trust in sustainable organizations.

483 Further research could be conducted in different countries to provide cross- cultural  
 484 comparisons. Moreover, future analysis can explore more aspects of interpersonal trust. Furthermore,  
 485 the analysis only considers three conditions related to trust. Further exploration of additional  
 486 elements affecting interpersonal trust is required. Even though we acknowledge some limitation of  
 487 this research, we support our claim that competences, relations and cooperation affect interpersonal  
 488 trust.

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 491 manuscript.

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