

TRUST TOWARDS MANAGERS, PERCEIVED MANAGERIAL RESPONSIBILITY AND INDIVIDUAL EFFECTIVENESS: EXPLORING ORGANIZATIONAL OUTCOMES OF TRUST BELIEFS

*Piotr Prokopowicz*³⁰

Abstract

Trust has become a very useful explanatory device in organizational science. This paper presents and clarifies the current psychological debate on trust, verifies the Integrative Model of Organizational Trust in the natural organizational setting, suggests perceived responsibility as additional trust antecedent and analyzes the possible influence that trust towards managers has on employee engagement and performance. The results imply that among trust antecedents, perceived managerial benevolence and integrity influence trust towards managers heavily, while perceived ability of managers has substantial impact on employee work engagement. The possibility of distinguishing domain-general trust and domain-specific confidence as separate aspects of trust is discussed.

Keywords: trust, responsibility, individual effectiveness, industrial and organizational psychology

Introduction

Trust has become one of the most popular concepts in social sciences during the last three decades (e.g. Luhman, 1979; Sztompka, 1996, 1998; Fukuyama, 1994; Rotter, 1980; Bateson, 1988). This influence is especially apparent in organizational psychology in general and, more specifically, in studies on organizational effectiveness. Complex theoretical frameworks have been developed and redeveloped both by theorist and business practitioners in order to describe trust as one of the most important, if not the most important, assets of contemporary business (Levering, 2000; Covey, 2006; Schoorman, Mayer & Davis, 2007; Rousseau et al., 1998, Sitkin & Pablo, 1992, Mayer et al., 1995; Robinson, 1996). Numerous research programs and studies have tried to prove that there is a direct link between trust and organizational effectiveness (e.g. Levering, 2000; Mayer & Gavin, 2005; Davis et al., 2000). Is this interest in trust legitimate? Can trust be considered the ultimate resource that an organization can create, sustain and employ in order to maximize its performance?

This paper shall be an attempt to indicate that while trust has become a very useful explanatory device in organizational science, most theories of trust still tend to ignore important facets of trust beliefs in organizations, bringing both conceptual and empirical confusion into an already disorganized field. While theoretical and empirical body of knowledge suggests that trust, construed as a relationship-specific cognitive model individuals hold about other individuals regarding their cooperation-relevant dispositions (e.g. Dietz & Hartog, 2006), influences substantially the outcome of every group-based activity, it

³⁰ MA, Institute of Sociology, Jagiellonian University, piotr.prokopowicz@uj.edu.pl.

is still to be established what conditions must be fulfilled in order to distinguish trust from other types of beliefs and behaviors.

The purpose of this paper is threefold. Firstly, it is to present and clarify the current debate on trust, relating it to the fields of cognitive sciences and philosophical anthropology. Secondly, it is to verify the Integrative Model of Organizational Trust, (Mayer et al., 1995) in the natural organizational setting, possibly supplementing it with additional dimension of perceived responsibility. Finally, it is to analyze the possible influence that trust and its antecedents have on individual engagement and performance.

What is trust?

Even though the literature on organizational trust remains dispersed (e.g. Dietz & Hartog, 2006; McEvily et al., 2003), there is a set of key papers and reviews that attempt to identify the essence of trust (Rotter, 1967, 1980; Mayer et al., 1995, Rousseau et al., 1998; Butler, 1991). In order to construe the current state of debate on organizational trust, it is necessary to recapitulate them briefly.

In psychology, trust has been traditionally regarded as a dispositional trait. The main proponent of this approach was Rotter (1967), who in his seminal work described interpersonal trust as a generalized expectancy of others' reliability. Rotter (1980) argues that people differ in their propensity to trust others. Other authors, who followed Rotter's argument, agree that socio-economic factors like life experiences, personality types, cultural background, and education determine one's propensity to trust (Mayer et al., 1995). As for the role of context, according to Rotter, unfamiliar environmental circumstances cause the influence of trusting dispositions to rise (Rotter, 1980).

Rotter's approach proved effective in measuring the trait-like aspects of trust. Nevertheless, organizational psychology abandoned this perspective in favor of more situational, contextual and interactive approaches, leaving some aspects of Rotter's interpersonal trust and describing it as caution or propensity to trust (see: Rousseau et al., 1998; Mayer et al., 1995; Schoorman et al., 2007). The majority of definitions of trust in modern organizational science and psychology focus on trust as a specific set of beliefs about partner's dependability (McAllister, 1995; Dirks, 1999), integrity and good will (Robinson, 1996, Cook & Wall, 1980), as well as competence (Mishra, 1993). Nevertheless, a large number of theoretical and empirical perspectives leave the field disorganized and call for a paradigm-like solution to advance the research on organizational trust.

Integrated Model of Organizational Trust

Due to the chaotically increasing number of publications related to trust, it is important to recognize an appealing effort in organizational science to clarify the most important issues in the field (Mayer et al., 1995). The integrative model of organizational trust (IMOT), created and refined by Mayer et al. (1995; Schoorman et al., 2007) constitutes the basis for this paper. It is the first fully relational approach to trust, focusing on organizational trust between two parties: a trusting party (trustor) and a party to be trusted (trustee). This unique relationship-specific boundary condition is what makes IMOT approach especially useful for this paper as it focuses on the relationship between employees and managers.

By the definition proposed by Mayer et al. (1995), trust is "a willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (p. 712). It is crucial to recognize two important aspects of this definition. Firstly, trust is not synonymous to risk, but is rather a willingness to take risk.

Secondly, this willingness, as based on the structure of expectations, is a conative fact, and as such, is hard to be studied by means of cognitive measurement. It means that while the will to become vulnerable to other person's actions is represented mentally, it is problematic to perceive those representations as a direct indicator of further behavioral tendency. Notwithstanding these limitations, trust expectations and mental representations of such willingness described by Mayer et al. (1995) can and should be studied with the methods and theoretical background of cognitive psychology.

The definition offered by Mayer et al. (1995) seems to encompass everything that is crucial for understanding organizational trust – the fact that trust always arises in social relationships (and as such is embedded in the cultural context of trust situations), involves risk and something of value for the trustor, allowing disappointment as an outcome (hence the vulnerability). The integrated character of the model takes into account the fact that while trust is a willingness to become vulnerable, it is preceded by a set of trust antecedents – propensity to trust and perceived trustworthiness (including trustee's ability, benevolence and integrity).

Propensity to trust

In one of the most popular theories of trust in psychology, Rotter defined interpersonal trust as “an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon” (1967, p.651). His approach treated trust as generalized expectations about trustworthiness of others, somewhat similar to psychological trait. In Mayer et al. (1995) model this generalized trait is called “propensity of trust”, and is understood as a general willingness to trust others (Dietz, Den Hartog, 2006). This dispositional approach, as described earlier, may prove to be interesting, although, due to its general character, not very useful in organizational science. It is similar to Sitkin and Pablo's (1992) risk propensity, construed as “the tendency of a decision maker either to take or avoid risk”, and is especially important in the initial phase of every social relationship (Mayer et al., 1995). Of course, propensity is not enough to explain trust beliefs and behaviors – trust is always relationship-specific. This is to say that in every social relationship one holds a set of beliefs about trustworthiness of other party that influence and mediate the initial propensity to trust. Mayer et al. list three most important factors of trustworthiness: ability, benevolence and integrity.

Ability

The first aspect of trustworthiness mentioned by Mayer et al. (1995), ability, is “that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain.” (Mayer et al., 1995: 717). In IMOT, ability is a key factor for understanding trust, as it relates to competencies that a person has considering the area in which he or she is being trusted. To put it simply in Dietz and Den Hartog's (2006) words, ability is „other party's capabilities to carry out her/his obligations (in terms of skills and knowledge)” (p. 560).

Similarly to other factors of perceived trustworthiness, ability depends on the context. One can trust a friend with an important secret, because one knows he or she is good at keeping them, but it is possible that one will not trust him or her with taking care of one's daughter, as one knows he or she lacks skills in this aspect. In similar fashion, in organizational context, a CEO can be trusted with making an important strategic decision related to the future of the company, but will not be trusted with running a complex analysis

of the market. Thus, ability, and in consequence trust, should be construed as domain-specific (Zand, 1972).

Benevolence

According to Mayer et al. (1995), benevolence is “the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive.” (p. 718). This area covers intentions and motives of the trustee which are crucial to the act of trust. Although it may seem similar to Rotter’s interpersonal trust, it is important to see a notable difference: benevolence is not a generalized personality trait of a trustor but observed and cognitively represented trait of a given trustee. It „reflects benign motives and a personal degree of kindness toward the other party, and a genuine concern for their welfare” (Dietz, Den Hartog, 2006, p. 560). People attributed with high benevolence are perceived as willing to genuinely engage in the actions to the benefit of a trustor.

Taking that into consideration, it is also important to emphasize at this stage of analysis that benevolence, as defined by Mayer et al. (1995), appears very similar to the meaning of trust given by the authors, which may artificially intensify the relationship between benevolence and trust. This possibility will be verified and discussed further in the paper.

Integrity

Belief in other party's competence and good will does not cover all aspects of trustworthiness listed by Mayer et al. (1995). Apart from perceiving the trustee as knowledgeable and benevolent, one needs to be sure that he or she upholds a certain set of values, cherished by the trustor. As Mayer et al. (1995) describe, integrity is “trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable.” (p. 719) This dimension, related to a value structure shared by both parties is crucial for perceived accountability and credibility of the trustee. It involves observed consistency in trustee’s behavior as well as the congruence of values. It encompasses “honesty and fair treatment, and the avoidance of hypocrisy” (Dietz, Den Hartog, 2006, p. 560).

Analyzing the notion of perceived integrity, Dietz, Den and Hartog (2006) seem to assume that values of honesty and fairness are universal and, in consequence, treat them as a hallmark of the dimension. In this paper, as it is focused specifically on relational character of trust, integrity is treated more closely to the original definition by Mayer – as a degree of accordance between trustee’s and trustor’s values.

Interrelationship of trustworthiness factors

These three factors of trustworthiness – ability, benevolence and integrity – allow Mayer et al. to formulate one of the main propositions related to the model: “Trust for a trustee will be a function of the trustee's perceived ability, benevolence, and integrity and of the trustor's propensity to trust.”(1995, p. 720)

The three basic factors of organizational trust have a considerable rate of independence: ability, benevolence and integrity, though related, are separable and can change independently (Mayer et al. 1995, p. 720). As trust is relationship-specific, one can imagine situations in which a benevolent and experienced manager cannot be trusted due to lack of knowledge in some area or, on the other hand, a first-class professional cannot be trusted because of his lack of integrity or good will toward the trustor. All those three factors are the basic building blocks of trust. In the authors’ words: “If ability, benevolence, and integrity were all perceived to be high, the trustee would be deemed quite trustworthy.

However, trustworthiness should be thought of as a continuum, rather than the trustee being either trustworthy or not trustworthy. Each of the three factors can vary along a continuum.” (1995, p. 721) In situations where the levels of the factors are not very high or vary, “whether or not the employee will trust the manager depends in part upon the employee’s propensity to trust.” (1995, p. 721)

Further development of IMOT

The emphasis that Mayer et al. (1995) put on the relational character of trust implied that trust varies across relationships and within person – this premise has been accepted by the papers and research that followed. The meaning of the role of context, risk and control on trusting behavior has been further analyzed in a paper published in 2007 by Schoorman et al. Other refinements of the model has been proposed by many (see: Dietz, 2006)

One of the most interesting arguments for adding another dimension of trustworthiness has been made by Cunningham and McGregor (2000) and Mishra (1996). They argue that perceived predictability or reliability is not included in dimensions offered by Mayer et al. (1995). This approach appears to be problematic, mostly because of the misguided understanding of the nature of interpersonal relations – it enforces mechanical framework on relationships that have clear volitional character. Even if it were possible to predict other party’s behaviour entirely (that means the highest possible level of reliability and predictability, as proposed by Cunningham and McGregor, 2000, and Mishra, 1996), it would not imply the situation of complete trust. If one is certain that other party is a notorious wrongdoer, one will not take risk with him or her, although the wrongdoing is something to be predicted. Other person’s behavior might also be predictable on the grounds of brutal control, but that excludes the possibility of trust as well. This is why responsibility (Wojtyła, 1994), as a dimension considered with the consistency in acting freely based on the value-based obligation towards trustor is to be proposed as a supplement for IMOT.

Trust and responsibility

According to definition provided by Mayer et al. (1995), trust beliefs and behaviors can only exist if the trustor believes that the trustee is free to make his or her decisions, has real impact on trustee’s situation and upholds certain system of values. This set of factors is characteristic for, but not exclusive to, situation of human act (Wojtyła, 1994), especially in the context of individual responsibility. While it is possible to treat responsibility as a psychological concept, psychologists usually do not operationalize it for research and prefer to use the construct of self-efficacy (Bandura, 1977, 1992) for describing “the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (Bandura, 1995, p. 2). The main flaw of this approach it that it is purely cognitive, without the necessary link to “the real impact” on a particular domain. In order to find that link and understand the role of responsibility in trust situations, one can refer to the philosophical concept of human act and its connections with notions of responsibility, applied in the context of organizational psychology.

Wojtyła describes the concept of personhood stemming from the basic experience of human existence – human act. An act, a philosophical concept that could be defined psychologically as a behavior subjectively experienced as free and self-determined, is truly possible only in the situation when a person has a real choice and is conscious of the difference that choice makes in the world (Stocki, Prokopowicz & Żmuda, 2008). Freedom – given in the elementary cognitive experience of “I can – I don’t have to” – is an obvious precondition of an act. The qualitative difference between the experience of human acting and

something's acting in human is given in the moment of efficacy – the experience of “I am the doer of this” (Stocki, Prokopowicz & Żmuda, 2008)

Efficacy is a notion that connects directly experience of acting to responsibility. A person is responsible for something only if he or she can influence something or is a conscious doer of something. It is important to emphasize that responsibility is not a relation, let alone social relation – it is an intra-personal, cognitive fact. A person can be responsible because he or she is response-able, has a will that is able to respond to values. Furthermore, a person is responsible for something or someone but is also responsible to something or someone, and that relationship can be only formed based on obligation stemming from values and experiencing others as selves, as persons.

Given the fact that responsibility is a subjective, intra-personal phenomenon, in the context of interpersonal relations it has to be analyzed as perceived responsibility. In this study, responsibility will be understood as a perceived consistency in acting freely based on the value-based obligation towards trustor. As such, it is ignored by Mayer et al (1995), and should be included in the comprehensive model of relational trust. Perceived responsibility of trustee will be analyzed as one of the dimensions (additional to ability, benevolence and integrity) of trustworthiness that is expected to influence trust towards trustee. Furthermore, in order to deepen the understanding of the role responsibility plays in trust relations, a qualitative method for analyzing the perception of managerial responsibility needs to be employed. The method most suited for representing the relationships of concepts is concept mapping (Novak and Cañas, 2008). This methodological approach shall be described in details further in the paper.

Trust and effectiveness

The relationship between trust and effectiveness has been verified in numerous studies. The source of the link has been identified in cost reduction (Bromiley & Cummings, 1995), collaboration and cooperation (Roberts & O'Reilly, 1974) or engagement and performance (Friedlander, 1970; Dirks, 1999). Trust has also been connected to organizational citizenship behaviors (McAllister, 1995; Podsakoff, MacKenzie, Moorman & Fetter, 1990; Robinson, 1996) and effort (e.g., Williams & Karau, 1991). It is still not clear whether this influence is direct or moderating (Dirks, 1999), but this investigation goes beyond the scope of this paper.

The relationship between trust and high performance has been suggested by many authors (e.g., Bromiley & Cummings, 1995; Butler, 1991; McAllister, 1995) - attempts to link trust to effectiveness are as old as the reflection on trust. Rotter (1967) claimed that there is a direct link between trust and effectiveness. He believed that efficiency, adjustment and survival of social groups depended upon the presence of trust (1967, p. 651). Lately, more psychologists have been interested in team performance and trust (Dirks, 1999; Costa, Roe and Tailieu, 2001; Kiffin-Petersen, 2004). Moreover, perceived task performance has been found correlated with more objective measures and relationship continuity (Smith & Barclay, 1997).

What is even more relevant to this paper is the relationship between trust in management and performance. This link has been analyzed by Mayer and Gavin (2005). Their study suggests that trust in management is directly related to employees' ability to focus attention on value-producing activities. Similarly, Davis et al. (2000) find that trust is significantly related to sales, profits and employee turnover in the restaurant industry; managers who were either more or less trusted differed significantly in perceptions of their ability, benevolence and integrity.

Managerial Trust and Responsibility Scale (MTRS)

Trust is a cognitive aspect of social interaction between two parties, in which free will, consideration of risks, as well as responsibility for a given action, are concerned. In the relational theory of trust, which currently dominates the field of trust research, there are two major factors to be distinguished: the propensity to trust (a trait-like feature of every trust relationship) and the trustworthiness of the trustee (relationship-specific perceptions about the trustee). While both of them are important to understand the dynamics of every trust relation, trustworthiness is key to both organizational analysis and intervention, as it relates to possibly modifiable aspects of relationships. Perceived ability, benevolence, integrity and responsibility of a trustee should be measured accordingly in order to determine their interrelation and influence they have on trust beliefs and behaviors.

To measure trust and its antecedents, a survey “or other similar methodology that taps into the person's willingness to be vulnerable to the trustee” (Mayer et al., 1995:729) is considered a valid and well examined approach. Managerial Trust and Responsibility Scale, introduced in this paper, is a survey method devised to measure propensity to trust and its antecedents defined by Miller et al. (1995), as well as responsibility, as defined in this paper. The details about the questionnaire will be provided in the Method section.

Hypotheses

Based on the theoretically supplemented model by Mayer et al. (1995; Schoorman et al., 2007) it is possible to formulate the following hypotheses:

- Hypothesis 1: Trust for a manager will be positively related to manager's perceived ability, benevolence, integrity, responsibility and to an employee's propensity to trust
- Hypothesis 2: Job engagement will be positively related to manager's perceived ability, benevolence, integrity, responsibility and to an employee's propensity to trust.
- Hypothesis 3: Job performance will be positively related to manager's perceived ability, benevolence, integrity, responsibility and to an employee's propensity to trust
- Hypothesis 4: Employees' constructs of managerial responsibility will be connected to the notions of efficacy, self-determination and value-based obligation (exploratory hypothesis)
- Hypothesis 5: Employees' constructs of managerial responsibility will be closely associated with trust (exploratory hypothesis).

Method

Participants

40 persons (11 male, 19 female; 10 did not provide information about their gender) out of 53 employees of a training and consulting company, took part in the study. Employees were asked to participate in the study by the management, who was offered a short report after studies, providing the generalized data about managerial trust in organization. Demographic structure of the sample is presented in Table 1, and the summary of research tools (with subscale reliabilities) can be found in Table 2.

Table 1. Structure of the Sample

Demographics	Category	Frequency
Gender	Male	11
	Female	19
	Missing	10
Age	<26	3
	26-35	14
	36-45	6
	Missing	17
Education	High school	1
	Graduate	29
	Missing	10
Tenure	<2	9
	From 2 to 5	13
	From 5 to 10	2
	Missing	16

Table 2. Research tools used in the study

Questionnaire	Author(s)	Subscale(s)	Crobnach's Alpha
UWES (Utrecht Work Engagement Scale)	Schaufeli et al. (2002)	-	.92
In-Role Job Performance Questionnaire	Podsakoff and MacKenzie's (1989)	-	.78
MTRS (Managerial Trust and Responsibility Scale)	Prokopowicz (this paper)	Ability	.87
		Benevolence	.85
		Integrity	.81
		Propensity to trust	.72
		Trust	.77
		Responsibility	.8

Measures

The scale for measuring multi-faceted character of managerial trust (as defined by the Integrated Model of Organizational Trust; Mayer et al., 1995) and responsibility (as defined by Wojtyła, 1994) was constructed in three subsequent steps. The first step consisted of conceptualization and operationalization of the Integrated Model of Organizational Trust (Mayer et al., 1995) and responsibility (Wojtyła, 1994). In the second step, a number of items were developed using the Likert format for trust antecedents (Ability, Benevolence, Integrity and Responsibility), Propensity to trust, and Trust itself, all relationship-specific (employee-manager). The third step consisted of supplementing the initial subset of items by adapting modified items from Rotter (1967), Gill et al. (2005) and Schoorman et al. (2007). The final scale was constructed as a set of six additive sub-scales, in which high score would indicate high ability (or benevolence, or trust etc.) in employee-manager relationship.

Ability

Manager's Ability was measured by 7 additive items. Cronbach's α for Ability reached the level of .87. A sample item for this sub-scale is "My manager is very competent at performing his job."

Benevolence

Managerial Benevolence was measured by 7 additive items. Cronbach's α for Benevolence reached the level of .85. One of the items used for this sub-scale is "I am confident that my manager wants the best for me."

Integrity

Manager's perceived Integrity was measured by 6 additive items, with Cronbach's $\alpha = .81$. A sample item from this sub-scale is "I share my manager's values."

Propensity to trust

Propensity to trust (Cronbach's $\alpha = .72$) was measured by 7 additive items. In an Integrated Model of Organizational Trust, propensity to trust is understood as a dispositional trait, similar to Rotter's interpersonal trust (1967). Miller and Mitamura (2003) make a further argument against homogeneity of this construct, claiming that generalized trust is rather caution level than trust. Hence, caution level in relationships is probably the closest to what Mayer et al. (2005) call the propensity to trust. A sample item from this sub-scale is "These days, you cannot rely on anyone but yourself."

Trust

Trust towards managers, as defined by Mayer et al. (1995) was measured by 7 additive items (Cronbach's $\alpha = .77$). One of the items measuring this construct in the questionnaire is "I would be willing to let my manager have complete control over my future in this company."

Responsibility

Trust is a cognitive state of willingness to be vulnerable in the relationship, and can take place only if a trusted party is equipped with efficacy, self-determination, and takes responsibility for his or her actions. This set of factors is characteristic for human act (Wojtyła, 1994). Perceived efficacy, self-determination and responsibility of the manager, as well as the truth-based communication underlying the relationship of both trusting parties, are measured in this sub-scale of the questionnaire. Cronbach's α for this sub-dimension reached the level of .8. Exemplary items for this facet include: "My manager has a direct influence on how the company works.", "My manager avoids making hard decisions", and "My manager always takes full responsibility for his or her mistakes."

Masking questions

A number of items intended to partially disguise the purpose of the Propensity to trust sub-scale were developed and included in the questionnaire. Sample items from this group are: "I believe I am an optimist." and "In achieving success, hard work is usually more important than natural talent."

Subjective in-role job performance

One of the aspects of an individual employee effectiveness is the manner in which an employee perceives his or her job performance. In order to measure perceived In-role job performance, Podsakoff and MacKenzie's (1989) five-item scale was selected and adapted for employee self-evaluation. Test items have been transposed from third to first grammatical person, e.g. "This worker always completes the duties specified in his/her job description." has been changed into "I always complete the duties specified in my job description" and „This worker fulfills all responsibilities required by his/her job" into "I fulfill all responsibilities required by my job". All participants rated their perceived In-role job performance on 5-point Likert type scale (from strongly disagree to strongly agree). Cronbach's α for this sub-scale reached the level of .78.

UWES – Utrecht Work Engagement Scale

Engagement, as defined by Schaufeli et al. (2002), is "a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption." (p. 74). They describe it as a persistent affective-cognitive state, not focused on any particular object of reflection. In order to measure engagement, Schaufeli and Bakker (2003) created a 17-item UWES (Utrecht Work Engagement Scale). The scale has been verified in many cross-cultural studies, proving to be of high validity and reliability. The questionnaire consists of three additive subscales: absorption, vigor, dedication. All participants rated their engagement on a 7-point Likert-type scale ranging from 0 (never) to 6 (always/every day). Cronbach's α for UWES reached the level of .92. A sample item from this sub-scale is "When I am working, I forget everything else around me".

Understanding of managerial responsibility

Concept maps are visualization techniques designed to graphically represent relationships (especially causal relations) between concepts. Novak and Cañas (2008) define concept maps as "graphical tools for organizing and representing knowledge" (p. 1). In practice, concept maps usually consist of concepts and relationship between those concepts, represented as concept boxes and a line linking two concepts. Also, in the version used in this study, concept maps include words describing the relationship, so called linking phrases, that characterize the relationship between two concepts (Novak and Cañas, 2008).

In our analysis propositions, understood as "statements about some object or event in the universe, either naturally occurring or constructed" (Novak and Cañas, 2008, p. 1), created by participants regarding a given topic, constituted the basic tool of analysis. Propositions consist of two concepts connected using linking words or phrases, forming a meaningful statement.

In order to analyze participants' understanding of managerial responsibility, a tool for drawing and analyzing maps was employed. IHMC Cmap Tools is a free software developed at the Florida Institute for Human and Machine Cognition, rooted in traditional cognitive theories of learning (Novak and Cañas, 2008). In the study, all participants were instructed to use the software and form the concept map around the central concept of the map: Responsible manager.

Procedure

All employees (53) of a small training and consulting company were invited to participate in the study. Subjects were provided with electronic versions of a set of questionnaires (MTRS, UWES and modified In-role Job Performance Questionnaire) and

software for creating a concept map of Responsible manager (IHMC Cmap Tools). Participants also received detailed instructions about the nature and order of the study.

In the first part of the research, employees were asked to construct a concept map of a concept of a Responsible manager – all associations, concepts and links that come to their mind when they think about their experience with responsible managers. Apart from detailed instructions on how to use the software and elicit causal maps, they were also provided with a sample concept map on “the ideal vacation trip”.

In the second part of the study they were asked to fill out a set of trust and performance questionnaires. Both maps and filled questionnaires were to be sent anonymously from a created email account to researcher's address. Participants were not supervised during the procedure due to the electronic form of the tools and the specificity of work environment (it was important for the company that employees had freedom to participate in the study at work or home, depending on their preferences).

Results

In the quantitative part of the study three linear regression analyses were conducted. Coefficients for three dependent variables are presented in Tables 3, 4 and 5 (all models were checked for linearity and homoscedasticity, independent variables in each model lacked high multicollinearity). As the sample is not random, reported significance levels lack their usual interpretation but are reported here in compliance with social science convention.

Table 3. Coefficients of Linear Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Significance
	B	Standard error	β		
(Constant)	13.473	5.314		2.535	.016
Ability	.004	.176	.003	.021	.983
Benevolence	.33	.179	.385	1.85	.073
Integrity	.34	.177	.361	1.92	.063
Propensity	-.261	.153	-.189	-1.706	.097
Responsibility	.069	.152	.081	0.454	.653

Note. Dependent Variable: Trust

In the first regression analysis Trust was analyzed as a dependent variable with trustworthiness dimensions (Ability, Benevolence, Integrity, Responsibility) and Propensity to trust as predictors. These five variables explained almost two thirds of the variance ($R^2 = .61$) in Trust scores, with significance level $p < .001$. The most influential predictors were Benevolence ($\beta = .38$; $p = .07$) and Integrity ($\beta = .36$; $p = .06$), followed by Responsibility and Ability, associated positively ($\beta = .08$; $p = .65$ and $\beta = .18$; $p = .98$, respectively), and Propensity to trust ($\beta = -.19$; $p = .1$), related negatively to Trust.

Table 4. Coefficients of Linear Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Significance
	B	Standard error	β		
(Constant)	36.08	16.976		2.125	.041
Ability	1.335	.568	.496	2.351	.025
Benevolence	-.184	.58	-.092	-.317	.754
Integrity	.158	.565	.072	.281	.781

Propensity	-.356	.492	-.109	-.723	.475
Responsibility	.174	.486	.085	.359	.722

Dependent Variable: Work engagement (UWES)

In the second regression analysis Work engagement scores were regressed on trustworthiness dimensions (Ability, Benevolence, Integrity, Responsibility), and Propensity to trust. These five predictors accounted for about 30% of the variance ($R^2 = .301$) in Work engagement scores, with high significance level of $p = .035$. Ability was the most powerful predictor ($\beta = .5$; $p = .03$), followed by Propensity to trust ($\beta = -.11$; $p = 0,47$) and Benevolence ($\beta = -.09$; $p = .75$) – both negatively related to Engagement – and Integrity with Responsibility, positively associated with Engagement ($\beta = .08$; $p = .72$ and $\beta = .07$; $p = .78$, respectively).

Table 5. Coefficients of Linear Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Significance
	B	Standard error	β		
(Constant)	21.535	3.677		5.857	.000
Ability	.132	.121	.275	1.092	.284
Benevolence	-.018	.129	-.052	-.143	.888
Integrity	.096	.121	.249	.795	.433
Propensity	-.103	.104	-.176	-.994	.328
Responsibility	-.057	.100	-.159	-.573	.571

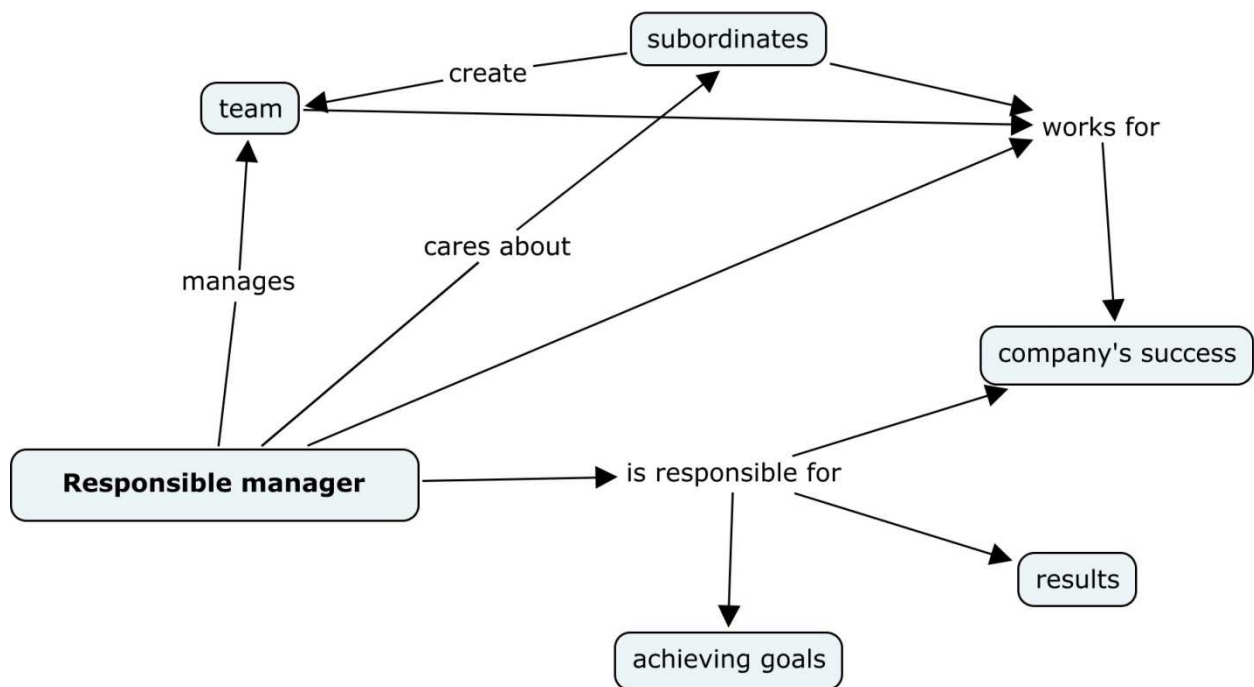
Dependent Variable: In-role job performance (PODS)

In the third regression analysis In-role job performance was regressed on trustworthiness dimensions (Ability, Benevolence, Integrity, Responsibility), and Propensity to trust. These five variables accounted for about one eighth ($R^2 = .129$) in In-role job performance scores with significance level $p = .523$. Ability ($\beta = .27$; $p = .28$) and Integrity ($\beta = .25$; $p = .43$) were the most influential predictors of In-role job performance, followed by Propensity to trust ($\beta = -.17$; $p = 0,33$), Responsibility ($\beta = -.16$; $p = .57$) and Benevolence ($\beta = -.05$; $p = .89$).

Exploratory analysis of concept maps

The quality of concept maps submitted by the participants render both the quantitative and qualitative analyses of the relationship between understanding of managerial responsibility and trust towards managers difficult. Only 14 maps have been elicited and submitted by the participants, and those submitted ones differ substantially not only in complexity, but in the quality of the data and understanding of concept maps specificity - sample concept maps are presented in Figures 1 and 2.

Figure 1. Sample concept map regarding “Responsible manager”



Nevertheless, an effort to reconstruct organizational perception of responsible manager has been made by comparing the understanding of managerial responsibility by the participants with the basic notions of Wojtyła’s (1994) concept of responsibility and the facets of Integrated Model of Organizational Trust by Mayer et al. (1995). Sample propositions involving Responsible manager are listed in Table 6.

In order to analyze the character of the maps, propositions have been classified in the categories of IMOT’s Ability, Benevolence, Integrity and Trust, as well as Wojtyła’s Responsibility. Benevolence, Integrity, and Trust were categorized using the definitions provided by Mayer et al. (1995), Responsibility - using Wojtyła’s (1994) perspective, while Ability, as related in the context of this study to managerial competencies, was characterized by the inventory of managerial skills listed by Cardona & Garcia-Lombardia (2005).

Table 7. Categories of Propositions Regarding the „Responsible Manager”

Category	Propositions	Perc.	Accum. Perc
Ability	41	51.25%	51.25%
Benevolence	5	6.25%	57.50%
Integrity	5	6.25%	63.75%
Trust	3	3.75%	67.50%
Responsibility	12	15.00%	82.50%
Others	14	17.50%	100.00%

As indicated in Table 7, more than a half of propositions (51.25%) related to the concept of “Responsible manager” have been categorized as reflecting managerial skills and abilities. Those include propositions like “Responsible manager has business awareness”,

“Responsible manager means that they control their emotions” or “Responsible manager motivates individuals”, falling into basic leadership competencies listed by Cardona & Garcia-Lombardia (2005). Significantly fewer propositions have been categorized as Benevolence (e.g. “Responsible manager cares about subordinates”, 6.25%), Integrity (e.g. “Responsible manager is fair”; 6.25%) and Trust (e.g. “Responsible manager is trustworthy”; 3.75%). Propositions categorized as “Others” did not fall into any of the categories (e.g. “Responsible manager is usually somebody I like”; 17.5%). Category “Responsibility” signified propositions related to efficacy, self-determination, obligation and those close or synonymous to “Responsible manager”, such as “Responsible manager is responsible for achieving goals” or “Responsible manager is responsible for results”. 15% of concepts fell into this category.

Discussion

Determinants of trust

In course of testing the relationship of trust antecedents and trust beliefs (assumed in Hypothesis 1) an interesting pattern emerged. Perceived Benevolence, understood as good will of a manager, along with Integrity, that is his or her fairness and honesty, influenced trust beliefs heavily compared to Ability and Responsibility, which had minimal impact on the willingness of employees to become vulnerable in the relationship with their manager. Propensity to trust, a trait expressing employees’ generalized trust, was related slightly negatively to trust.

There is a possible interpretation of this result pattern. Firstly, benevolence, as described earlier, is related closely to trust on theoretical level – while trust is understood as willingness to become vulnerable, and benevolence as perceived good will, it is possible to observe their direct dependence. If a person believes that another person has good intentions toward him or her, it is natural that he or she would be more willing to trust that person. Perceived integrity utilizes similar link – a trustee upholding strong ethical values will be generally more likely to act in favor of a trustor than a person of low integrity. However, the connection is not that clear when it comes to Ability – out of all trust antecedents, whose predictive power was tested in the study, it is probably the most domain-specific facet of trust beliefs.

This context-dependence is probably the cause of small impact that perceived Ability had on Trust in the study. In the questionnaire, employees were asked about competencies of the manager as a manager, that is his skills in leadership, business and management, while questions related to Trust focused on more general aspects of the relationship, like the willingness to give the manager complete control over one’s future in the company. In further studies, two possibilities could be pursued: separating domain-general and domain-specific aspects of Trust or transforming dimension of Trust by adding more domain-specific questions related to Trust.

Work engagement

An entirely different set of factors accounting for the variance of Work engagement emerged in the test of Hypothesis 2. It seems that perceived Integrity and Benevolence of a manager, having substantial impact on Trust towards managers, have minor impact on the effort employees put in their jobs. One variable showing a clear connection to Work engagement was Ability, that is, in the context of this study, leadership competencies of the evaluated manager (Cardona & Garcia-Lombardia, 2005).

This might seem counterintuitive, as perceived competencies could be expected to have lesser impact on individual effort than e.g. Benevolence, connected with acceptance and good will. The possible explanation behind it may be that motivating people and providing them with the engaging work conditions is widely perceived as being a part of a manager's job description.

Different patterns of relationship between trust antecedents, Trust and Work engagement may suggest the possibility of a new conceptual framework of trust. It may be possible that trust (understood as the willingness to become vulnerable) and confidence (understood as the belief that the trustee has certain competencies needed for consistent and successful task completion) may be distinguished in course of research and analysis as two separate constructs. This has been indirectly suggested by Rousseau et al. (1998). According to them, trust "is a psychological state that manifests itself in the behaviors towards others, is based on the expectations made upon behaviors of these others, and on the perceived motives and intentions in situations entailing risk for the relationship with those others." (1998, p. 228). When accepting this definition of trust, it is possible to eliminate Ability as an antecedent of trust, distinguishing domain-general trust (as defined in IMOT) and domain-specific confidence (based on the notion of professionalism and predictability) as two separate phenomena.

In-role Job Performance

In the third regression analysis In-role job performance was analyzed as a dependent variable with trustworthiness dimensions, and Propensity to trust as predictors. These five variables showed to account for comparatively low part of In-role performance scores. Weak explanatory power of the model is directly the product of small variance in the results of In-role job performance subscale.

Poor quality of In-role job performance data is most likely connected to the self-appraising character of the subscale. Small variance of results concentrating around the highest scores suggests that self-evaluation of job performance might lead to biases in the evaluation process. In further studies, more objective measurement of job performance should be applied.

Responsible Manager

In none of the analyses conducted in the study Responsibility had any significant relationship with dependent variables. It seems that neither trust nor work engagement are influenced by the perceived efficacy, self-determination and value-based consistency of the manager. It is possible that this result is caused by similar understanding of Responsibility and Ability by the participants.

This argument is supported by the qualitative analysis of propositions related to Responsible manager that were elicited by the participants. For the majority of subjects, the main associations with managerial responsibility are closely connected to leadership competencies, as described by Cardona & Garcia-Lombardia (2005). These results suggest that employees did not represent a deep understanding of responsibility, focusing on describing "ideal manager" and not "responsible manager". Furthermore, focusing on skills may suggest that perceived responsibility, similarly to ability, is domain-specific.

Conclusions

The general findings of the study indicate the necessity of further investigation of the key elements of trust beliefs. It is important to remember that the study, while conducted in

the natural setting, concentrated only on trust beliefs and subjective indicators of effectiveness. In order to study trust in natural environment, more behavioral aspects of trust should be included, answering the fundamental question posed by the study: Are people truly willing to trust those who they perceive as benevolent and ethical rather than competent and responsible?

One of the findings of the study that appears to be hard to comprehend within the framework of IMOT is the consistently negative relationship of Propensity to trust and dependent variable such as Trust, Work engagement and In-role job performance. This finding, along with the more domain-specific role of perceived responsibility in trust still needs to be analyzed.

The results of the study suggest the possibility of analyzing domain-general trust and domain-specific confidence as two separate theoretical constructs. While perceived integrity and benevolence clearly influence trust relationship in general, trustee's ability and possibly responsibility, seem to influence only domain-specific aspects of interpersonal relationship. The former should be understood as trust, according to definition by Mayer et al. (2005), the latter should be construed as confidence. This theoretical framework could explain different influence trust and confidence have on employee engagement and performance and would possibly bring more order to the diversified field of trust research.

Trust, as a complex variable, has a potential for explaining a vast variety of organizational behavior. Traditionally it has been used mainly to explain team and individual effectiveness in organizations. While the study indicates a promising way of orchestrating that, it is important to remember that neither trust nor effectiveness are one-dimensional constructs. Each of their aspects deserves deeper analysis and a place in the integrated framework of organizational trust.

References

- Bateson, P. (1988). The Biological Evolution of Cooperation and Trust. In: D. Gambetta. (Ed.), *Trust: Making a Breaking Cooperative Relations*. Oxford: Blackwell, pp. 14-30.
- References: Bandura, A. (1977). *Self-efficacy: Toward a unifying theory of behavioral change*. Psychological Review, 84, pp. 191-215.
- Bandura, A. (1992) Exercise of personal agency through the self-efficacy mechanisms. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action*. Washington, DC: Hemisphere.
- Bandura, A. (1995). *Self-Efficacy in Changing Societies*. Cambridge University Press.
- Bromiley, P., & Cummings, L. L. (1995). Transactions Costs in Organizations With Trust. In: R. Bies, B. Sheppard, & R. Lewicki (Eds.), *Research on negotiations in organizations*. Greenwich, CT: JAI Press, pp. 219- 247.
- Cardona, P. & Garcia-Lombardia, P. (2005). *How to Develop Leadership Competencies*. Madrid: Eunsa Ediciones.
- Cummings, L. L., & Bromiley, P. (1996). The Organizational Trust Inventory (OTI): Development and Validation. In: R. Kramer & T. Tyler (Eds.), *Trust in organizations*. Thousand Oaks, CA: Sage, pp. 302-330.
- Davis, J.H., Schoorman, D., Mayer, R.C., and Hoon Tan, H. (2000). The Trusted General Manager and Business Unit Performance: Empirical Evidence of a Competitive Advantage. *Strategic Management Journal*, Vol. 21, No. 5. (May, 2000), pp. 563-576.
- Dietz, G., and Den Hartog, D.N. (2006). Measuring Trust Inside Organisations. *Personnel Review*, 35:5, pp. 557-588.

- Costa, A.C., Roe, R.A. Taillieu, T. (2001). Trust Within Teams: The Relation With Performance Effectiveness. *European Journal of Work and Organizational Psychology*, 10(3): pp. 225-244.
- Covey, S.M.R. (2006). *The Speed of Trust*. New York: Simon & Schuster.
- Cunningham, J.B. and McGregor, J. (2000). Trust And The Design Of Work: Complementary Constructs In Satisfaction And Performance. *Human Relations*, 53:12, pp. 1575-91.
- Friedlander, F. (1970). The Primacy of Trust As a Facilitator Of Further Group Accomplishment. *Journal of Applied Behavioral Science*, 6, pp. 387-400.
- Fukuyama, F. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York: The Free Press.
- Gill, H., Boies, K., Finegan, J.E., and McNally, J. (2005). Antecedents of Trust: Establishing a Boundary Condition for the Relation between Propensity to Trust and Intention to Trust. *Journal of Business and Psychology*, 19: 3, pp. 297-302.
- Glaeser, E.L., Laibson, D.I. Scheinkman, J.A., and Soutter, C.L. (2000). Measuring Trust. *Quarterly Journal of Economics*, 115:3, pp. 811-846.
- Kiffin-Petersen, S. (2004). Trust: A Neglected Variable in Team Effectiveness Research. *Journal of the Australian and New Zealand Academy of Management* 10:1, pp. 38-53.
- Levering, R. (2000). *A Great Place to Work. What Makes Some Employers So Good (And Most So Bad)*. New York: Random House.
- Luhmann, N. (1979). *Trust*. Chichester: John Wiley & Sons.
- Mayer, R.C., Davis, J.H, and Schoorman., F.D. (1995). An Integrative Model of Organizational Trust. *Academy of Management Review*, 20(3), pp. 709 – 734.
- Mayer, R.C. and Gavin, M.B. (2005). Trust in Management and Performance: Who Minds the Shop While the Employees Watch the Boss? *Academy of Management Journal* 48:5, pp. 874-888.
- McAllister, D. (1995). Affect- and Cognition-Based Trust As Foundations For Interpersonal Cooperation in Organizations. *Academy of Management Journal*, 38, pp. 24-59.
- McEvily, B., Perrone, V. and Zaheer, A. (2003). Trust As an Organizing Principle. *Organization Science*, 14:1, pp. 91-103.
- Miller, A.S. and Mitamura, T. (2003). Are Surveys on Trust Trustworthy? *Social Psychology Quarterly*, 66:1, pp. 62-70.
- Novak, J. D. & Cañas, A. J. (2008). The Theory Underlying Concept Maps and How to Construct and Use Them, Technical Report IHMC CmapTools 2006-01 Rev 01-2008, *Florida Institute for Human and Machine Cognition*, available at: <http://cmap.ihmc.us/Publications/ResearchPapers/TheoryUnderlyingConceptMaps.pdf>
- Podsakoff, P.M. & MacKenzie, S.B. (1989). *A Second Generation Measure Of Organizational Citizenship Behavior*. Indiana: Indiana University.
- Podsakoff, P., MacKenzie, S., Moorman, R., & Fetter, R. (1990). Transformational Leader Behaviors And Their Effects On Followers' Trust In Leader, Satisfaction, And Organizational Citizenship Behaviors. *Leadership Quarterly*, 1, pp. 107-142.
- Robinson, S.L. (1996). Trust and Breach of the Psychological Contract. *Administrative Science Quarterly*, 41, pp. 574-99.
- Roberts, K., & O'Reilly, C. (1974). Failures in Upward Communication in Organizations: Three Possible Culprits. *Academy of Management Journal*, 17, pp. 205-215.
- Rotter, J. B. (1967). A New Scale for the Measurement of Interpersonal Trust. *Journal of Personality*, 35, pp. 651-665.
- Rotter, J.B. (1980). Interpersonal Trust, Trustworthiness, and Gullibility. *American Psychologist* 35:1, pp. 1-7.

- Rousseau, D., Sitkin, S.B., Burt, R.S. and Camerer, C. (1998). Not So Different After All: a Cross-Discipline View of Trust. *Academy of Management Review*, 23:3, pp. 393-404.
- Schaufeli, W.B., Bakker, A.B. (2003). Utrecht Work Engagement Scale: Version 1. In: *Preliminary Manual*, Occupational Health Psychology Unit, Utrecht University.
- Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V., Bakker, A.B., (2002). The Measurement of Engagement and Burnout: A Confirmative Analytic Approach. *Journal of Happiness Studies* 3, pp. 71–92.
- Schoorman, F.D., Mayer, R.C., and Davis, J.H. (2007). An Integrative Model of Organizational Trust: Past, Present and Future. *Academy of Management Review*, 32(2), pp. 344-354.
- Sitkin, S. B. & Pablo, A. L. 1992. Reconceptualizing the Determinants of Risk Behavior. *Academy of Management Review*, 17, pp. 9-38.
- Smith, J., & Barclay, D. (1997). The Effects of Organizational Differences and Trust on the Effectiveness of Selling Partner Relationships. *Journal of Marketing*, 61, pp. 3-21.
- Stocki, R., Prokopowicz, P. & Żmuda (2008). Pełna Partycypacja W Zarządzaniu. Tajemnica Sukcesu Najbardziej Wyjątkowych Firm Świata. Kraków: Oficyna.
- Sztompka, P. (1996). Trust and Emerging Democracy. *Sociology*, 11:1, pp. 37-62.
- Wojtyła, K. (1994). *Osoba i Czyn oraz Inne Studia Antropologiczne*. Lublin: TN KUL.
- Zand, D. E. (1972). Trust and Managerial Problem Solving. *Administrative Science Quarterly*, 17, pp. 229-239.

Abstrakt

Zaufanie to jedno z najbardziej użytecznych pojęć eksplanacyjnych w naukach o organizacji. Artykuł prezentuje i wyjaśnia stan współczesnej debaty psychologicznej na temat zaufania, poddaje weryfikacji Integracyjny Model Zaufania Organizacyjnego w naturalnym kontekście organizacyjnym, sugeruje postrzeganą odpowiedzialność jako dodatkowy warunek zaufania oraz analizuje możliwy wpływ, jaki zaufanie do menedżerów ma na zaangażowanie i poziom wykonania pracowników. Wyniki przedstawione w artykule sugerują, że pośród wszystkich antecedensów zaufania, postrzegana życzliwość i integralność moralna menedżerów wpływa najmocniej na zaufanie do nich, podczas gdy ich postrzegany poziom umiejętności wpływa najbardziej na zaangażowanie pracowników. W artykule zaproponowane zostaje wprowadzenie rozróżnienia między dwoma aspektami zaufania do menedżerów: ogólnodomenowym oraz domenospecyficznym.