TRUST AND ITS RELATIONS TO COMMITMENT AND INVOLVEMENT IN WORK AND ORGANISATIONS

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ABSTRACT

There are two perspectives on trust: personal and systems trust. This paper focuses on personal trust. The purpose of the paper is to analyse the relationship between personal trust in organisations on the one hand and organisational commitment and job and work involvement on the other hand. This is done against the background of four hypotheses. They refer to the difference between affective and instrumental commitment - stating that personal trust correlates with affective but not instrumental commitment - and to the difference between job and work involvement – stating that personal trust correlates with job but not work involvement. These hypotheses are tested with data from four studies in different areas of work (office work, management, nursing of the elderly, health care). Using partial correlation and canonical correlation analysis, the hypotheses about commitment can be confirmed in total while the results for involvement are only partially in accordance with the hypotheses.

OPSOMMING

Daar is twee perspektiewe oor vertroue: persoonlike en stelsel vertroue. Hierdie artikel fokus op persoonlike vertroue. Die doel van die artikel is om die verwantskap tussen persoonlike vertroue in organisasies aan die een kant en organisasie-verbintenis en pos – en werkbetrokkenheid aan die ander kant te ontleed. Dit word gedoen teen die agtergrond van vier hipotesese. Hulle verwys na die verskil tussen affektiewe en instrumentele verbintennisse beklemtoning dat persoonlike vertroue korreleer met affektiewe maar nie instrumentele verbetenis - die verskil tussen pos en werkbetrokkenheid - beklemtoning dat persoonlike vertroue korreleer met pos maar nie werkbetrokkenheid. Hierdie hipotesese word getoets aan die hand van data van vier studies in verskillende werksareas (kantoor, bestuur, verpleging van bejaardes en gesondheidsorg). Deur gebruik te maak van parallelle korrelasies en kanonieke korrelasie-ontleidings, kan die hipotese met betrekking tot verbintenis in die geheel bevestig word terwyl die resultate van betrokkenheid slegs gedeeltelik bevestig word, soos gestel in die hipotesese.

Many recent publications point to the increasing importance of trust in organisations. As organisations restructure and downsize in the name of efficiency and productivity, trust has become an increasingly important element of management language because employees who survive these painful processes are understandably wary and anxious about the future direction of the organisation and their roles. In a world of rapid change, loss of confidence, increasing risks and decreasing certainties, trust seems to be a helpful concept to understand, describe and explain part of these disturbing phenomena.

When looking at the popular literature about trust, its meaning seems to be somehow self-evident and more or less common sense in many cases. However, studying the literature we learn three things. First, trust is not at all a straightforward and clearly defined concept. It has several, largely diverse bases (e.g. Kramer, 1999). Secondly, trust is not a new or recent issue; much of the talking and writing about trust is popular rhetoric and does not adequately consider its roots and backgrounds in different disciplines (e.g. Erickson, 1968; Giddens, 1990; Kramer & Tyler, 1996; Lane & Bachmann, 1998; Luhmann, 1973, 1979; Rotter, 1967; Williamson, 1993; Wrightsman, 1964). The increasing prominence of trust is associated with the belief and the admission that traditional concepts in organisational science, particularly those with a rational background, fail to explain processes and behaviour in organisations. Much like the doctor who gives a psychovegetative diagnosis in the case of complex and unclear evidence, trust seems to be appropriate for filling in and bridging black holes and gaps in the economy and organisations. Thirdly, besides these fundamental concerns we find only little evidence for the status of trust. Is trust part of a more comprehensive model such as the psychological contract (e.g. Guest, 1998)? What is the role of trust? Is it a cause, a moderator or mediator variable, or a consequence in

organisational settings (e.g. Dirks & Ferrin, 2001)?

This paper focuses on the role of trust. Particularly, we will study hypotheses on the relationship between trust, commitment and involvement. Before doing so a brief theoretical background will be given.

Theory and hypotheses

We find quite different approaches to trust among the social sciences. Some of them can claim to be theoretical (e.g. Luhmann, 1973), while others use a hypothetical construct to derive corresponding measures (e.g. Rotter, 1967). Despite this divergence, most of the approaches agree that trust is fundamentally a psychological state. Moreover, trust is supposed to be socially learned (e.g. Rotter, 1971) in institutions (family and school among others) and organisations (e.g. Luhmann, 1973), and trust is assumed to be fundamental to the existence of human lives (e.g. Wrightsman, 1964) and the formation of personality and identity during childhood and youth (e.g. Erickson, 1968).

A distinction can be made between approaches that account for personal trust and systems trust. While sociology and the political and organisational sciences usually direct their attention to trust in social systems, psychology and some other social sciences are more concerned with personal trust. A definition which integrates both perspectives is, for example, given by Giddens (1990, p. 34): "The reliability of a person or system, regarding a given set of outcomes or events, where that confidence expresses faith in the probity or love of another, or in the correctness of abstract principles (technical knowledge)." Luhmann (1979, p. 58) states that systems trust is latent and is beyond the day-to-day experience that influences personal trust. As part of this wider perspective, personal trust can be defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" according to Rousseau, Sitkin, Burt and Camerer (1998, p. 395).

As mentioned ealier there are several theoretical problems associated with the concept of trust. Despite these problems,

recent empirical research underlines the important role of trust in organisations. Besides significant main effects on workplace behaviour and outcomes (e.g. job satisfaction, OCB, individual and unit performance), the review by Dirks and Ferrin (2001) contains some evidence for the moderator function of trust in diverse relationships. It should be mentioned that despite the fact that most studies look for influences of trust on commitment, they actually perform correlational analyses of the trust-commitment relationship (e.g. Brockner, Siegel, Daly, Tyler & Martin, 1997). Moreover, Guest (1998) considers trust to be a "key integrative concept" and a mediator between causes and consequences in the model of the psychological contract.

It should be mentioned that the research in the area of trust suffers from weak methods. To date, we find only a limited number of instruments; many of them are, however, grounded in personality theory (e.g. Rotter, 1967). One of the few measures for work and organisations with proper psychometric testing was developed by Cook and Wall (1980). This is a scale to be applied in work settings which differentiates between two dimensions: peers and management and faith and confidence in their intentions and actions. Another instrument by Cummings and Bromiley (1996) was developed against the background of a critical conclusion about the status of trust measurement: "although trust has become an important construct in recent work in organisations, its measurement has either been anecdotal or by unvalidated survey measures" (p. 319). An interesting and psychometrically driven development was undertaken by Nyhan and Marlowe (1997). Their Organisational-Trust Inventory allows for the measurement of an individual's level of trust in the supervisor and work organisation as a whole. The OTI was developed in line with the above-mentioned definition by Luhmann (1979). Our studies are based on this scale.

One of the major potential consequences of trust – theoretically (e.g. Büssing, 2000) as well as empirically (e.g. Dirks & Ferrin, 2001) – appears to be organisational commitment. Furthermore, it seems that there is some overlap in functioning between trust and commitment. With respect to organisational commitment, Meyer and Allen (1984) argue that one of the most interesting areas for future research is the relationship between trust and (in particular) affective organisational commitment because trust functions similarly organisational commitment, i.e. high levels of affective organisational commitment as well as high trust are associated with employees' reacting to unexpected events in a way that is in line with organisational interests.

With respect to organisational commitment there are a couple of different approaches from different disciplines (e.g. Morrow, 1983; Moser, 1996). The earliest attempts to conceptualise commitment were those by Etzioni (1961), Kanter (1968) and Salancik (1977). All three rely on two sources of commitment: the instrumental and affective source. While affective commitment emphasises attachment to the organisation and effort put into work well beyond what appears to be required for the reward and former investments, instrumental commitment stresses the idea of exchange and continuance. For example, with regard to exchange this means that "an employee exchanges his or her contributions for the inducement provided by the organisation" and the extent of instrumental commitment depends on the "degree to which an employee's intention to behave are consistent with the organisation's behavioural demands" (Penley & Gould, 1988, p. 44).

To date, the approaches by Etzioni (1961) and Kanter (1968) dominate much of the empirical research because appropriate commitment scales developed by Penley and Gould (1988) and Meyer and Allen (1991) are available for both approaches. In this study we rely on Etzioni's (1961) approach. Following his idea, Penley and Gould (1988) operationalised three facets

of commitment: moral, calculative and alienative commitment. While moral and alienative commitment represent the affective type, calculative commitment belongs to the instrumental type. Moral commitment is characterised by the acceptance of and identification with organisational goals. Calculative commitment is based on the employee's receiving inducements to match his or her contributions. Alienative commitment is a negative organisational attachment characterised by low intensity of intentions to meet organisational demands on the one hand and remaining in or sticking to the organisation despite the deficit in rewards for efforts on the other hand (i.e. lack of control such as lack of alternatives).

Empirical studies from the organisational sciences that address the relationship between trust and organisational commitment are rare and only a few deal with organisational behaviour (e.g. Brockner et al., 1997; Laschinger, Finegan & Shamian, 2001; Nyhan & Marlowe, 1997) while others investigate commitment and trust in customer-supplier relationships (e.g. De Ruyter, Moorman & Lemmink, 2001; Garbarino & Johnson, 1999). The few results from organisational behaviour suggest a moderate positive correlation between personal trust and affective commitment and a low negative correlation between personal trust and the instrumental type of commitment. This leads us to the first two hypotheses:

- H1: The correlation between personal trust in supervisor/ organisation and affective commitment is positive and at a moderate or high level.
- H2: The correlation between personal trust in supervisor/ organisation and calculative commitment is negative and low.

Another potential consequence of trust is involvement in work and job. While organisational commitment is by definition directed to the organisation as a whole or parts of it, involvement has to do with one's work or with one's present job in an organisation. The differentiation between work and job involvement is sensible and obvious since work can be performed in as well as outside organisations in many forms of self-employment, for example as writer, lawyer, therapist. While work involvement is associated with what is called "work as a central life interest", job involvement is a specific belief regarding one's relationship to one's present job. Therefore, job involvement is directed to the specific and particular job context, while work involvement focuses on the centrality of work in one's own life and thus is a normative belief about the value of work in one's life. Against this background job involvement can be defined as a belief which is "contemporaneously caused" whereas "work involvement is a normative belief that is historically caused", that is work involvement is more a function of one's past cultural conditioning or socialisation in family, school and education (see Kanungo, 1982, p. 342).

In accordance with their different roots, empirical results suggest that job and work involvement have different sensitivity to change. While job involvement is not a stable characteristic and therefore sensitive to both positive and negative influences from actual changes of organisation, job context and job design (e.g. Hall, Goodale, Rabinowitz & Morgan, 1978; Moser & Schuler, 1993), we find only long-term changes of work involvement in longitudinal studies, which is in line with the socialisation thesis (e.g. Lorence & Mortimer, 1981).

Taking into account the conception of job and work involvement as well as personal trust in organisations we posit the following third and fourth hypotheses:

- H3: The correlation between personal trust in supervisor/ organisation and job involvement is positive and at a moderate or high level.
- H4: The correlation between personal trust in supervisor/ organisation and work involvement is positive but low.

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METHOD

Samples

The data in this study were obtained from four different samples. Each of the samples was part of another study; however, subjects' responses to the measures of trust, commitment and involvement were gathered in the same way in each of these studies. Contextual information about each sample which provides a richer description appears useful for understanding and interpreting the results and is therefore outlined in the information box below while table 1 reports important sample characteristics.

TABLE 1
SAMPLE CHARACTERISTICS

	Office worker (N = 32)	IT- Manager (N = 109)	Nurses for the elderly (N = 66)	Health care personnel (N = 123)
Female (%)	63	19	86	87
Age (Mean, range in years)	40 [22,52]	39 [31,50]	38 [17,60]	36 [18,60]
Seniority (Mean, range in years)	17,8 [4,29]	5,5 [1,13]	4,2 [0.2,21]	5,6 [0.1,35]
Executive position (%)	25	100	24	7

The proportion of female and male subjects and the proportion of subjects in executive positions are significantly different between the samples. We find high percentages of female subjects and low percentages of executive positions in three samples while the sample of IT managers is male dominated and consists exclusively of executives. The age distribution is quite comparable between the samples; only the health care personnel shows significant differences in comparison with the other three samples (p-values \leq .05 for all pair-wise comparisons). The seniority of the office workers is three times higher than the average seniority of the other three samples (p-values \leq .01 for all pair-wise comparisons).

Information box: Sample context

Office workers (32)

The office workers belong to two companies. One is a rapidly growing medium-sized data processing service enterprise working for the banking sector. This company employs a total of about 800 highly qualified persons; many of them hold college and university degrees. The company participated in a telework project and this subsample of 12 subjects represents the control group of non-teleworking office workers. The vast majority of the personnel is recruited from the surrounding region. The location of the working places of these 12 subjects is at the headquarters in Duisburg, a big city in the State of North Rhine-Westphalia in Germany. The second part of this sample (20 subjects) was again recruited as a control group within the above-mentioned telework project. It is a sample from a large multinational chemical enterprise with a total of 22.000 employees in Germany and 117.300 world-wide. The vast majority of the personnel is recruited from the surrounding region. The location of the working places of these 20 subjects is at the headquarters close to Cologne, the biggest city in the State of North Rhine-Westphalia in Germany. Again, this subsample consists of highly qualified persons, i.e. 25% of the subjects hold college and university degrees. Data were collected within the research project "Telework and quality of working life (AQUATEL)".

IT managers (109)

The IT managers are employed by a multinational IT company. The US mother company and its German branch employ a total

Measures

Trust scales

Nyhan and Marlowe's (1997) trust scales, translated into German by the author, were used for all four samples. The Organisational Trust Inventory (OTI) consists of 12 items, 8 items on the supervisor and 4 items on the organisation subscale. While Nyhan and Marlowe (1997) hold that the OTI covers both personal trust (through the subscale supervisor) and systems trust (through the subscale organisation), we do not consider the organisation subscale an adequate measure for systems trust since on the whole the items are directed to aspects of personal trust in organisations (e.g. "The level of trust between supervisors and workers in this organisation is ..."). The subscale "organisation" is a better measure of personal trust in the organisation. Items were rated with respect to the degree of trust on a five-point Likert scale (1 = 'not at all'; 5 = 'yes, indeed').

Commitment scales

The organisational commitment scales (OCS) as developed by Penley and Gould (1988) and translated into German by the author were used for all four samples. The OCS consists of 15 items and the three subscales moral, calculative and alienative commitment as described above. Each subscale has 5 items. Items were rated with respect to the degree of commitment on a five-point Likert scale (1 = 'not at all'; 5 = 'yes, indeed').

Involvement scales

Job and work involvement as described above were measured in all four samples using the scales of Kanungo (1982) in the German translation by the author. The job involvement scale includes 10 items the work involvement scale 6 items. Items were rated with respect to the degree of involvement on a five-point Likert scale (1 = 'not at all'; 5 = 'yes, indeed').

Procedure

The reliability of the scales was estimated using internal consistency according to Cronbach's alpha. The hypotheses were tested using partial correlation analysis controlling for the variables in table 1, namely sex, age, seniority and position. In order to adjust for inter-correlation among the trust variables and the commitment and involvement variables, additional canonical correlation analyses with the residual scores (i.e. after controlling for sex, age, seniority, position) were performed and canonical loadings for the significant canonical factors are reported.

of about 1.700 persons in Germany and some 43.000 world-wide. The 109 persons in our sample represent a subgroup (63%) of the 172 upper level managers (first to third level) in the German branch at the time of the study in 2001. The majority of the managers are recruited from all over Germany, although a substantial proportion are recruited from European countries and world-wide. The locations of their working places are spread all over Germany; the German headquarters are located in Munich, the capital city of the State of Bavaria in Germany. The managers represent all areas of the company (e.g. marketing, sales, consulting, support). More than 75% of the managers in our sample hold college or university degrees and 5% have a PhD. Data were collected within the German part of the "Collaborative International Study of Managerial Stress (CISMS)".

Nurses for the elderly (66)

The nurses in this sample work at five Munich homes for the elderly. These nursing homes are small to medium-sized with two to four wards and 58 to 105 beds. The working situation of the nurses is characterised by a shortage of qualified personnel, fluctuation, shift-work, and time pressure. The persons in this sample represent a subgroup (38%) of the nurses working at these five institutions. The majority of the personnel are recruited from the larger Munich area and from Bavaria; however there are a substantial proportion of nurses from all over Germany and from European countries. The location of the nursing homes is the larger Munich area,

the capital city of the State of Bavaria in Germany. Data were collected within the research project "Interaction work in person-related services (IntAkt)".

Health care personnel (123)

The health care personnel in this sample all work at a clinic for children and youth. This clinic treats psychosomatic, motoric, behavioural and eating disorders. It is a medium-sized institution with 220 beds, and is fully equipped with medical as well as pedagogical facilities. The subjects in this sample

represent the staff who work with patients (i.e. doctors, educationists, nurses, physiotherapists, psycho-logists, social paedagogicians, teachers). The sample represents a subgroup (84%) of this staff. The vast majority of the personnel is recruited from the surrounding region. However, those in higher qualified positions come in some proportion from other areas in Bavaria and Germany. The location of the clinic is in the very south of the State of Bavaria in Germany, close to the Alpes in a small, picturesque town. Data were collected within the research project "Quality management in hospitals".

RESULTS

Reliability and descriptive statistics

The scales for the variables of trust, commitment and involvement proved to be reliable measures. Results in table 2 from the estimation of internal consistency indicate sufficient or high reliability for all scales for all four samples with the exception of the scale "calculative commitment". For this scale we find two alpha values which indicate insufficient reliability in the samples "Nursing for the elderly" and "Health care personnel". Comparing the reliability of the German translation of the three scales with their English original, we find similar results (see table) with two exceptions regarding the scale "calculative commitment".

Descriptive statistics (i.e. mean, standard deviation) for all scales used in this study are also presented in table 2. The scores for trust indicate that personal trust in supervisor and organisation is fairly high and similar among the four groups. Only with nurses for the elderly do we find a degree of personal trust in the organisation which is higher and differs significantly from that of the health care personnel (according to results of ANOVA which are not reported here).

While the results for trust clearly range above the midpoint of the scale, this also holds true for moral commitment and alienative commitment (reversed) but not for calculative commitment. In other words, the affective type of commitment is obviously stronger than the instrumental type in all samples. This is particularly true for the IT managers. Their affective commitment averages significantly above most of the other groups (according to results of ANOVA). The scores for job and work involvement in all groups range remarkably below the midpoint of the scale. Again we find significantly higher values

for the IT managers compared with the other three groups, although this is restricted to job involvement (according to results of ANOVA).

Hypotheses 1 and 2

In table 3 the results for hypotheses 1 and 2 are reported. The results confirm the first hypothesis. In all four samples we find a positive and significant correlation between personal trust in supervisor/organisation and affective commitment. As mentioned earlier, affective commitment in this study is operationalised by the degree of moral and alienative commitment. Alienative commitment obviously decreases under increasing personal trust while moral commitment increases.

In line with the second hypothesis we find that the results in table 2 again depict a clear picture. Calculative commitment – which stands for the instrumental type of commitment – is statistically uncorrelated to personal trust in all four samples. While the level of correlation is very low in three of the four samples, it is a little higher in the sample of office workers.

Hypotheses 3 and 4

While the results unequivocally confirm the first two hypotheses, this it not the case for the third and fourth hypothesis. The results with respect to involvement are to some extent equivocal for two reasons. First, the correlation between personal trust in supervisor/organisation and job involvement is positive, but not consistently so for all samples at a moderate or high level. The exceptions concern the IT managers in particular and, with respect to trust in supervisor, also the office workers. Secondly, while on the average we find lower correlations between personal trust and work involvement – as hypothesised – some of the correlations become significant contrary to the fourth hypothesis. A general exception to the

TABLE 2

Internal consistency, mean and standard deviation for trust, commitment and involvement scales

	Office workers		IT-Managers			Nurses for the elderly		Health care personnel			Original		
	α	(N = 32) M	SD	α	(N = 109) M) SD	α	(N = 66) M	SD	α	(N = 123) M	SD	α
Personal trust: supervisor (8)	0,93	3,71	0,59	0,87	3,60	0,53	0,95	3,85	0,72	0,94	3,72	0,70	0,951
Personal trust: organisation (4)	0,93	3,34	0,66	0,68	3,44	0,57	0,92	3,59	0,82	0,87	3,18	0,74	0,951
Commitment - morale (5)	0,81	3,31	0,78	0,74	3,73	0,67	0,73	3,28	0,75	0,84	3,20	0,81	0.86^{2}
Commitment – calculative (5)	0,69	3,08	0,72	0,72	2,97	0,74	0,40	2,87	0,63	0,46	2,87	0,60	0,782
Commitment – alienative (5)	0,80	2,14	0,73	0,84	1,77	0,67	0,85	2,03	0,83	0,88	2,37	0,92	0,862
Job involvement (10)	0,85	2,54	0,44	0,80	2,87	0,52	0,86	2,67	0,63	0,86	2,60	0,72	0,873
Work involvement (6)	0,82	2,83	0,67	0,79	2,76	0,61	0,78	2,82	0,74	0,89	2,85	0,71	0,753

Range of all scales: [1,5]; $^{\rm 1}$ Nyhan & Marlowe (1997) only provide Cronbachs α for the total scale;

² Penley & Gould (1988); ³ Kanungo (1982).

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rule of the third and fourth hypothesis is given by the results of the IT managers. Their personal trust does not correlate at all with job and work involvement.

It should be mentioned that the results with respect to all four hypotheses are not confounded by differences in sex, age, seniority and position because we controlled for these variables in all four samples by means of partial correlation analysis. This partialling became necessary for two reasons: First, these characteristics are well known for their influence on the variables under study, and secondly, the samples showed differences in these variables to a greater or lesser degree.

The results of the bivariate correlation analysis might to some extent be biased by the inter-correlation among the trust variables and the commitment and involvement variables. Therefore, additional canonical correlation analyses with the residual scores (i.e. after controlling for sex, age, seniority, position) were performed and canonical loadings for the significant canonical factors are reported in table 4. These multivariate results confirm the bivariate picture obtained with the results in table 3. It becomes clearer from the multivariate results in table 4 that there is evidence in favour of the fourth hypothesis: all in all the correlation between work involvement and personal trust is lower compared with the correlation with job involvement.

DISCUSSION

Trust has become an important issue in organisational research over the past number of years, with an obvious connection to major changes in economy and organisations. These changes are characterised by aspects such as restructuring (including lean management, downsizing, outsourcing), greater flexibility in office hours and in the work force, boundary-less and virtual forms of organisation, and so forth (e.g. Wigand, Picot & Reichwald, 1997). At the centre of most of these far-reaching changes is the increased flexibility in the different areas of work and organisation.

In summary one can ask: "What motivates contemporary workers to identify with an organization, given a history of change and an uncertain future?" (Rousseau, 1998, p. 218). While on the one hand the relationship between dynamic changes in present organisations and the formation of an identity seem to contradict each other more than ever, on the other hand it appears that the existence of identity is fundamental to the development and prosperity of organisations. I think Rousseau (1998, p. 228) is right in stating that "deep structure identification [with the organisation, AB] increases worker acceptance of change".

However, what is necessary for workers to identify with their organisations, particularly in times of turbulent organisational

Table 3

Partial correlation between trust, commitment and involvement controlling for sex, age, seniority and position

	Office	Office workers (N = 32)		IT-Managers (N = 109)		es for Iderly	Health care personnel		
	(N =					66)	(N = 123)		
	Trust: S	Trust: O	Trust: S	Trust: O	Trust: S	Trust: O	Trust: S	Trust: O	
Commitment – morale	0,47*	0,73**	0,32**	0,28**	0,40**	0,55**	0,48**	0,55**	
Commitment – calculative	0,21	0,26	-0,026	-0,013	0,090	-0,062	0,080	-0,031	
Commitment – alienative	-0,48*	-0,62**	-0,42**	-0,37**	-0,37**	-0,53**	-0,55**	-0,61**	
Job involvement	0,11	0,41*	≈ 0	0,015	0,51**	0,42**	0,31**	0,41 * *	
Work involvement	0,14	0,27	-0,032	-0,008	0,33*	0,17	0,34**	0,36**	

^{*} p-value ≤ .05.;

TABLE 4

CANONICAL CORRELATION BETWEEN TRUST, COMMITMENT AND INVOLVEMENT

	Office workers	IT-Managers	Nurses for the elderly	Health care personnel		
	(N = 32)	(N = 109)	(N = 66)	(N = 123)		
	CR = 0.75 *	CR = 0.51*	CR = 0.69*	CR = 0.69*		
Trust as predictor						
Personal trust: supervisor	-0,73	-0,93	-0,88	-0,84		
Personal trust: organisation	-0,95	-0,86	-0,96	-0,97		
Commitment as criteria						
Commitment – morale	-0,97	-0,63	-0,73	-0,75		
Commitment – calculative	-0,38	0,064	-0,025	0,014		
Commitment – alienative	0,88	0,81	0,74	0,94		
Involvement as criteria						
Job involvement	-0,51	-0,039	-0,71	0,63		
Work involvement	-0,39	0,054	-0,39	-0,59		

^{*} Significant canonical correlation with p-value ≤ 0.05 .

Data for this paper are taken from the following projects: "Telework and quality of working life (AQUATEL)" granted to the author by the Ministry of Work, Social Affairs, Qualification and Technology (MASQT) of the State of North Rhine-Westphalia, German part of the "Collaborative International Study of Managerial Stress (CISMS)", "Interaction work in person-related services (IntAkt)" granted to the author by the Federal Ministry of Education and Research (BMBF) and "Quality management in hospitals" granted to the author by several hospitals. I would like to thank Britta Herbig and Jürgen Glaser (both Chair of Psychology, Technical University Muenchen) for their support.

^{**} p-value ≤ .01.

environments? In this paper we have looked at trust and its relation to commitment and involvement, which are both elements of identification with organisations and work. The results show significant relations between trust, commitment and involvement. These relations are quite consistent across the different organisations, types of work and groups of employees in this study. According to the hypotheses we found that personal trust in supervisor and organisation is substantially correlated with the affective type of commitment, i.e. with affective and alienative commitment, but not correlated with the instrumental type of commitment. In other words, as an important element of identification, employees' affective commitment with their organisations is dependent upon the degree of trust.

With regard to contracts in organisations this result might be interpreted in the light of its two bases: the legal (materially based) and the psychological (immaterially based) one. It seems that personal trust functions well as a "state" within the psychological contract model by influencing and strengthening affective types of commitment while instrumental, and in particular calculative, commitment may function more adequately within a materially based frame of contracting, emphasising the view of investments, exchange and continuance. Therefore, models of psychological contract, for example the one by Guest (1998) – including trust as a state which is supposed to mediate between causes (e.g. HRM policy) and for example organisational commitment as a consequence – should be specifically restricted to the affective type of organisational commitment.

Job involvement as another element of identification in work and organisational settings is also correlated with personal trust, however less consistently and less strongly compared with affective commitment. In other words, with increasing personal trust we find employees more affectively attached to and involved in their contemporary job and in the specific job context. In contrast to job involvement, results show on average lower correlations between personal trust and work involvement. This indicates that personal trust in supervisor and organisation has less to do with what is called "work as a central life interest" and that personal trust has only weak relations to work involvement as a normative belief, a belief which is historically instilled through past conditioning or socialisation in family, school and so on.

This holds true for three of the four groups of employees – office workers, nurses, health care personnel. However, we did not find any such relation between personal trust and involvement for the IT managers. Whereas for the three groups we were able to control for position, the IT managers were all in an executive position; moreover, the managers were recruited from all over Germany, from Europe and world-wide, most of them were intrapreneur oriented, highly mobile and regularly changed their location, often travelling both nationally and internationally. In a sense this group of people appear to be similar to what Sennett (1998) described as the "flexible man". It might be somehow characteristic for this new type of highly qualified and flexible employee to experience a loose relationship between personal trust in supervisor/organisation and identification with their job and work.

In conclusion, one should point out some limitations of this study. Although we were able to control for some important potentially intervening variables, it should be clear that the generalisability of the results is limited. One limitation is the choice of professions and branches. It would be interesting to see if the interpretation and conclusions inferred from these results are valid for other groups of employees. Another limitation on generalisability is that – except for the group of IT managers – the other three groups are regionally located. Further research beyond these limitations could add evidence to the validity of the results.

While this study is a correlational one and therefore does not allow causal arguments, many articles on trust - as mentioned in the section on theory above - posit that commitment and involvement are consequences and trust is an effect in the sense of a main, moderating or mediating effect. The answer to the question about the position of trust within a chain of causality is not only a methodological matter of hen or egg; the answer in fact has practical implications with respect to work and organisation (e.g. Lane & Bachmann, 1998). From developmental psychology we may conclude that trust is - at least at the level of early interpersonal relations ontogenetically first (e.g. Erickson, 1968). However, this cannot serve as a sufficient argument for the functioning of trust in social contexts such as in organisations and firms in particular. Therefore, we need practically relevant longitudinal or, even better, controlled studies that allow us to analyse causal interdependencies.

REFERENCES

- Brockner, J., Siegel, P.A., Daly, J.P., Tyler, T. & Martin, C. (1997). When trust matters: The moderating effect of outcome favorability. *Administrative Science Quarterly*, 42, 558-583.
- Büssing, A. (2000). Identität und Vertrauen durch Arbeit in virtuellen Organisationen? [Identity and trust through work in virtual organizations?] In M. Boos, K.J. Jonas & K. Sassenberg (Eds.). *Computervermittelte Kommunikation in Organisationen* [Computer mediated communication in organisations] (pp. 57-72). Göttingen: Hogrefe.
- Cook, J. & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need nonfulfilment. *Journal of Occupational Psychology*, 53, 39-52.
- Cummings, I.I. & Bromiley, P. (1996). The organizational trust inventory (OTI): Development and validation. In R.M. Kramer & T.R. Tylor (Eds.). *Trust in organisations: Frontiers of theory and research* (pp. 302-330). Thousands Oaks, CA: Sage.
- De Ruyter, K., Moorman, L. & Lemmink, J. (2001). Antecedents of commitment and trust in customer-supplier relationships in high technology markets. *Industrial Marketing Management*, 30, 271-286.
- Dirks, K. T. & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science*, *12*, 450-467.
- Erickson, E.H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Etzioni, A. (1961). *A comparative analysis of complex organizations*. New York: Free Press.
- Garbarino, E. & Johnson, M.S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing*, 63, 70-87.
- Giddens, A. (1990). *The consequences of modernity*. Oxford: Oxford University Press.
- Guest, D.E. (1998). Is the psychological contract worth taking seriously? *Journal of Organizational Behavior*, 19, 649-664.
- Hall, D.T., Goodale, J.G., Rabinowitz, S. & Morgan, M.A. (1978). Effects of top-down departmental and job change upon perceived employee behavior and attitudes: A natural field experiment. *Journal of Applied Psychology, 63, 62-72*.
- Kanungo, R.N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology*, 67, 341-349.
- Kanter, R.M. (1968). Commitment and social organization: A study of commitment mechanisms in utopian communities. *American Sociological Review*, 33, 499-517.
- Kramer, R.M. (1999). Trust and distrust in organisations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, *50*, 569-598.
- Kramer, R.M. & Tyler, T.R. (Eds.). (1996). *Trust in organisations:* Frontiers of theory and research. Thousands Oaks, CA: Sage.
- Lane, C. & Bachmann, R. (Eds.). (1998). *Trust within and between organizations: Conceptual issues and empirical applications*. Oxford: Oxford University Press.
- Laschinger, H.K.S., Finegan, J. & Shamian, J. (2001). The impact

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of workplace empowerment, oganizational trust on staff nurses' work satisfaction and organizational commitment. *Health Care Management Review, 26, 7-23.*

- Lorence, J. & Mortimer, J.T. (1981). Work experience and work involvement. *Sociology in Work and Occupations*, 8, 297-326.
- Luhmann, N. (1973). *Vertrauen: Ein Mechanismus der Reduktion sozialer Komplexität*. [Trust: A mechanism for the reduction of social complexity] Stuttgart: Enke.
- Luhmann, N. (1979). Trust and power. New York. Wiley.
- Meyer, J.P. & Allen, N.J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, 69, 372-378.
- Meyer, J.P & Allen, N.J. (1991). A three-component conceptualisation of organizational commitment. *Human Resource Management Review*, 1, 61-89.
- Morrow, P.C. (1983). Concept redundancy in organizational research: The case of work commitment. *Academy of Management Review*, 8, 486-500.
- Moser, K. (1996). *Commitment in Organisationen* [Commitment in organisations]. Bern: Huber.
- Moser, K. & Schuler, H. (1993). Validität einer deutschsprachigen Involvement-Skala [Validity of a German Involvement-Scale]. Zeitschrift für Differentielle und Diagnostische Psychologie, 14, 27-36.
- Nyhan, R.C. & Marlowe, H.A. (1997). Development and psychometric properties of the organizational trust inventory. *Evaluation Review*, *21*, 614-635.

- Penley, L. E. & Gould, S. (1988). Etzioni's model of organizational involvement: A perspective for understanding commitment to organizations. *Journal of Organizational Behavior*, 9, 43-59.
- Rotter, J.B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, *35*, 651-665.
- Rotter, J.B. (1971). Generalized expectancies for interpersonal trust. *American Psychologist*, *26*, 443-452.
- Rousseau, D.M. (1998). Why workers still identify with organizations. *Journal of Organizational Behavior*, 19, 217-233.
- Rousseau, D.M., Sitkin, S.B., Burt, R.S. & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393-404.
- Salancik, B.M. (1977). Commitment and the control of organisational behavior and belief. In B.M. Staw & G.R. Salancik (Eds.). *New directions in organizational behavior* (pp. 1-54). Chicago: St. Clair Press.
- Sennett, R. (1998). *The corrosion of character*. New York: Norton. Wigand, R., Picot, A. & Reichwald, R. (1997). *Information, organisation and management: Expanding markets and corporate boundaries*. Chichester: Wiley.
- Williamson, O.E. (1993). Calculativeness, trust and economic organization. *Journal of Law and Economics*, 30, 131-145.
- Wrightsman, L.S. (1964). Measurement of philosophies of human nature. *Psychological Reports*, *14*, 743-751.