

Assessing Affective Commitment in the Three-Component Model and the Two
Factor Theory:

A Comparison between the Theories of Meyer and Allen and Herzberg, Mausner
and Snyderman

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ABSTRACT

The purpose of this paper is to contribute to the empirical evidence concerning affective commitment by assessing the three-component model (Meyer & Allen, 1991) and the two factor theory (Herzberg, Mausner & Snyderman, 1959). Using survey data from 167 stores and 4112 employees from Poland and 191 stores and 6136 employees from the Czech Republic it is found that the three-component model predicts the simple and mediating effects reasonably well. Especially work experiences appear to have a large influence on affective commitment. The interaction effects from both theories were found antagonistic using this data. The model does not fit the data when all confirmed hypotheses are combined to one model. There were no higher order effects, neither from supermarket nor country. For future research a conceptual model with better defined constructs and sub constructs, that are more compatible with the hygiene and comfort factors, would be fruitful.

Keywords: Affective commitment, Three-component model, Two factor theory, Work experiences, Supermarket

Assessing affective commitment in the three-component model and the two factor theory

A comparison between the models from Meyer and Allen and Herzberg, Mausner and Snyderman

Scholars who study the efficiency and effectiveness of an organization, for example scholars in the field of industrial-organizational psychology, economics, marketing and management, have become increasingly interested in organizational commitment. This is not surprising since organizational commitment is found to be empirically related to economical concepts like job performance (Mowday, Porter, & Dubin, 1974; Steers, 1977), absenteeism (Sagie, 1998), turnover intentions and cognitions (e.g., Angle & Perry, 1981; Porter, Steers, Mowday, & Boulian, 1974), job satisfaction (Bluedorn, 1982; Eby, Freeman, Rush & Lance, 1999; Tett & Meyer, 1993) and to more recently developed psychological constructs like organizational citizenship (O'Reilly & Chatman, 1986; Shore & Wayne, 1993).

In an attempt to synthesize the organizational commitment research Allen and Meyer (1990) and Meyer and Allen (1991) analysed an extensive amount of commitment literature. In both reviews they define organizational commitment as a psychological state that characterizes the relationship that the employee has with the organization; a relationship that influences the decision of the employee to stay in or leave the organization. In the same articles they conceptualize three distinguishable components of commitment. The first component, *affective* commitment has three subcomponents 1) the emotional attachment to the organization 2) the identification with the organization and 3) the involvement in the organization. Employees that are strong affective committed want to stay employed in the organization. The second component, *continuance* commitment refers to perceived costs when the employee would leave the organization. Employees with this kind of commitment stay employed in the organization because they need to be. The third component, *normative* commitment concerns a perceived obligation to stay with the organization. Employees that are strong normative committed stay in the organization because they believe they ought to. Hackett, Bycio and Hausdorf (1994) and Allen and Meyer (1996) argued that there was enough evidence regarding the construct validity of the three components of organizational commitment. In 2002 a meta analysis of empirical studies from Meyer, Stanley, Herscovitch and Topolnytsky showed that the three components of commitment are related yet distinguishable from one another.

Allen and Meyer (1990) and Meyer and Allen (1991) argued that it is likely that the three conceptual different components of commitment have different antecedents and different implications for work relevant behaviour other than turnover. Based on this idea they created the three-component model of organizational commitment. The model is mainly based on induction, only a small part of the model is based on empirical evidence (Meyer & Allen, 1991). Up till now the three-component model is seen as the dominant model in organizational commitment (e.g., Bentein, Vandenberg, Vandenberghe, & Stinglhamber, 2005; Cohen, 2003; Greenberg & Baron, 2003). To date, empirical research has shown that affective commitment predicts employee performance (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989), absenteeism (Sagie, 1998), turnover (Tett & Meyer, 1993) and organizational citizenship (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Organ & Ryan, 1995) better than the other components of commitment. However there is no consensus about the causal ordering and the strengths of the relationships between all the antecedents and between the antecedents and affective commitment (Bateman & Strasser, 1984; Brown & Peterson, 1993; Curry, Wakefield, Price & Mueller, 1986; Vandenberg & Lance, 1992).

The purpose of this paper is to contribute to the empirical evidence concerning affective commitment by assessing the extent to which the antecedents predict affective commitment and especially evaluate the role of the moderating and mediating factors in the three-component model (Meyer and Allen, 1991) and the two factor theory Herzberg, Mausner and Snyderman (1959). Because affective commitment predicts better than the other components of commitment, this is the main focus in this paper. The model of the antecedents of affective commitment as Meyer and Allen (1991) proposed is presented in Figure 1. The solid lines represent the hypotheses tested in this paper, the dashed lines are left out of the analyses. The whole three-component model of organizational commitment from Meyer and Allen (1991) can be found in appendix 1.

The idea from Reichers (1985) and Becker (1992) that (affective) commitment is not unidimensional and has different foci, is followed in this paper. They suggest to measure different foci of commitment because employees can be committed to different individuals and targets, for example: supervisor, colleagues and team. Therefore this papers focus is on affective commitment to work, colleagues and supermarket

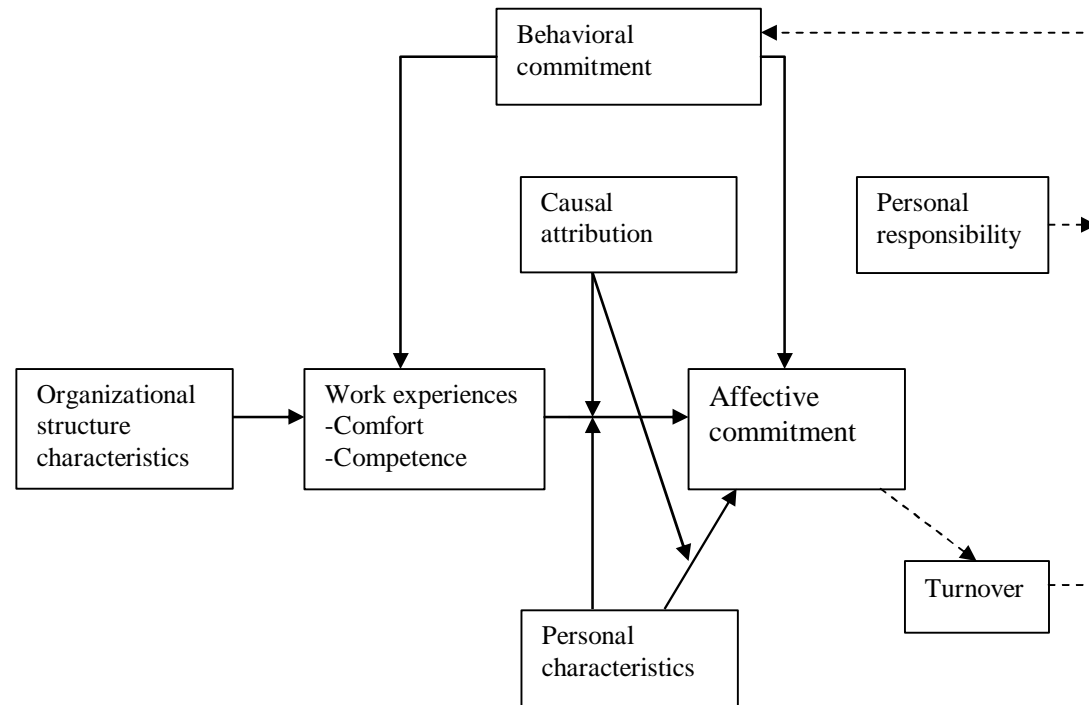


Figure 1. Part of the three-component model of organizational commitment from Meyer and Allen (1991).

Note. The solid lines represent the hypotheses tested in this paper.

According to Meyer and Allen (1991) work experiences have the strongest and most consistent positive relationship with affective commitment. They refer to Herzberg (1966) to make a distinction between the comfort and the competence categories in work experiences. To clarify this, the two factor theory of job satisfaction from Herzberg, Mausner and Snyderman (1959) is here explicated first, later on the explanation of Meyer and Allen's (1991) three-component model is continued.

The two factor theory of job satisfaction from Herzberg et al. (1959) is developed on the basis of the occurrence of events (critical incidents) technique. The theory distinguishes between dissatisfiers (hygiene factors) and satisfiers (motivational factors) of a job. The hygiene factors or dissatisfiers are intrinsic to a job, these are: working conditions, policies and administrative practices, salary and benefits, work itself, supervision, subordinates, peers, status, job security, co-workers and personal life. The motivational factors or satisfiers are comparable to the self-actualisation need from Maslow's hierarchy of needs (Maslow, 1943) and are extrinsic to a job. These factors are recognition for achievement, work itself, possibility of growth, advancement, responsibility and job challenge. This distinction between the satisfiers and the dissatisfiers is made because factors that lead to job satisfaction are different from factors that lead to job dissatisfaction. This means that the opposite of job satisfaction is not job

dissatisfaction but no job satisfaction, and the opposite of job dissatisfaction is not job satisfaction but no job dissatisfaction; satisfaction and dissatisfaction thus are on different continua (Herzberg, 1968).

According to Herzberg et al. (1959) the absence of hygiene factors creates job dissatisfaction but the presence of hygiene factors does not create satisfaction or motivation. Employees are not satisfied when hygiene factors are absent however when they are present the satisfaction is only temporary and they will begin to strive to more satisfaction; hygiene factors can only produce short term changes in job attitudes and do not enrich a person's job. In contrast to the hygiene factors the motivating factors are associated with long term positive effects in job attitudes; they enrich a person's job. According to the theory the hygiene factors must be on a minimum level before the motivating factors can be used to stimulate a person.

The motivating factors can only satisfy an employee if the hygiene factors are sufficient. This is called an interaction effect; the effect of the motivating factor is dependent on the level of the hygiene factor. In this case the hygiene or comfort factors are to be seen as the moderating variables. "A moderator is a qualitative or quantitative variable that affects the direction and/or the strength of the relationship between an independent or predictor variable and the dependent or criterion variable" (Baron & Kenny, 1986, pg. 1176). Consequently the first hypothesis based on Herzberg's theory is: *the hygiene factors have a positive moderating effect on the relationship between the motivational factors and affective commitment to work, colleagues and supermarket (hypothesis 1).*

It should be noted that Herzberg's theory focuses on job satisfaction rather than on affective commitment. Although, according to the definitions, commitment can be seen as a more general measure than job satisfaction; commitment applies to the appraisal of the organization as a whole whereas job satisfaction applies the appraisal of the job or certain aspects of the job (Locke, 1976).

Although Meyer and Allen (1991) refer to Herzberg's two factor theory and make the distinction between competence and comfort factors theoretically, they do not divide the two separate constructs into two factors and do not use the comfort factor as moderator, as suggested by Herzberg et al (1959). Instead Meyer and Allen (1991) make one construct (work experiences) of the comfort and competence factors together. Meyer and Allen (1991) also do not use the same constructs to measure the hygiene and competence factors as Herzberg does. They believe that the comfort category is best measured by: pre-entry expectations, freedom from conflict, equity in reward distribution, organizational support, organizational dependability, role clarity and supervisor consideration. Accomplishment, autonomy, fairness of performance-based rewards, job challenge, job scope, opportunity for advancement,

opportunity for self expression, participating in decision making and personal importance to the organization are according to them the constructs in the competence category. Consequently the second hypothesis is: *the combined influence of the comfort and competence factors has a positive effect on affective commitment to work, colleagues and supermarket (hypothesis 2)*. This hypothesis is competing with hypothesis 1.

Meyer and Allen (1991) do not explain why they do not use the moderator as suggested by Herzberg et al. (1959). They merely incorporate another moderator in their model, based on research from Hackman and Oldham (1976) and Hulin and Blood (1968); the fit between personal characteristics and the organization, called the person-environment fit. The personal characteristics such as need for achievement, affiliation, autonomy, higher order need strength, personal work ethic, locus of control and central life interest in work, are *personal dispositions*. If these personal dispositions are compatible with what the organization is offering them affective commitment can result. The difference between the moderator of two factor theory and the three-component model is that Herzberg implicitly assumes that all people have higher order needs whereas Meyer and Allen at least think that the degree of higher order needs is not the same for all people. Meyer and Allen (1991) modelled this moderator between work experiences and affective commitment. Consequently the third hypothesis is: *person-environment fit has a positive moderating effect on the influence of work experiences on affective commitment to work, colleagues and supermarket (hypothesis 3)*.

Meyer and Allen (1991) also present another perspective on the personal characteristics, namely a direct influence from personal characteristics to affective commitment. Consequently the fourth hypothesis is: *personal characteristics have a direct positive effect on affective commitment to work, colleagues and supermarket (hypothesis 4)*. This hypothesis is competing with hypothesis three.

Meyer and Allen (1991) reason that person-environment fit may not be enough to get an employee committed to the organization. The person also has to attribute that fit to the organization. This means that causal attribution moderates the relationship between personal characteristics and affective commitment. However Meyer and Allen (1991) place in their model the potential moderating effect from causal attribution between work experiences and affective commitment. This lack of clarity on where to place the moderator results in the following two hypotheses: *causal attribution has a positive moderating effect on the influence from personal characteristics on affective commitment to work, colleagues and supermarket (hypothesis 5)* and *causal attribution has a positive moderating effect on the influence from work experiences on affective commitment to work, colleagues and supermarket (hypothesis 6)*.

Meyer and Allen (1991) indicate that the relationship between organizational structure characteristics and affective commitment is not examined thoroughly, nonetheless they expect, based on research of Brooke, Russell and Price (1988); Morris and Steers (1980); O'Driscoll (1987); Podsakoff, Williams and Todor (1986), that decentralization of decision making and formalization of policy and procedure are related to affective commitment. Podsakoff et al. (1986) suggest that organizational structure characteristics do not have a direct effect on affective commitment, but rather, that the relationship is mediated by work experiences, Meyer and Allen (1991) included work experiences as mediator in the relationship between organizational structure characteristics and affective commitment. Consequently the seventh hypothesis is: *work experience is a mediator in the relationship between organizational structure characteristics and affective commitment to work, colleagues and supermarket (hypothesis 7).*

Meyer and Allen (1991) describe behavioural commitment as a form of commitment that is very elusive and beyond conscious recognition. It relates to the process of becoming locked into an organization and how employees deal with this. Associated with this kind of commitment is a state best described as a desire to continue employment. Meyer and Allen (1991) model behavioural commitment as a variable that influences the independent variable work experiences as well as the dependent variable affective commitment. But it is also a variable that is influenced by affective commitment, the endogenous variable turnover and the exogenous variable personal responsibility. This results in the following hypotheses: *Behavioural commitment has a positive, direct influence on affective commitment to work, colleagues and supermarket (hypothesis 8) and work experiences mediate the relationship between behavioural commitment and affective commitment to work, colleagues and supermarket (hypothesis 9).*

METHOD

Participants: Data from a large research project for a worldwide operating retail company is used to examine the above hypotheses. The data were collected in three Eastern European countries: Czech Republic, Poland and Slovakia. In total this data includes 399 supermarkets, with a total of 11416 staff. From the 17 Slovakia supermarkets, 1128 employees have returned their questionnaire. The average size of the Slovakia supermarket is 66.4 (SD = 20.6). From the 171 supermarkets in Poland 4122 employees returned their questionnaire. The average size of the Polish supermarkets is 24.1 (SD = 26.7). From the 211 Czech supermarkets, 6166 questionnaires returned, which is an average of 29.2 (SD = 39.0) per supermarket. Because supermarkets in Slovakia are scarce and much larger in staff than those of the two other countries they are excluded from the analysis. 24 Supermarkets with in total of 39 staff were excluded because the responses per supermarket were too low, only 1 till 3 employees per supermarket returned the questionnaire. Resulting in 167 stores and 4112 employees from Poland and 191 stores and 6136 employees from Czech, to be used in the analysis.

The dataset includes 77.6% male and 22.4% female employees. There are gender differences between employees of the two countries, in Poland is 72.1% male, in the Czech Republic is 81.3% male. 25.0% of the respondents were younger than 25 years, 19.6% were between 26 and 30 year old, 23.4% were between 31 and 40 years of age and 28.4% were older than 40 years, 3.6% did not answer this question. The employees in the Czech Republic are relatively older than employees from the Polish sample.

17.5% of the employees worked less than 6 months for the supermarket, 12.6% worked there between 6 months and a year, 34.4% worked between 1 and 3 years for that supermarket, 20.3% worked between 3 and 5 year for that supermarket and 15.2% worked there over 5 years. There are no big differences between the countries with respect to how many month/years people are working for the supermarket. The employees in the Czech Republic had a relatively lower educational background than the employees from Poland. 53.0% of the employees had a permanent contract.

Data Collection Procedure: Prior to the data collection two meetings were held in the Czech Republic to inform respectively the top management and HR managers of the importance and content of the research. The meetings also addressed questions about the utility of the questionnaire, confidentiality and logistics. All employees were informed about the questionnaire two weeks before it was distributed by the supermarket managers. The surveys were coded in order to match the responses from the employees to the stores. Confidentiality of the survey was guaranteed to all respondents.

The questionnaires were translated to Polish and Czech by native speakers of the company, other native speakers translated the questionnaires back to English. The translations were verified and considered adequate by university colleagues originating from the two countries. To guarantee clarity and consistency, a pilot study among supermarket employees was conducted in each country. The questions were found clear and relevant.

Measures: All questions were measured as 5-point Likert formatted items; the items are coded such that a high score indicates a high amount of the particular construct. Items were worded to determine the general extent of a participant's feeling or beliefs. The events that may have given rise to those feelings or beliefs were not examined.

The dependent variables, affective commitment towards work, colleagues, team and supermarket were measured with the adapted version of Allen and Meyer's (1990) affective commitment scale. The

adaptation was made to enhance comprehension of the questions for low skilled employees (Torka, 2003).

Table 1 displays sample items, the number of items and Cronbach's alpha of each (sub) construct that measured the affective commitment and its antecedents. All the questions used for this analysis can be found in appendix 2. Because this research is done with an already existing questionnaire some sub constructs are not measured quite as well as they could be measured. For example from the construct personal characteristics, the sub constructs need for affiliation and locus of control were not measured. The questionnaire does not measure the whole construct as it was meant, this will negatively influence the content validity. This probably does not have a huge influence on the outcome because all independent variables, measured and non measured, are positive related to the dependent variable, so there is a probability that the relationships are over- or underestimated however the signs will not change because of it.

Table 1.

Cronbach's alpha and the number of items per (sub) construct

Constructs	Questions	Cronbach's alpha	N of Items
Affective commitment			
Affective commitment work,	My work is interesting	0.85	3
Affective commitment team	I am proud to work for my team	0.76	3
Affective commitment colleagues	I like to associate with my colleagues	0.72	4
Affective commitment hypermarket	I am proud to work for this hypermarket	0.89	6
Combined reliability estimate of commitment		0.91	16
Competence factors Herzberg			
Recognition for achievement	If I do a good job, my immediate colleagues tell me so	0.58	3
Work itself	My work fits my abilities.	0.62	3
Responsibility	I feel responsible for my work	0.90	11
Job challenge	My work requires learning continuously	0.66	7
Combined reliability estimate of competence		0.87	26
Herzberg hygiene			
Working conditions	It often seems that have too many things to do	0.66	2
Salary and benefits	The benefits I receive are better than most other companies of this type offer		1
Supervision	My immediate supervisor treats me fairly	0.85	4
Status	I have a good reputation at this hypermarket	0.79	3
Job security	This hypermarket takes good care of me		1
Co workers and personal life	I meet my colleagues outside work as well	0.69	5

Constructs	Questions	Cronbach's alpha	N of Items
Combined reliability estimate of hygiene		0.73	16
Personal characteristics			
Need for achievement	Doing my work well is important to me	0.52	2
Need for autonomy	In my work I prefer to decide what to do and how to do it by myself		1
Higher order need strength	I like to learn new things through my work		1
Personal work ethic	It is important to me, that people are satisfied with my work performance	0.62	6
Central life interest in work	I can't imagine my life without my career	0.62	3
Combined reliability estimate of personal characteristics		0.69	10
Person environment fit			
	My work fits my abilities.	0.62	3
Causal attribution			
Attributed fit	Changing employer would mean more uncertainty	0.73	3
Allen and Meyers comfort factors			
Organizational dependability	I could easily get another job elsewhere	0.82	3
Role clarity	I know the way tasks are distributed in my team	0.70	4
Supervisor consideration	My supervisor gives me good information about proposed changes in my tasks	0.79	4
Combined reliability estimate of comfort		0.69	10
Allen and Meyer competence factors			
Accomplishment	I have influence in my team		1
Autonomy	My supervisor and/or colleagues tell me what to do		1
Job challenge	My work requires learning continuously	0.68	6
Opportunity for self expression	My supervisor encourages me to speak up on things related to my work	0.82	4
Participation in decision making	We can influence decisions our immediate supervisor takes about our tasks	0.83	4
Combined reliability estimate of competence		0.83	16
Organizational structure			
	We can influence decisions our immediate supervisor takes about our tasks	0.83	4
Behavioural commitment			
	How long have you been working in this department		1

Note. Work experiences according to Allen and Meyer are the comfort factors and the competence factors combined.

Principal component analysis suggests the feasibility of collapsing the four hypothesized dependent variables into three dependent variables because affective commitment to team and colleagues load on the same factor.

Furthermore the semantic distinction between sub constructs is not always clear. For instance, organizational structure has the sub construct decentralization of decision making, which is similar to the competence factor participation in decision making at an individual measurement level. It can be argued that the competence factor sub components opportunity for self expression and participation in decision making are distinctive yet related. Person-environment fit is also very similar to the sub construct work itself from the Herzberg hygiene factor.

In table 2, which displays the correlation matrix, the means and standard deviations, can be seen that only 11 of the 45 correlation coefficients are greater of magnitude than the intrascale reliability estimates (Cronbach's alpha). This indicates sufficient discriminant validity between the constructs. Especially considering the fact that some questions a part of more than one construct; for example in A&M comfort en A&M organizational structure. The high intrascale correlations are at least partially a result of the common method variance, which is a predictable consequence of lengthy self-report measures (Podsakoff, MacKenzie, Lee & Podsakoff, 2003).

Table 2.

Means, standard deviations, and intercorrelations of constructs

	Mean	SD ^a	1	2	3	4	5	6	7	8	9	10	11	12
1. Affective comm. work	3,77	0,81	1,00											
2. Affective comm. team	3,85	0,65	0,53	1,00										
3. Affective comm. colleagues	3,79	0,57	0,31	0,51	1,00									
4. Affective comm. location	3,60	0,77	0,64	0,62	0,40	1,00								
5. Herzberg comfort	3,51	0,47	0,66	0,54	0,39	0,60	1,00							
6. Herzberg hygiene	3,29	0,44	0,42	0,48	0,41	0,61	0,52	1,00						

	Mean	SD ^a													
			1	2	3	4	5	6	7	8	9	10	11	12	
7. M&A Personal Characteristics	4,07	0,43	0,31	0,31	0,31	0,27	0,34	0,23	1,00						
8. M&A person-environment fit	3,22	0,66	0,38	0,26	0,17	0,33	0,42	0,26	0,17	1,00					
9. M&A Causal attribution	2,75	0,79	0,24	0,21	0,16	0,36	0,24	0,37	0,03	0,14	1,00				
10. M&A hygiene	3,68	0,44	0,37	0,42	0,32	0,39	0,46	0,44	0,34	0,24	0,07	1,00			
11. M&A comfort	3,19	0,55	0,46	0,43	0,32	0,48	0,66	0,46	0,29	0,21	0,17	0,53	1,00		
12. M&A Organizational structure	2,98	0,89	0,37	0,37	0,26	0,46	0,54	0,48	0,19	0,21	0,22	0,53	0,79	1,00	

Note. The values are the mean of reported scores on a 5-point scale (1-5).

^aStandard deviation.

RESULTS

Because the participants are nested in supermarkets that are nested in countries the unconditional intraclass correlations are computed to determine whether or not there is a multilevel effect.

Table 3.

The unconditional intraclass correlations per dependent variable on the higher order levels

	Unconditional intraclass correlation	
	Supermarket	Country
Affective commitment to work	0.04 ns	0.01 ns
Affective commitment to colleagues	0.02 ns	0.01 ns
Affective commitment to location	0.02 ns	0.00 ns

In table 3 can be seen that the unconditional intraclass correlation estimates for supermarket range from 0.02 to 0.04, this means that at best 4 percent of the variability in affective commitment occurs between supermarkets and at least 96 percent of the variability occurs within supermarkets. The unconditional

intraclass correlation estimates for countries range from 0.00 to 0.01, thus at best 1 percent of the variability in affective commitment occurs between countries and at least 99 percent of the variability occurs within countries. These estimates show that there is almost no within-group dependence (supermarket and country) so there is no need to use multilevel analyses.

The first hypothesis tested is: hygiene factors have a positive moderating effect on the influence from motivational factors on affective commitment. Because the nature of this interaction effect is not explicitly stated it is assumed that the interaction effect is either linear or step. To test the step moderator, in this case the hygiene factor is dichotomized at 3. The cut off point is at 3 because 3 is the neutral point. Respondents that score 3 are do not experience high or low hygiene. Therefore it can be argued that people who score above 3 experience enough hygiene, to have effect from the comfort factors. The hypothesis is supported if the moderator has a significant effect in the hypothesised direction on the dependent variable while the relationships between the independent and the dependent are controlled (Baron & Kenny, 1986). To reduce the multicollinearity, the variables that are used to test the moderators are centred. Hypothesis 1 is not supported by the data because the moderating effect that is found is antagonistic for affective commitment to work, affective commitment to colleagues and affective commitment to supermarket. In table 1 we can see that the step moderator is not significant with respect to affective commitment to work, but is significant with respect to affective commitment to colleagues and affective commitment to supermarket, this relation however is antagonistic. H1 can therefore not be confirmed by the data for all three forms of affective commitment.

The second hypothesis predicted that the combined influence of the comfort and competence factors has a positive effect on affective commitment. Table 5 and 6 show that the comforts as well as the competence factors have a positive influence on the three foci of affective commitment. It can be seen that the competence factors ($\beta = .40$, $\beta = .33$, $\beta = 0.40$, $p < 0.01$) have relatively more influence on affective commitment to work, colleagues and supermarket than the comfort factors ($\beta = .14$, $\beta = .24$, $\beta = 0.17$, $p < 0.01$). H2 can be confirmed by the data for the three foci of affective commitment.

Comparing the standardized beta coefficients for the comfort and competence factors from Allen and Meyers theory with Herzberg's hygiene and motivational factors, it can be seen that Herzberg's motivational factor has more influence on affective commitment to work, colleagues and supermarket ($\beta = .62$, $\beta = .38$, $\beta = 0.40$, $p < 0.01$) than the competence and comfort factors. The hygiene factor ($\beta = .10$, $p < 0.01$) from Herzberg has lower influence on affective commitment to work than the comfort and competence factors. The hygiene factors ($\beta = .32$, $\beta = .40$, $p < 0.01$) have approximately the same influence

on affective commitment to colleagues and supermarket as the competence factors. It seems that Herzberg's theory without the moderator predicts better than Allen and Meyers theory.

The third hypothesis predicts that person-environment fit positively moderates the effect from work experiences on affective commitment. Because the nature of this moderator is not explicitly stated, it is assumed to be linear. From table 5 and 6 can be concluded that the moderating effect is present but is antagonistic ($\beta = -.05$, $p < 0.01$, $\beta = -.01$, ns, $\beta = -0.03$, $p < 0.01$). H3 can not be confirmed for any of the three foci of affective commitment.

The fourth hypothesis predicts that personal characteristics have a direct positive influence on affective commitment. In table 5 and 6 we can see that personal characteristics are indeed positively related to affective commitment to work colleagues and supermarket ($\beta = .30$, $\beta = .36$, $\beta = 0.27$, $p < 0.01$). This means H4 can be confirmed for the three foci of affective commitment.

Hypothesis 5 predicts that causal attribution has a moderating effect on the influence from personal characteristics on affective commitment. In table 5 and 6 can be seen that the interaction effect of causal attribution was not found significant for the three foci of affective commitment ($\beta = -.01$, $\beta = -.01$, $\beta = -.01$, ns). H5 therefore can not be confirmed.

Table 5.

Affective commitment to work, colleagues and supermarket for hypothesis 1 to 5

	Affective commitment to:											
	work				colleagues				supermarket			
	B	SE B	β	R ²	B	SE B	β	R ²	B	SE B	β	R ²
Hypothesis 1												
Constant	-0.57	0.06		.45	1.05	0.04		.38	-0.98	0.05		.49
Motivational	1.05	0.02	.62*		0.42	0.01	.38*		0.64	0.02	.40*	
Hygiene	0.19	0.02	.10*		0.39	0.01	.32*		0.71	0.02	.40*	
Hypothesis 2												
Constant	3.77	0.01		.46	3.83	0.01		.38	3.62	0.01		.49
Motivational	1.04	0.02	.61*		0.41	0.01	.38*		0.63	0.02	.39*	
Hygiene	0.19	0.02	.10*		0.39	0.01	.32*		0.71	0.02	.41*	
Moderator	-0.17	0.03	-.05*		-0.11	0.02	-.05*		-0.18	0.02	-.06*	
Hypothesis 3												
Constant	-0.60	0.08		.45	0.97	0.06		.38	-0.86	0.07		.49
Motivational	1.05	0.02	.62*		0.43	0.01	.39*		0.63	0.02	.39*	
Hygiene	0.20	0.03	.11*		0.41	0.02	.34*		0.67	0.02	.38*	
Step Moderator 3	-0.00	0.01	-.01		-0.01	0.01	-.03**		-0.02	0.01	-.03**	
Hypothesis 4												
Constant	0.82	0.07		.24	1.71	0.05		.25	0.66	0.01		.24
Comfort	0.26	0.02	.14*		0.29	0.02	.24*		0.30	0.02	.17*	
Competence	0.61	0.02	.40*		0.32	0.01	.33*		0.57	0.02	.40*	
Hypothesis 5												
Constant	3.75	0.01		.24	3.82	0.01		.25	3.60	0.01		.26
Comfort	0.26	0.02	.14*		0.29	0.02	.24*		0.29	0.02	.17*	
Competence	0.61	0.02	.40*		0.32	0.01	.33*		0.57	0.02	.40*	
Moderator	-0.03	0.03	-.01		0.01	0.02	.00		-0.05	0.03	-.02	.24
Hypothesis 6												
Constant	0.14	0.06		.39	1.62	0.04		.26	0.27	0.06		.30
Work experiences	0.60	0.02	.31*		0.56	0.01	.46*		0.75	0.02	.42*	
Person-environment fit	0.43	0.01	.44*		0.07	0.01	.12*		0.21	0.01	.22*	
Hypothesis 7												
Constant	3.76	0.01		.39	3.82	0.01		.26	3.60	0.01		.30
Work experiences	0.59	0.02	.31*		0.56	0.01	.46*		0.74	0.02	.42*	
Person-environment fit	0.43	0.01	.43*		0.07	0.01	.11*		0.21	0.01	.22*	
Moderator	-0.10	0.02	-.05*		-0.02	0.01	-.01		-0.06	0.02	-.03*	
Hypothesis 8												
Constant	1.43	0.08		.09	2.02	0.05		.13	1.66	0.07		.07
Personal characteristics	0.57	0.02	.30*		.44	0.01	.36*		.48	0.02	.27*	
Hypothesis 9												
Constant	0.83	0.08		.14	1.67	0.05		.17	0.80	0.07		.19
Personal characteristics	0.56	0.02	.29*		0.44	0.01	.36*		0.46	0.02	.26*	
Causal attribution	0.24	0.01	.23*		0.14	0.01	.20*		0.33	0.01	.34*	
Hypothesis 10												
Constant	3.76	0.01		.14	3.82	0.01		.17	3.60	0.01		.19
Personal characteristics	0.56	0.02	.29*		0.43	0.01	.36*		0.46	0.02	.26*	
Causal attribution	0.24	0.01	.23*		0.14	0.01	.21*		0.33	0.01	.34*	

Moderator	-0.02	0.02	-.01	-0.02	0.01	-.01	-0.01	0.02	-.01
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Note. If not specified otherwise in the table the dependent variable is regressed on the independent variable(s). * $p < .01$, ** $p < .0$

Hypothesis 6 predicts that causal attribution has a positive moderating effect on the influence from work experiences on affective commitment. In table 5 and 6 can be seen that the moderator is antagonistic ($\beta = -.03$, $\beta = -.03$, $\beta = -.05$, $p < 0.01$). Therefore H6 can not be confirmed for the three foci of affective commitment.

The seventh hypothesis predicts that work experience mediate the relationship between organizational structure characteristics and affective commitment. Baron and Kenny (1986) described three conditions that must hold when one can speak of a mediator. First there must be an effect from the independent variable on the mediator. The effect from organizational structure characteristics on work experience is large ($\beta = .79$, $p < 0.01$). Second the independent variable must have an effect on the dependent variable. Structural characteristics affect affective commitment work, colleagues and supermarket ($\beta = .37$, $\beta = .37$, $\beta = .46$, $p < 0.01$). Third, the mediator must have an effect on the dependent variable when regressing the dependent variable on the mediator and on the independent variable. This last condition does not hold for work experiences in relation with affective commitment to work ($\beta = -.02$, ns). However, the relation between work experiences and affective commitment to colleagues and supermarket is significant and substantial ($\beta = .56$, $\beta = .38$, $p < 0.01$).

The effect from the mediator is especially large in relation to affective commitment to colleagues, where the influence from structural characteristics decreases from ($\beta = .37$, $p < 0.01$) to ($\beta = -0.08$, $p < 0.01$) when the work experiences is taken into account. This means that work experience does mediate the relation between organizational structure characteristics and affective commitment to colleagues and supermarket and H7 can be confirmed for affective commitment to colleagues and supermarket, but not for affective commitment to work.

The eighth hypothesis predicts that behavioural commitment has a positive, direct influence on affective commitment. In table 5 to 7 we can see that behavioural commitment indeed has a positive effect on affective commitment to work, colleagues and supermarket ($\beta = .12$, $\beta = .10$, $\beta = 0.09$, $p < 0.01$). This means H8 can be confirmed for the three foci of affective commitment.

Table 6.

Affective commitment to work, colleagues and supermarket for hypothesis 6 to 9

	Affective commitment to:											
	work				colleagues				supermarket			
	B	SE B	β	R ²	B	SE B	β	R ²	B	SE B	β	R ²
Hypothesis 6												
Constant	0.27	0.07		.26	1.51	0.04		.28	0.01	0.06		.33
Causal attribution	0.18	0.01	.17*		0.10	0.01	.15*		0.27	0.01	.28*	
Work experiences	0.86	0.02	.45*		0.59	0.01	.48*		0.82	0.02	.46*	
Hypothesis 6 (continued)												
Constant	3.75	0.01		.26	3.82	0.01		.28	3.60	0.01		.34
Causal attribution	0.18	0.01	.17*		0.10	0.01	.15*		0.27	0.01	.28*	
Work experiences	0.86	0.02	.45*		0.58	0.01	.48*		0.81	0.02	.45*	
Moderator	-0.06	0.02	-.03*		-0.04	0.01	-.03*		-0.09	0.02	-.05*	
Hypothesis 7												
Constant	2.31	0.01		.63	2.31	0.01		.63	2.31	0.01		.63
Independent on mediator	0.38	0.00	.79*		0.38	0.00	.79*		0.38	0.00	.79*	
Hypothesis 7 (continued)												
Constant	2.71	0.03		.14	3.15	0.02		.14	2.41	0.03		.21
Organizational structure	0.34	0.01	.37*		0.22	0.01	.37*		0.40	0.01	.46*	
Hypothesis 7 (continued)												
Constant	0.59	0.07		.23	1.69	0.04		.25	0.49	0.06		.26
Work experiences	0.91	0.02	.48*		0.62	0.01	.50*		0.90	0.02	.51*	
Hypothesis 7 (continued)												
Constant	0.55	0.08		.23	1.57	0.05		.26	0.86	0.07		.27
Organizational structure and Work experiences	0.94	0.03	.50*		-0.05	0.01	-.08*		0.14	0.01	.16*	
	-0.02	0.02	-.02		0.69	0.02	.56*		0.67	0.03	.38*	
Hypothesis 8												
Constant	3.49	0.02		.01	3.68	0.02		.01	3.41	0.02		.01
Behavioural commitment	0.07	0.01	.12*		0.04	0.00	.10*		0.05	0.01	.09*	
Hypothesis 9												
Constant	3.24	0.01		.03	3.24	0.01		.03	3.24	0.01		.03
Independent on mediator	0.06	0.00	.18*		0.06	0.00	.18*		0.06	0.00	.18*	
Hypothesis 9 (continued)												
Constant	3.49	0.02		.01	3.68	0.02		.01	3.68	0.02		.01
Behavioural commitment	0.07	0.01	.12*		0.04	0.00	.10*		0.04	0.00	.10*	
Hypothesis 9 (continued)												
Constant	0.59	0.07		.23	1.69	0.04		.25	0.49	0.06		.26
Work experiences	0.91	0.02	.48*		0.62	0.01	.50*		0.90	0.02	.51*	
Hypothesis 9 (continued)												
Constant	0.57	0.07		.23	1.70	0.04		.25	0.51	0.06		.25
Work experiences and behavioural commitment	0.90	0.02	.48*		0.61	0.01	.50*		0.89	0.02	.50*	
	0.02	0.01	.03*		0.00	0.00	.00		0.00	0.01	.00	

Note. If not specified otherwise in the table the dependent variable is regressed on the independent variable(s). The only exception is with mediator testing in which the dependent variable is regressed on the mediator variable. * $p < .01$, ** $p < .05$

The effect from the mediator is especially large in relation to affective commitment to colleagues, where the influence from structural characteristics decreases from ($\beta = .37$, $p < 0.01$) to ($\beta = -0.08$, $p < 0.01$) when the work experiences is taken into account. This means that work experience does mediate the relation between organizational structure characteristics and affective commitment to colleagues and supermarket and H7 can be confirmed for affective commitment to colleagues and supermarket, but not for affective commitment to work.

The eighth hypothesis predicts that behavioural commitment has a positive, direct influence on affective commitment. In table 5 to 7 we can see that behavioural commitment indeed has a positive effect on affective commitment to work, colleagues and supermarket ($\beta = .12$, $\beta = .10$, $\beta = 0.09$, $p < 0.01$). This means H8 can be confirmed for the three foci of affective commitment.

Hypothesis 9 predicts that work experiences mediate the relationship between behavioural commitment and affective commitment. First there must be an effect from the independent variable on the mediator. The effect from behavioural commitment on work experience is positive and significant ($\beta = .18$, $p < 0.01$). Second the independent variable must have an effect on the dependent variable. Behavioral commitment affect affective commitment work, colleagues and supermarket ($\beta = .12$, $\beta = .10$, $\beta = .09$, $p < 0.01$). Third, the mediator must have an effect on the dependent variable when regressing the dependent variable on the mediator and on the independent variable. The mediator has an effect on the dependent variable for the three foci of affective commitment ($\beta = .48$, $\beta = .50$, $\beta = .50$, $p < 0.01$). This means H9 can be confirmed for affective commitment to work, colleagues and supermarket.

All hypotheses were tested at this point; the ones that were confirmed are put together in a model. Given that all hypotheses with an interaction effects were rejected by the data, the model is estimated without the moderators. The three foci of affective commitment are tested separately. The model of affective commitment to work differs in antecedents from the models affective commitment to colleagues and supermarket because H7 was rejected for affective commitment to work, however it was not rejected for affective commitment to colleagues and supermarket. The first two equations describe the relationships between the antecedents and affective commitment

to work. The second two equations describe the relationship between affective commitment to colleagues and its antecedents. The third two equations describe the relation between affective commitment to supermarket and its antecedents. The last 2 equations describe the relationship between affective commitment in general, thus the combined effect from affective commitment to work, colleagues and supermarket, with its antecedents. LISREL 8.7 was used to estimate the confirmed part of the model, visualization can be found in appendix 3. The following structural equations were estimated (ML):

$$Y1 = 0.42*X1 + 0.027*X2 + 0.14*X3, \text{ Errorvar.} = 0.75, R^2 = 0.22$$

(0.0091)	(0.0092)	(0.0090)	(0.011)
46.43	2.93	16.08	68.32

$$X1 = 0.18*X2, \text{ Errorvar.} = 0.97, R^2 = 0.033$$

(0.010)	(0.014)
17.88	68.32

$$Y2 = 0.43*X1 - 0.00063*X2 + 0.21*X3, \text{ Errorvar.} = 0.71, R^2 = 0.26$$

(0.0090)	(0.0089)	(0.0088)	(0.010)
47.69	-0.071	23.50	68.31

$$X1 = 0.098*X2 + 0.78*X4, \text{ Errorvar.} = 0.36, R^2 = 0.64$$

(0.0063)	(0.0063)	(0.0053)
15.68	124.56	68.31

$$Y3 = 0.47*X1 - 0.0026*X2 + 0.098*X3, \text{ Errorvar.} = 0.74, R^2 = 0.25$$

(0.0091)	(0.0090)	(0.0090)	(0.011)
51.61	-0.28	10.88	68.31

$$X1 = 0.098*X2 + 0.78*X4, \text{ Errorvar.} = 0.36, R^2 = 0.64$$

(0.0063)	(0.0063)	(0.0053)
15.68	124.56	68.31

$$Y1 = 0.52*X1 + 0.012*X2 + 0.17*X3, \text{ Errorvar.} = 0.64, R^2 = 0.34$$

(0.0085)	(0.0084)	(0.0084)	(0.0093)
61.00	1.37	19.84	68.31

$$X1 = 0.098*X2 + 0.78*X4, \text{ Errorvar.} = 0.36, R^2 = 0.64$$

(0.0063)	(0.0063)	(0.0053)
15.68	124.56	68.31

Where: The first line gives the standardized regression coefficients
 The second line gives the standard deviation (SD)
 The third line gives the T-values.
 Y1 is affective commitment to work
 Y2 is affective commitment to colleagues

Y3 is affective commitment to supermarket
 Y4 affective commitment in general
 X1 is work experience
 X2 is behavioral commitment
 X3 is personal characteristics
 X4 is organizational structure characteristics

Table 4.
LISREL estimations

	Chi-square	AGFI	RMSEA	RMR
Affective commitment to work	1189	0.63	0.36	0.061
Affective commitment to colleagues	1217	0.63	0.26	0.062
Affective commitment to supermarket	1394	0.58	0.27	0.064
Affective commitment as a whole	1260	0.62	0.26	0.064

In table 4 can be seen that when the separate confirmed hypotheses are combined to a structural model, the model does not fit the data very well. Large Chi-squares indicate poor fit. The adjusted goodness of fit indexes, with their values of 0.63 and 0.58 indicate that the model does not fit the data very well. The root mean square error of approximation also indicates poor fit, however the root mean square of residual is indicating good fit. In sum can be said that the model does not fit the data.

DISCUSSION

In contrast to most research on Allen and Meyer's three-component model which focuses on the distinction between the three components (Allen & Meyer, 1996; Ko, Price, & Mueller, 1997; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002) this study examines the relationship between the antecedents of affective commitment and affective commitment.

In table 2 in the method section it is shown that all variables have a mean higher than the expected value of 3 except for causal attribution which has a mean of 2.76 and organizational structure characteristics which has a mean of 2.99. Measured on a 5 point scale these are high means. The high means may be the effect of collective labour agreement in Europe. Or maybe this is the result of pre-entry expectations that were not measured in this questionnaire. Met pre-entry expectations positively influence affective commitment and also are positively related with the fit between personal and organizational characteristics (Caldwell, Chatman, & O'Reilly, 1990; Meyer & Allen, 1991, 1997; O'Reilly, Chatman, & Caldwell, 1991).

The results show that the motivational factors have more influence on affective commitment to work than hygiene factors. Motivational factors have approximately the same influence as hygiene factors with respect to affective commitment to colleagues and supermarket. Keeping in mind that almost everyone in this survey is affective committed, this contradicts the two factor theory from Herzberg which states that motivational factors lead to job satisfaction or affective commitment but play only a very small part in job dissatisfaction and the hygiene factors influence job dissatisfaction and play a small part in job satisfaction or affective commitment. This result is not in agreement with Dunnette, Campbell and Hakel (1967), Wernimont (1966), Ewen, Smith, Hulin and Locke (1966), Graen (1966) and Friedlander (1964) who conclude that hygiene factors are more important than motivational factors to job satisfaction and job dissatisfaction. This difference may be due to the different populations that were investigated, the respondents in this research were low educated employees and respondents in the researches mentioned above were on average high educated. Another possible explanation for the mixed results can be the different procedures that were used in the different researches.

However this result is in congruence with Burkes (1966) empirical analysis and literature review on the base of which he questioned if hygiene and motivational factors are independent and unidimensional constructs. This maybe due to the different methods of investigating this problem (Vroom, 1964), the critical incidence technique yields very often other results then survey research.

The (step) interaction effect is negative which means that the increase of affective commitment with a unit increase of motivational factors becomes smaller, the higher the hygiene factors. Although the interaction effect is only slightly negative, with the exception of the step moderator in affective commitment to team, which is very negative. The direction of Herzberg's two factor theory is that the increase in affective commitment is higher with a unit increase in motivational factors, the higher the hygiene factors. This may be a result of regression to the mean. This means that people who score very high on one factor tend to score somewhat lower on any other factor and people who score very low on a factor tend to score somewhat higher on another factor, due to random variance. It can also be explained by the law of diminishing returns. Which means in this example that when one factor gets higher any other factor will be less and even negatively contributing to the dependent variable.

The results show that affective commitment is to a certain degree predicted by Allen and Meyer's comfort and competence factors. As for the two factor theory, here also is shown that higher order needs predict affective commitment better than the lower order needs. Comparing Herzberg's theory and Allen and Meyer's theory it is clear that Herzberg's hygiene and motivational factors predict affective commitment better or at least as good as Allen and Meyer's comfort and competence factors.

However work experiences, according to the reasoning of Meyer and Allen (1991), may not be enough to get an employee commitment, employees possibly also need to feel a fit between them and the work they do and attribute that fit to the organization. In order to test that three hypotheses were made, that are discussed below.

The interaction effect person-environment fit and work experiences are slightly negative. This means the higher the work experiences are the smaller the increase in affective commitment when person-environment fit increases with a unit. The hypothesized interaction effect between causal attribution and personal characteristics and the assumed interaction effect between causal attribution and work experiences are also not supported by the data.

A possible explanation for this negative interaction effect can be that the measurement of the constructs has limited (construct) validity. This limited validity has two causes, 1) the theory is not discriminating properly between different constructs, as already mentioned in the method section and 2) not all the constructs were measured, because this survey was originally made for another research. Not measuring all the constructs generally leads to over or underestimation of the relationships and therefore can lead to incorrectly acceptance of the alternative hypothesis or failure to reject the null hypothesis.

Another plausible explanation is that hardly any of the indicators in the two moderating variables are compatible with each other. For example when in the work experience factor were indicators about how much the respondents could participate in decision making and in the person environment fit factor were indicators about if they wanted to participate in decision making, the interaction effect could have been positive.

From the results can be seen that work experiences mediate the relationship between organizational structure characteristics and affective commitment to colleagues and supermarket.

This means that organizational structure characteristics have less influence on affective commitment to colleagues and supermarket when work experiences are taken into account. Or in other words, work experiences account partly for the relation between organizational structure characteristics and affective commitment. The mediation is strongest for affective commitment to work and colleagues.

Behavioural commitment does indeed influence affective commitment, but when work experiences are used to mediate in the relation between behavioural commitment and affective commitment to work, the effect from behavioural commitment on affective commitment almost disappears. This means that work experiences account for a great deal in the relation between behavioural commitment (which is measured in this research by the single question "How long have you been working in this department") and affective commitment.

Personal characteristics seem to have a large positive influence on affective commitment. Combining this finding with the finding that there are no significant multilevel effects with respect to affective commitment, it could be possible that personality/ character of the respondents has a great influence on affective commitment. It may be that employees with for example a loyal and conscientious personality experience more affective commitment than employees that are less loyal and conscientious. Staw and Ross (1985) and Staw, Bell and Clausen (1986) indicated that personality factors account in considerable measure for differences in job attitudes, therefore it is possible that there are personal dispositions that could account for affective commitment, at least partly.

When estimating the models, based on solely the confirmed hypotheses it appears that non of the models fit the data, for any of the three foci. When the three foci are combined to affective commitment in general there is a comparable misfit.

The three-component model predicts the simple and mediating effects reasonably well. This paper presents support for Meyer and Allen's prediction that from all antecedents work experiences have the largest influence on affective commitment. The mediating as well as the direct effect from work experiences is large, although the direct effect from Herzberg's hygiene and competence factors is larger. This paper, however presents no support for the interaction effects predicted by Meyer and Allen (1991) nor for the models based on solely the confirmed

hypotheses. This is probably for a large extent due to the theoretical foundation of the model. However it may also be an effect of using indicators that were meant for testing other hypothesis.

Limitations and future research

As already mentioned in the method section, the common method variance is a limitation of this study. Common method variance is variance that is attributed to the measurement method instead of the constructs of interest. This is one of the major sources of random and systematic measurement error. Common method variance can inflate and/ or deflate a relationship and it can even change the direction of the effect. This may be the reason why the moderators are antagonistic.

Another limitation that is also already mentioned is that not all sub constructs are properly measured. As already said this will only have an influence on the strength of the relationship and not on the direction. Given the amount of omitted variables the parameters are likely to be slightly under- or overestimated.

Despite the fact that the three-component model asks for causal hypotheses, no causal claims can be made based on the cross-sectional data that is used. Because the theoretical causality of the constructs or in other words which variable precedes in time, is not questioned but only tested in this paper, this is not a big problem.

A final concern involves the missing data. Is it not known how many employees did not participate in this study and what demographic background they have. It is possible that respondents systematically differ from non respondents. Given the descriptive statistics of the variables this may well be a problem.

Beyond addressing the limitations of this study, the presented analysis suggests interesting steps for further research. Given the results of this study we can conclude that dividing affective commitment into (three) foci give more insight in the effects of the antecedents contributing to the different foci. Theoretical elaboration on the foci is still needed.

Furthermore it would be worthwhile to consider a conceptual model in which the constructs and sub constructs are better defined, are less overlapping and more compatible, especially

compatible with the hygiene and comfort factors, which seem to predict affective commitment best. Under these conditions more final tests on the moderating and mediating elements of the both theories would be fruitful.

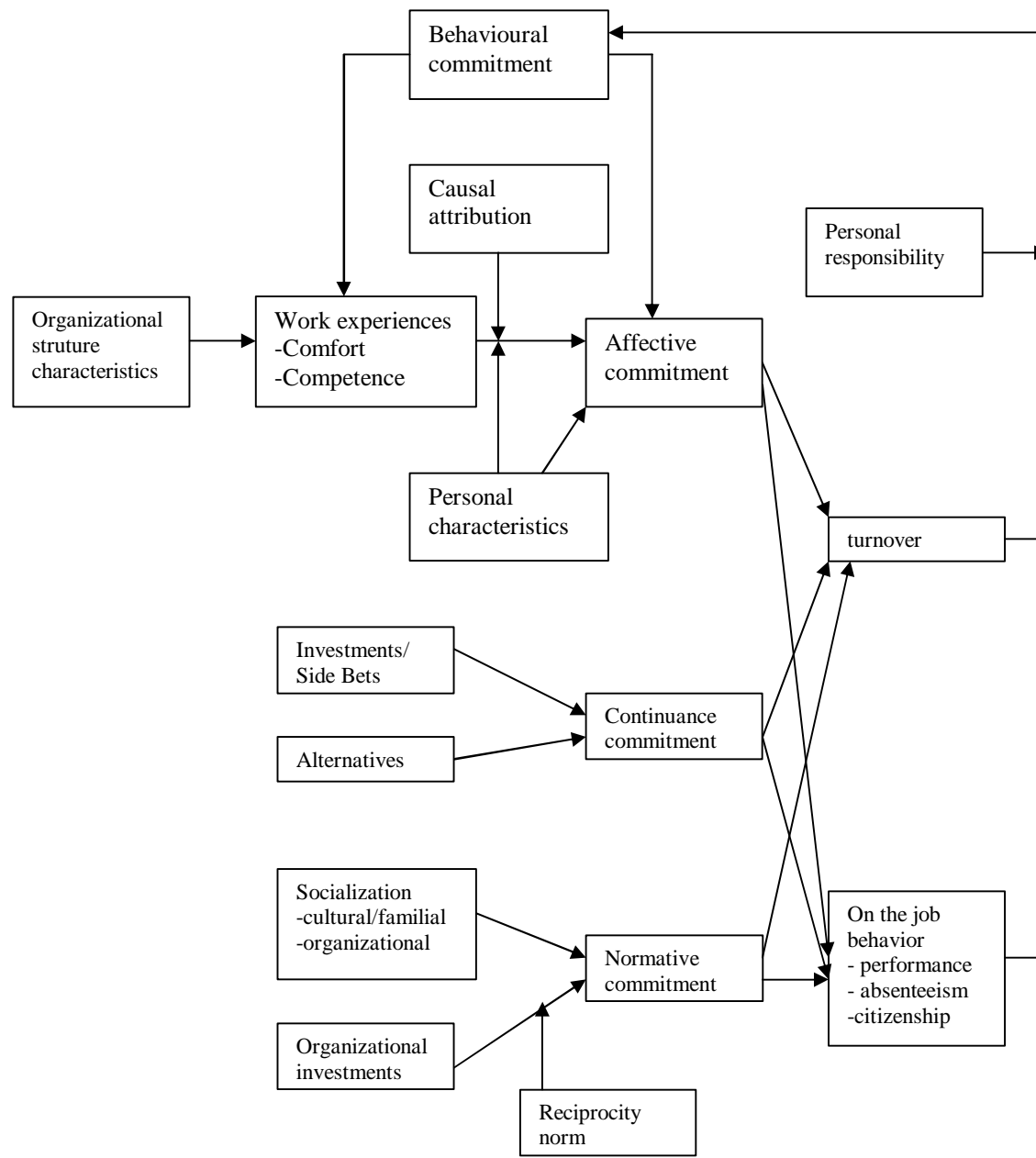
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Appendix 1. Three-component model.



Appendix 2. All questions included in this research

Constructs	Questions	Cronbach's alpha	Factors
Affective commitment			
Affective commitment work	My work is interesting	0.856	1
	I enjoy my work		
	I am proud of my work		
Affective commitment team	I am proud to work for my team	0.778	1
	I really care about my team		
	I feel really at ease in my team		
Affective commitment colleagues	I like to associate with my colleagues	0.732	1
	I feel at ease amongst my colleagues		
	If I talk about my colleagues, I usually say us rather than them		
	I would risk my neck to support my colleagues		
Affective commitment hypermarket	I am proud to work for this hypermarket	0.899	1
	I really care about this hypermarket		
	I feel at ease at this hypermarket		
	This is a nice hypermarket to work for		
	I feel attached to this hypermarket		
	In this hypermarket I feel like part of the		
Competence factors Herzberg			
Recognition for achievement	My colleagues value the way I do my work	0.581	1
	If I do a good job my immediate supervisor tells me so		
	If I do a good job, my immediate colleagues tell me so		
Work itself	My work fits my abilities.	0.616	1
	My work offers me the opportunity to do the things I am good at		
	My work is too simple*		
Responsibility	Together we as colleagues are responsible to keep the business running	0.890	1
	If something goes wrong in my team, I take it seriously		
	I feel responsible for my work		
	I feel (co) responsible to keep our team running		
	I feel (co) responsible for changes in my team		

	I feel (co) responsible for improvements in my team		
	I feel (co) responsible for the reputation of my team		
	I feel (co)responsible to keep this hypermarket running		
	I feel (co)responsible for changes at this hypermarket		
	I feel (co)responsible for improvements at this hypermarket		
	I feel (co)responsible for the reputation of this hypermarket		
Job challenge	My work requires learning continuously	0.662	2
	My work is routine*		
	In my work I have to repeat the same tasks over and over again*		
	In my work, I have to deal with problems that I have not met before		
	In my work, I have to handle unexpected situations		
	In my work, I have to deal with problems that are difficult to solve		
	I would like to have more variety in my present work*		
Herzberg hygiene			
Working conditions	It often seems that I have too many things to do	0.661	1
	I am often asked to do more work than I can handle		
Salary and benefits	The benefits I receive are better than most other companies of this type offer		
Supervision	I feel valued by my immediate supervisor	0.848	1
	My immediate supervisor gets on very well with people		
	My immediate supervisor treats me fairly		
	My immediate supervisor can be relied on when things get tough in my job		
Status	I have a good reputation at this hypermarket	0.788	1
	I have a good reputation in my team		
	I am highly respected in my team		
Job security	This hypermarket takes good care of me		
Co workers and personal life	I meet my colleagues outside work as	0.711	2

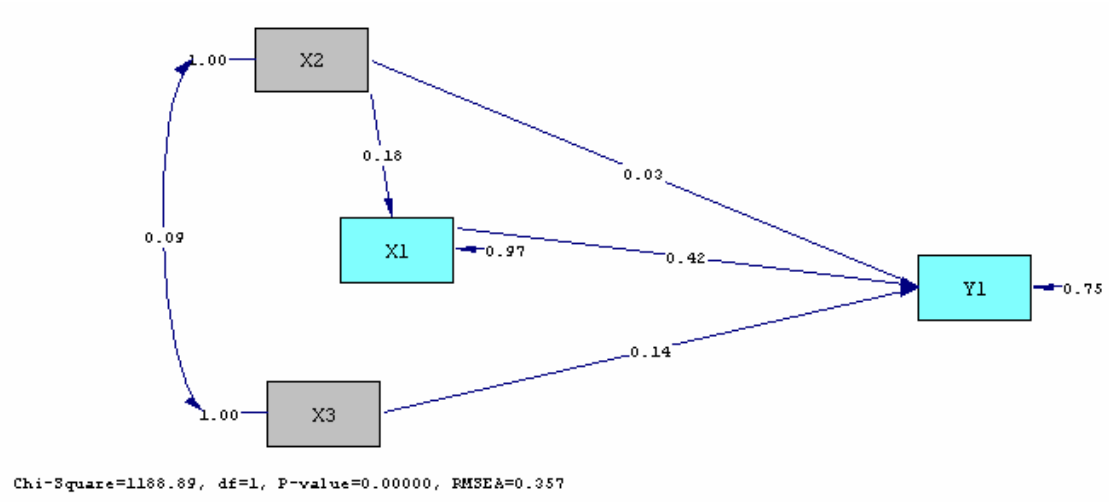
	well		
	My colleagues value me personally		
	My immediate colleagues treat me fairly		
	My immediate colleagues are willing to listen to my work related problems		
	My immediate colleagues can be relied on when things get tough in my work		
Personal characteristics			
Need for achievement	Doing my work well is important to me	0.523	1
	I feel unhappy when my work is not up to my usual standard		
Need for autonomy	In my work I prefer to decide what to do and how to do it by myself		
Higher order need strength	I like to learn new things through my work		
Personal work ethic	It is important to me, that people are satisfied with my work performance	0.62	1
	Good cooperation between colleagues is important		
	Helping a colleague is important		
	Doing something extra for a colleague is a good thing to do		
	I strongly feel I have to be successful in my work		
	I believe I have to give my best for my career		
Central life interest in work	My career takes priority	0.62	1
	My life would be a lot less exiting without my career		
	I can't imagine my life without my career		
Person environment fit	My work fits my abilities.	0.616	1
	My work offers me the opportunity to do the things I am good at		
	My works is to simple*		
Causal attribution	Changing employer would mean more uncertainty	0.734	1
	Changing employer would lead to a loss of social contacts that are important to me personally		
	Changing employer would have negative financial consequences		
Allen and Meyers hygiene factors			
Organizational dependability	I could easily get another job elsewhere	0.827	1

	Because of m work experience		
	Because of my education		
Role clarity	I know the way tasks are distributed in my team	0.704	1
	I know exactly what my tasks are		
	I know what my colleagues ought to do		
	The tasks in my work are clear to me		
Supervisor consideration	My supervisor gives me good information about proposed changes in my tasks	0.789	1
	My immediate supervisor gives me good information about changes regarding my team		
	My supervisor gives me information about proposed changes related to the hypermarket		
	My immediate supervisor is willing to listen to my work related problems		
Allen and Meyer competence factors			
Accomplishment	I have influence in my team		
Autonomy	My supervisor and/or colleagues tell me what to do*		
Job challenge	My work requires learning continuously	0.662	2
	My work is routine*		
	In my work I have to repeat the same tasks over and over again*		
	In my work, I have to deal with problems that I have not met before		
	In my work, I have to handle unexpected situations		
	In my work, I have to deal with problems that are difficult to solve		
Opportunity for self expression	My supervisor encourages me to speak up on things related to my work	0.822	1
	My supervisor encourages me to say what I think about things related to the hypermarket		
	My immediate supervisor confers with us, if we want to		
	My immediate supervisor encourages me to speak my mind on things related to my team		
Participation in decision making	We can influence decisions our immediate supervisor takes about our tasks	0.83	1
	My supervisor enables me to co		

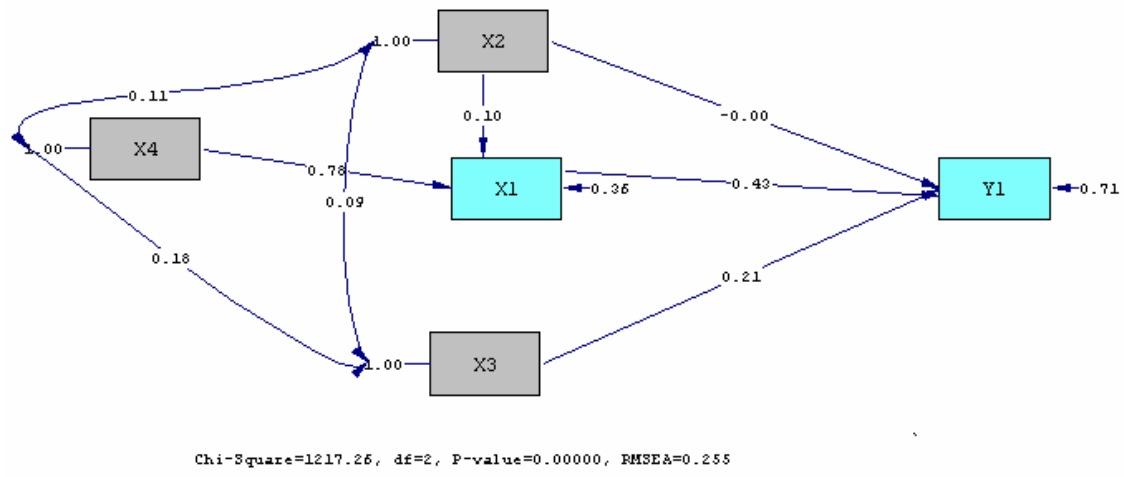
	decide about changes in my tasks		
	My supervisor enables me to co decide about changes in this hypermarket		
	My immediate supervisor enables me to co decide about changes in my team		
Organizational structure	We can influence decisions our immediate supervisor takes about our tasks	0.831	1
	My supervisor enables me to co decide about changes in my tasks		
	My supervisor enables me to co decide about changes in this hypermarket		
	My immediate supervisor enables me to co decide about changes in my team		

Appendix 3. LISREL estimates of the part of the model that is confirmed.

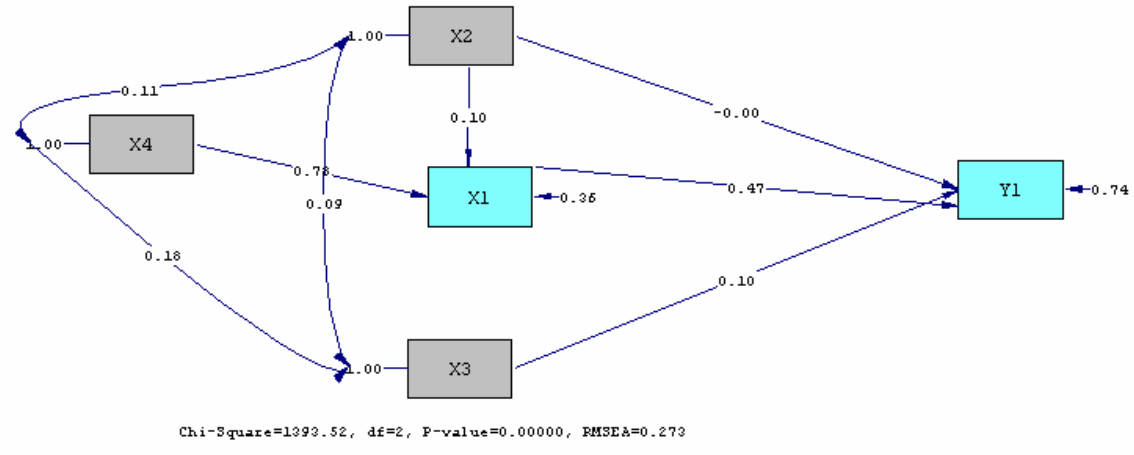
Affective commitment to work:



Affective commitment to colleagues:



Affective commitment to supermarket:



Affective commitment in general:

