

Behavioral determinants of nonprofit board performance. The case of supervisory boards in Dutch secondary education

Klaas Heemskerk, Eelke M. Heemskerk and Margrietha Wats

forthcoming in Nonprofit Management and Leadership

Klaas Heemskerk, MA, MSc is PhD student at the Amsterdam Institute for Social Science Research, University of Amsterdam and a teacher of Dutch Language and Literature at the Municipal Gymnasium of Leiden.

dr. **Eelke Heemskerk** is assistant professor of political science at the University of Amsterdam. He published on corporate governance, corporate elites, social networks and institutional reform in the Netherlands and Europe.

Margrietha Wats, MD, MBA is affiliated fellow at the department of political science, University of Amsterdam and partner at the Galan Group.

Acknowledgements:

We thank the editor and two anonymous reviewers for their constructive criticism. This article builds on an earlier paper from this research project (Heemskerk and others, 2014). Eelke Heemskerk received funding of Netherlands Organization for Scientific Research.

**Behavioral determinants of nonprofit board performance:
the case of supervisory boards in Dutch secondary education.**

Abstract

There is an increased awareness that the performance of boards (good governance) is not only determined by structural determinants but by behavioral determinants as well. These behavioral determinants might be particularly important for public and non-profit governance, where the role of the board is more diffuse and heterogeneous than in than in corporate governance. Here we investigate how social dynamics within boards in secondary education influence their performance. We follow a concise model that includes cognitive conflict, the use of expertise, effort norms and social cohesion as determinants of board task performance. A survey among all secondary schools in the Netherlands serves as the empirical underpinning for this process-oriented model of good governance. We show that the behavioral determinants have different effects on the control task and advice task of boards. Also, we find that cognitive conflicts in supervisory boards do not lead to less but rather to more social cohesion within boards. Building on these findings we suggest a revised model of the behavioral determinants of non-profit board performance.

What determines board performance?

The lion share of research on the effectiveness of boards aims to establish a relation between structural and formal characteristics of boards such as the size or composition on the one hand, and organizational performance, narrowly interpreted as financial results, on the other (Hermalin and Weisbach, 1991; Di Pietra and others, 2008). Reviews of this literature have now come to the somewhat disappointing conclusion that the results are not encouraging (for instance Dalton and Dalton, 2011). The relation between formal characteristics and organizational performance remains uncertain at best. The reason for these discouraging results may well lay in the fact that much is going on in-between board characteristics and organizational performance. The insight gains ground that it is not so much the structural or formal characteristics but more the behavioral aspects that determine board effectiveness (Bainbridge, 2002; Finkelstein and Mooney, 2003; Hoye and Doherty, 2011; Huse, 2005; Pye and Pettigrew, 2005; Van Ees and others, 2009; Huse and others, 2011; Bailey and Peck, 2013; Kumar and Zattoni, 2013).

A behavioral approach towards board effectiveness focuses on the task performance of boards, rather than on the organizational performance. After all, a board can perform well in times when an organization is in dire straits due to external circumstances, and boards may invest less in the quality of their own task performance when their organization is doing well (Pugliese and others, 2013). It is particularly suitable for the study of board effectiveness in nonprofit organizations, where the measurement of organizational performance is typically more troublesome (Forbes, 1998; Herman and Renz, 1999; Lindgren, 2001; Brown, 2005). Yet, in spite of the increased interest in nonprofit boards and governance since the mid-1990s (Renz, 2012) there remains a gap in our understanding of internal processes and dynamics of boards in general and nonprofit boards in particular (Cornforth, 2012). The extensive discussion of group dynamics in nonprofit management literature has not yet found its pendant in the governance research literature (Renz and Andersson 2014, see Hoye and Doherty, 2011 for a review of some notable exceptions in sport governance).

We have built a concise model for the behavioral determinants of board performance based on some of the leading articles in the field, most notably Forbes and Milliken (1999) and Huse (2005). We have two reasons to closely stick to this literature. On a positive note, Nicholson and others (2012) found that the conceptualization of boards as teams hold a great deal of promise for nonprofit governance research. A more critical reading of the literature however suggests that it is time the

behavioral process-oriented study of boards delivers on its promise of insight in the black box of board dynamics. After all, fifteen years after the groundbreaking article of Forbes and Milliken (1999) there is a need for empirical studies of board processes and internal dynamics in nonprofits. The assumptions from the behavioral approach to corporate governance need to be tested empirically and across sectors.

The main obstacle for the behavioral study of boards is gaining access to the black box of actual board behavior. Yet it is crucial, as Leblanc (2004, p.437) aptly points out: “[...] trying to distill a relationship between governance and performance – from outside of a boardroom – is analogous to trying to find out what makes a sports team effective by sitting in a cafeteria reading the sports pages”. Here we open up the black box through a survey designed to map behavioral dynamics within a board. Our study examines the relationship between effective board task performance and actual board behavior in supervisory boards in Dutch secondary education. Our findings are based on data collected from 148 responding out of the 342 secondary educational organizations, using hierarchical multiple regression to test our hypotheses.

The Netherlands has by and large a privatized yet publicly funded system for secondary education. Educational reforms and deregulation in the 1980s led to a further increase in autonomy but also in the scale of secondary educational institutions (Karsten, 1999). In the 1990s it became clear that the traditional one-tier governance model in which a voluntary school board with parents and local notables delegates executive power to the principal was no longer appropriate for the large and autonomous schools. This led to a transition to a two tier governance system in which a supervisory board with non-executive directors supervises the executive board of the school. The supervisory board is composed of five or seven persons with different expertise (such as financial, legal, and educational expertise). The executive board often consists of just one person: the executive director – comparable with the CEO in firms. The supervisory board has the duty to control and advise the executive board: they decide on the yearly budgets, the overall policy of the school, and act as employer for the executive director. Supervisory boards typically meet about six times a year (Blokdiik and Goodijk, 2012). Such a two-tier governance system is typical in the Netherlands and common in many continental European countries (see also Heemskerk, 2007, pp 50-53).

This change in governance structure provides a good opportunity to study behavioral dynamics. First, because the boards have to ‘reinvent’ their role and tasks they will be more able to

reflect on the behavioral elements that may affect their performance. Second, it provides an opportunity to analyze the effectiveness of the often newly formed supervisory boards from a behavioral perspective and complement the research that only consider the formal and structural aspects of the supervisory boards (Blokdiijk and Goodijk, 2012).

A behavioral model of board performance

Here we follow the common classification of two key tasks of non-executive directors: a control task and an advisory task (Huse, 2005; Nicholson and Newton, 2006; Adams and others, 2008; Petrovic, 2008). But what determines this task performance? We use the four behavioral factors Forbes and Milliken (1999) distinguish as building blocks of our model: effort norms, the use of knowledge and skills, cognitive conflicts and the social cohesion within a board. Effort norms are socially constructed expectations of the amount of time and energy individual group members are supposed to invest in their duties (Forbes and Milliken, 1999; Bailey and Peck, 2011; see Doherty and others, 2004 for norms at non-profit boards). If board members implicitly agree to invest only limited time in analyzing and collecting the necessary information, they run the risk to become a passive audience that rubberstamps decisions taken by the executive management (Stiles and Taylor, 2001; Minichilli and others, 2012). A board where demanding norms that are shared by all members exist on the effort that is expected of its members will fulfill both its control and its advisory task more effectively (Minichilli and others, 2012). We thus expect that:

H1: clear and demanding effort norms will be positively associated with effective board task performance.

Knowledge and experience are important assets for a board. But the presence of knowledge alone does not necessarily make a board effective. The use of knowledge and skills designates the extent to which a board is actually able to put these to use in the fulfillment of its tasks. This requires respect for and knowledge of each other's expertise within a board (see also Minichilli and others, 2012). This leads to the expectation that:

H2: the transparent use of each other's knowledge and skills will be positively associated with effective board task performance.

Conflict is often considered as a negative aspect of group dynamics. Yet, conflict can be very important for effective groups as well. Jehn (1995) distinguishes two types of conflict within groups: cognitive conflict and relational conflict. Relational conflict arises through interpersonal incompatibilities among group members and is expressed in tensions and hostility amongst group members. A cognitive conflict in contrast arises from disagreement between group members about the content of the tasks to be performed, due to differences in viewpoints, ideas and opinions (Jehn 1995). While relational conflicts have a negative impact on group performance, cognitive conflicts are ingredients for effective group task performance. It positively influences group performance for it increases understanding and critical evaluation of task and ideas and it overcomes confirmatory biases in group decision making (Jehn, 1995). It also can positively influence task commitment and member satisfaction for it facilitates group members to voice their own perspectives on the task at hand (Simons & Peterson, 2000).

Important moderating effects for the relationship between cognitive conflicts and group performance are the type of task to be performed. Cognitive conflicts are found to be more positive in decision-making and more negative in routine tasks (O'Neill and others, 2013). The effect of cognitive conflicts also depends on the organizational level; the higher in the organizational hierarchy, the more positive the effect of cognitive conflicts becomes (De Wit and others, 2012). Boards are typically involved in non-routine, strategic decision making, in which the exchange of different perspectives is eminently important, and act at the apex of organizational hierarchy. It therefore seems legitimate to propose that cognitive conflict will have a positive impact on the control and advisory task of a board. Therefore we expect that:

H3: cognitive conflicts will be positively associated with effective board task performance.

The fourth behavioral factor is the social cohesion within a board. Social cohesion is commonly defined as the tendency of a group to be one and united in the pursuit of its goals (Mach and others, 2010) and several researchers show a positive relationship between social cohesion and performance. Social cohesion improves participation and communication within a group and also increases the acceptance of the goals, tasks and roles amongst group members (Casy-Cambell and Martens, 2009; Doherty and Carron, 2003). However, Forbes and Milliken (1999) argue that there is an optimum to social cohesion. Insufficient cohesion is negative to task performance, but too much

cohesion causes groupthink within a board. Groupthink develops when members feel so deeply involved with a group that in their wish for unanimity, they lose their ability to reasonably view alternative decisions (Hogg and Hains, 1998). Social cohesion within a group is a main factor for the emergence of groupthink (Park, 2000). Following this line of reasoning we expect that:

H4: social cohesion will have an inverted U-shaped relation with effective board task performance.

A closer look at the literature however suggests that the role of social cohesion as determinant of board effectiveness might be thornier. Forbes and Milliken (1999) for instance suggest that social cohesion is also an important intermediate variable that influences the effect of cognitive conflict on board task performance. Relational conflict has a negative impact on social cohesion within a board and hence on the board task performance (Jehn, 1995; Forbes and Milliken, 1999). And a number of studies suggest that cognitive conflict can stir relational conflict (De Dreu and Weingart, 2003; Eisenhardt and others, 1997; Mooney and others, 2007; Simons and Peterson, 2000). Minichilli and others (2012) for instance found a negative relationship between cognitive conflict and board task performance at Scandinavian companies but a positive relationship at Italian firms. They attribute the negative impact of cognitive conflict on board performance to a combination with, or even production of relational conflict (see also Mooney and others, 2007). This makes the relationship between social cohesion, cognitive conflict and task performance complicated and context-dependent. To avoid these issues some empirical studies choose to leave out social cohesion as a variable in their model of board behavior (Zona and Zattoni, 2007; Bailey and Peck, 2011; Minichilli and others, 2012). But perhaps this omission contributes to the contradiction in research findings, as the effect of cognitive conflict on board task performance is sometimes not significant (Zona and Zattoni, 2007), negative (Minichilli and others, 2012) or positive (Bailey and Peck, 2011). Here we do include the relation between cognitive conflict and social cohesion in our model of board behavior and expect that:

H5. Cognitive conflicts will be negatively associated with social cohesion.

Figure 1 provides a schematic representation of the model of board behavior. Note that we do not expect a priori that the four factors will have a different effect on either the control or advisory task performance. Empirical studies of corporate governance already provide support for the building

blocks of this model. Effort norms and the use of knowledge and skills have a positive effect on board task performance (Zona and Zattoni, 2007; Minichilli and others, 2012). A positive effect of effort norms and cognitive conflict on board task performance was found in Bailey and Peck (2011), while Minichilli and others (2009) also report a positive effect of cognitive conflict on task performance. And Huse and others (2005) find an effect of social cohesion on task performance. Although in previous studies the behavioral model was mostly applied to corporate firms, we believe that it will prove even more useful in nonprofit organizations, such as educational institutions.

[INSERT FIGURE 1 ABOUT HERE]

Research design and methodology

A survey allowed us to include all secondary schools in our initial sample and provide us with quantifiable data on the board dynamics. For our deductive oriented research we judged it to be a more appropriate approach than interviews or direct observations, which would limit the scope and generalizability considerably. We distributed the survey in 2012 among all 342 Dutch institutions for secondary education. The response rate was 43% (148 schools). This is relatively high compared with the 15-30% common in survey research on board behavior in corporate governance (Huse, 2009b) and the 24% in recent survey research within the same sector (Blokdiijk and Goodijk, 2012). We send the survey to the chief executive, typically the chair and sole member of the executive board. We are aware that one respondent per organization, how well informed as he or she may be, might pose a potential threat to the reliability of the data (see Useem 1995). In our context of Dutch secondary education it is customary for the chief executive to attend all meetings of the supervisory board. The chief executive thus is the one person who both knows the organization well and knows how the supervisory boards has contributed to the organizational performance. The executive is therefore more than the non-executive board members in the position to make statements on the functioning of the supervisory board (Minichilli and others, 2012). Therefore it is common to rely on the chief executive as the single respondent (Daily and others, 2003; Minichilli and others, 2009; Huse, 2009a).

All variables were measured on a 7-point Likert scale. The dependent variable of board task performance falls apart in the control task performance and advisory task performance. Both were measured by questions on the controlling or advising participation of the supervisory board on sector-

relevant issues. Effort norms were measured by questioning the active involvement of supervisors. We formulated the questions following the suggestions of Forbes and Milliken (1999) and the examples provided by Bailey and Peck (2011) and Sellevol and others (2007). For the use of knowledge and skills we asked the executive whether the members of his supervisory board knew each other's skills and expertise well, whether the tasks within the board are distributed in accordance and if the most knowledgeable board members also have the most influence. For cognitive conflict we asked the director to scale the diversity in opinions, perspectives and reasoning within the internal supervisory organ, using the 'value-creating boards'-surveys as inspiration for the formulation (Sellevol and others, 2007; Huse, 2009b). Finally, we measured social cohesion following the suggestions of Forbes and Milliken (1999) and the survey items in Sellevol and others (2007).

In addition we included five simple control variables. First, we controlled for the administrative complexity of an organization, counted by the number of schools governed by the executive board. Second, we included the experience of the respondent as measured by the number of her or his years of service within the organization. Third, we followed Blokdiijk and Goodijk (2012) who argue that the functional separation of executive and supervisory directors needs time to start functioning optimally and therefore we control for the number of years since this separation was implemented. Finally we include the frequency of board meetings and the frequency of consultation between the chief executive and the chair of the supervisory board as possible intervening variables in the board task performance (Blokdiijk and Goodijk, 2012).

[INSERT TABLE 1 ABOUT HERE]

To test the consistency of the variables we determined Cronbachs α , after removal of outliers. One of the three items for the use of knowledge and skills seemed to measure a different concept (α of .4 when included) and was therefore excluded from further analyses. Table 1 provides an overview of our variables, their operationalization and, when relevant the value of α and the number of items. The values of α confirm the internal consistency of the items. Because both dependent and independent variables were measured by the same survey instrument we used Harman's single factor test to account for common method bias and control for systematic errors of measurement (Chang and others, 2010). This analysis showed that less than 50% of the variance could be attributed to one

factor. The use of the same measuring instrument thus appeared not to have led to a severe distortion of our data.

Table 2 shows the means, standard deviations and the bivariate correlations of all variables. It is striking that the frequency of the consultation between the chief executive and the chair of the supervisory board correlates with the control and advisory task performance. This may suggest that close contact between the chief executive and the chairman of the supervisory board is somehow related to effective task performance.

[INSERT TABLE 2 & 3 ABOUT HERE]

Results

Contrary to our expectations (hypothesis 5) we find a significant positive correlation between cognitive conflict and social cohesion (see Table 2). Furthermore a significant correlation between cohesion and the advisory task performance is absent. This might be due to our assumption of a non-linear, inverted U-shaped relation, whereas linearity is an assumption in the determination of Pearson's correlation coefficient. However, an analysis of the scatter plot of cohesion and both control and advisory task performance did not show a clear inverted U-shaped relationship. It is noteworthy that the cohesion within boards in our research appears to be extremely high (mean 6.38 on a 7-point scale) and varies little (standard deviation of .564).

We tested four models using hierarchical multiple regression analysis (see Table 3). First, in model 0 we included only the control variables.. Next, model 1 we also included effort norms, the use of knowledge and skills, and cognitive conflict model 2 subsequently adds cohesion to the analysis. Because we expected that the relation between cohesion and task performance is inverted U-shaped we included the cohesion squared in model 3.

Model 0 with only control variables has little explanatory value. In fact, only the first model seems to have sufficient explanatory power. The addition of cohesion and cohesion squared in the analysis (model 3) leads to a decrease of the adjusted determination coefficient, both for the control and advisory task performance. Model 1 therefore best explains the variance in task performance.

These results confirm our first hypothesis of a positive effect of effort norms on task performance, both for the control and advisory task performance. For our second hypothesis however we find a different outcome for the control and the advisory task performance. There is a positive

effect of the use of knowledge and skills on the control task performance, but not on the advisory task performance. For the third hypothesis it is the other way round: cognitive conflicts have a positive effect on the advisory task performance, but we find no significant effect on control task performance.

The fourth hypothesis, expecting an inverted U-shaped relationship between cohesion and task performance, was already rejected on the basis of the linear pattern in the correlation scatter plots. The results for model 2 in the hierarchical regression analysis also show no significant linear relationship between cohesion and control or advisory task performance. Moreover, the results for model 3 with squared cohesion reveals there exists indeed no significant non-linear or U-shaped relation with task performance. For the fifth hypothesis we conducted a separate single regression analysis. As expected from the correlation analysis, there is no negative but a positive effect of cognitive conflict on social cohesion ($\beta_{st} = .299, p < 0.001$). Table 4 provides a summary of the results.

[INSERT TABLE 4 ABOUT HERE]

Discussion and conclusions

This study provides from a nonprofit context further empirical support for process-oriented models of board governance. The effectiveness of supervisory boards in Dutch secondary education is influenced by the behavioral dynamics within the board. The results warrant four main conclusions. First, effort norms affect both the control and the advisory task performance of the supervisory board. The higher the expectations of the investment of time and attention are, the more effective a board is in both its advisory as its control task. And while frequency of board meetings is often seen as a proxy for the activity and effort norms we do not find any effect of this item on task performance nor on effort norms. This underscores the need to go beyond the easily accessible 'usual suspects' in the study of actual board behavior (see also Nordqvist and Minichilli, 2009).

Second, it is meaningful that the use of knowledge and skills has an effect on the control task performance, but no effect on the advisory task performance. This result underscores that control and advice are indeed different tasks and require different social behavior within a board in order to be effective. In many sectors there is increasing attention for the expertise non-executive directors bring to the table. Our findings suggest that, if a board manages to put its expertise to the use, this might indeed be helpful for the control task but not for the advisory task. The distinction Forbes and Milliken

make between the use of knowledge and skills as more about the process of coordination, and cognitive conflict as related to the content of members' contribution, provides a possible explanation (Forbes and Milliken, 1999).

Third, for cognitive conflict we indeed find a difference between the control task and the advisory task performance. Cognitive conflict has a positive effect on the advisory task performance, but no significant effect on the control task performance. The advisory task requires that various conflicting viewpoints are brought to the table. This makes sense if we consider that, while the control task is typically tied to the annual recurring budget cycle, the advisory task is less routine than the control task, and cognitive conflict is known to be more positive in less routine tasks (O'Neill and others, 2013). Boards that want to be effective in their advisory task do well to make sure that different viewpoints and perspectives are thoroughly discussed within the boardroom.

Fourth, and contrary to our hypothesis, we find that cognitive conflict has a positive effect on the cohesion within a board. A possible explanation for this unexpected positive effect is the high level of cohesion within supervisory boards in Dutch secondary education. Cognitive conflict might draw a cohesive group much closer, while conflicts in a less cohesive group might have a negative impact on the cohesion. Ensley and others (2002) for example suggested that groups with a high degree of cohesion are better able to prevent cognitive conflicts turning into relational conflicts. The triggering of relational conflict is considered to be the main reason for the negative effect of cognitive conflict in other contexts (Mooney and others, 2007; Simons and Peterson, 2000). We must therefore agree with Tekleab and others (2009) and criticize the isolated conceptualization of the impact of conflict and cohesion on the performance of groups.

Forbes and Milliken (1999) already problematized the relationship between cohesion and task performance. They state cohesion also affects the efforts norms within a board: a cohesive group will be more likely to make greater efforts than a loose, disjointed group (see also Nadler, 2004). Similarly, the use of knowledge and skills might also have a positive dependence on the cohesion within a group (Petrovic, 2008). It seems that cohesion is more of a prerequisite for the social dynamics within a group. After all: without a group, no group dynamics. Future research should bring more sophistication here, for example by including concepts such as relational conflict and trust in the model of the social dynamics within a board.

[INSERT FIGURE 2 ABOUT HERE]

The outcomes of our study can be used to further specify the initial model (see Figure 2). We suggest that social cohesion is best considered as an input variable. In addition we include that the use of knowledge and skills has a positive effect on cognitive conflict, because different expertise and perspectives contribute to critical discussion within a board. Figure 2 shows the results of a simple regression on the effects of social cohesion and effort norms on cognitive conflict (arrows on the left and middle part). The arrows on the right show the values of the standardized β 's presented in Table 3. Additional research can further investigate the merits of this adjusted model, both through surveys, interviews and participative observations.

For board members (both executive and supervisory) this study generates a number of suggestions. Perhaps most important is the observation that the control task and the advisory task are markedly different. This is particularly important at times when boards are increasingly expected to be involved in the key strategic decisions that shape the future of their organizations. The control task is typically *ex ante*, looking back and judging the performance and the choices made by senior executive. But in many fields and sectors boards are now expected to combine both the control and advice task in what we may call *anticipating governance*: looking forward and advising executives on strategic issues.

Table 1: Operationalization of the variables

Variables	Operationalization	Alpha
Control variables		
1. Administrative complexity	The number of schools governed by the executive board	
2. Years since introduction	Number of years since the introduction of a supervisory board	
3. Experience of respondents	Number of years in office of the respondent	
4. Frequency of board meetings	Number of meetings within a year	
5. Director/Chair consultation	Number of consultation between the chief executive and the chair of the supervisory board within a year	
Dependent variables		
6. Advisory task performance	5 items on a 7-point Likert scale	.78
7. Control task performance	4 items on a 7-point Likert scale	.72
Independent variables		
8. Effort norms	4 items on a 7-point Likert scale	.80
9. Use of knowledge and skills	2 items on a 7-point Likert scale	.72
10. Cognitive conflict	3 items on a 7-point Likert scale	.78
11. Social cohesion	4 items on a 7-point Likert scale	.86

Where relevant, the value of Cronbach's α is mentioned

Table 2: Correlations

	1	2	3	4	5	6	7	8	9	10	11
Control variables											
1. Administrative complexity	1										
2. Years since introduction	.177*	1									
3. Experience of respondents	.091	.013	1								
4. Frequency of board meetings	-.031	-.063	.148	1							
5. Director/Chair consultation	.082	.077	-.077	.189*	1						
Dependent variables											
6. Advisory task performance	.034	.080	.006	.149	.242**	1					
7. Control task performance	-.020	.085	-.017	.104	.180*	.589**	1				
Independent variables											
8. Effort norms	.058	.014	-.037	-.079	.064	.390**	.388*	1			
9. Use of knowledge and skills	.055	.039	.091	-.057	.155	.321**	.411**	.527**	1		
10. Cognitive conflict	.028	.030	.055	-.094	.080	.332**	.322**	.451**	.463**	1	
11. Social cohesion	.124	-.105	.031	-.006	-.008	.113	.229**	.391*	.459**	.299**	1
<i>Mean</i>	4.92	3.51	10.0	5.82	8.75	3.93	4.49	5.67	5.88	4.73	6.38
<i>Standard deviation</i>	9.40	3.38	9.47	2.02	5.72	1.09	1.04	.934	1.00	1.22	.564
<i>N</i>	146	134	148	138	138	146	146	141	139	140	138

Pearson's correlation coefficients. Two-tailed test. * < 0.05; ** < 0.01

Table 3: Regression results

	Model 0 Advisory	Model 0 Control task	Model 1 Advisory task	Model 1 Control task	Model 2 Advisory	Model 2 Control task	Model 3 Advisory	Model 3 Control task
Administrative complexity	.027	-.045	.012	-.063	.021	-.067	.021	.069
Years since introduction	.063	.085	.061	.082	.050	.087	.051	.086
Experience of respondents	.012	-.013	-.011	-.047	-.012	-.047	-.011	-.049
Frequency of board meetings	.079	.080	.136	.140	.135	.140	.135	.142
Director/Chair consultation	.224*	.161†	.167*	.088	.161†	.091	.159†	.096
Effort norms			.230*	.212*	.243*	.205*	.243*	.205*
Use of knowledge and skills			.093	.241*	.118	.229*	.119	.226*
Cognitive conflict			.215*	.123	.220*	.121	.218*	.126
Social cohesion					-.074	.036	.326	-1.177
Social cohesion squared							-.400	1.215
\bar{R}^2	.032	.006	.207	.210	.204	.204	.198	.201

Table 4: Tested hypotheses

Hypothesis	Confirmed?	Estimated value	p-value
H1a Effort norms will be positively associated with effective control task performance.	YES	.212	< 0.05
H1b Effort norms will be positively associated with effective advisory task performance.	YES	.230	< 0.05
H2a The use of knowledge and skills will be positively associated with effective control task performance.	YES	.241	< 0.05
H2b The use of knowledge and skills will be positively associated with effective advisory task performance.	NO	-	-
H3a Cognitive conflicts will be positively associated with effective control task performance.	NO	-	-
H3b Cognitive conflicts will be positively associated with effective advisory task performance.	YES	.215	< 0.05
H4a Social cohesion will have an inverted U-shaped relation with effective control task performance.	NO	-	-
H4b Social cohesion will have an inverted U-shaped relation with effective advisory task performance.	NO	-	-
H5 Cognitive conflicts will be negatively associated with social cohesion.	NO	.299	< 0.001

Figure 1: Behavioral determinants of board task performance

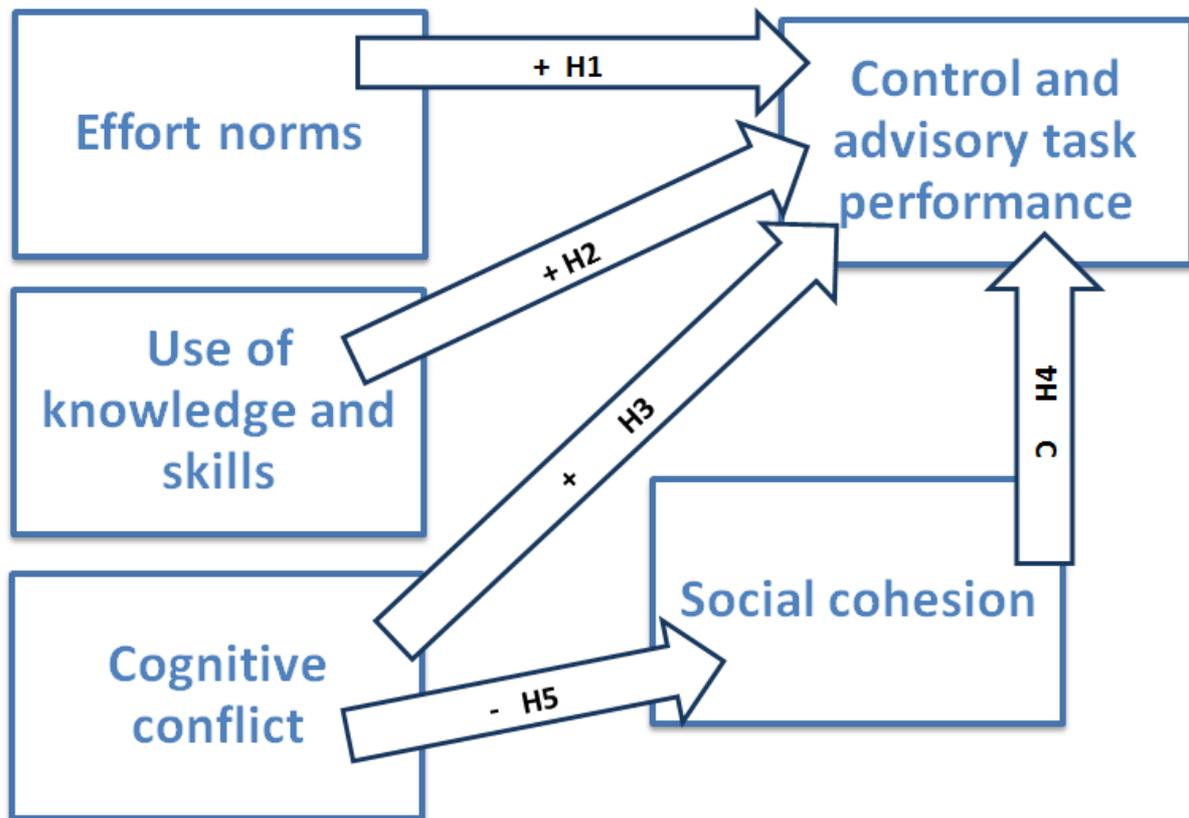
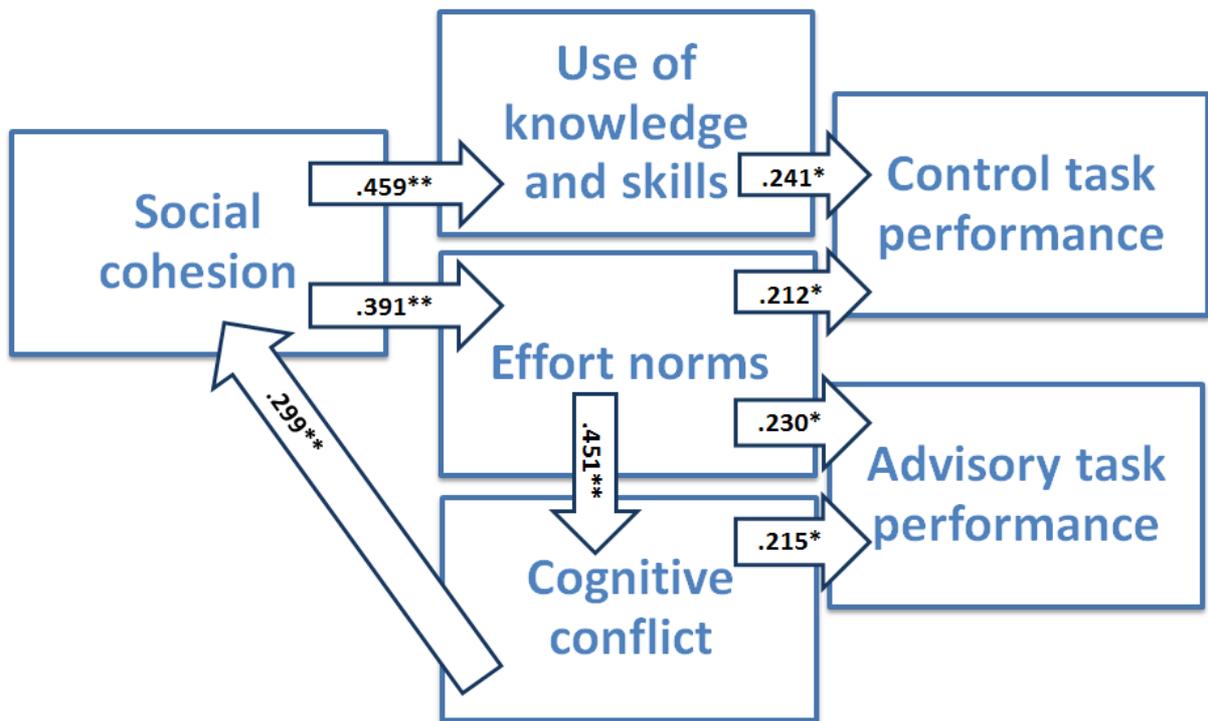


Figure 2: Adjusted model behavioral determinants of board task performance



References

- Adams, R., Hermalin, B. and Weisbach, M., *The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey*. NBER Working Paper No. 14486, 2008.
- Bainbridge, S., 'Why a Board? Group Decisionmaking in Corporate Governance'. *Vanderbilt Law Review*, 2002, 55, pp. 1-56.
- Bailey, B. and Peck, S., 'Board Processes, Climate and the Impact On Board Task Performance'. *First International Conference on Engaged Management Scholarship, June*, Available at SSRN: <http://ssrn.com/abstract=1852596>, 2011
- Bailey, B. and Peck, S., 'Boardroom Strategic Decision-Making Style: Understanding the Antecedents'. *Corporate Governance*, 2013, 21, pp. 131-146.
- Blokdijk, T. and Goodijk, R., *Toezicht binnen onderwijsinstellingen, Onderzoek naar samenstelling, werkwijze en functioneren van raden van toezicht in het onderwijs. [Supervision in educational institutions, Research into composition, operation and functioning of supervisory boards in education]*. The Hague: Nationaal Register, 2012.
- Brown, W., 'Exploring the Association Between Board and Organizational Performance in Nonprofit Organizations'. *Nonprofit Management & Leadership*, 2005, 15, pp. 317-339.
- Casey-Campbell, M. and Martens, M., 'Sticking it all together: A critical assessment of the group cohesion-performance literature'. *International Journal of Management Reviews*, 2009, 11, pp. 223-246.
- Chang, S-J., Witteloostuijn, A. and Eden, L., 'Common method variance in international business research'. *Journal of International Business Studies*, 2010, 41, pp. 178-184.

Cornforth, C., 'Nonprofit Governance Research: Limitations of the Focus on Boards and Suggestions for New Directions'. *Nonprofit and Voluntary Sector Quarterly*, 2012, 41, pp. 1116-1135.

Daily, C., Dalton, D. and Cannella, A., 'Corporate Governance: Decades of Dialogue and Data'. *Academy of Management Review*, 2003, 28, pp. 371-382.

Dalton, D. and Dalton, C., 'Integration of Micro and Macro Studies in Governance Research: CEO Duality, Board Composition, and Financial Performance'. *Journal of Management*, 2011, 37, pp. 404-411.

De Dreu, C. and Weingart, L., 'Task versus relationship conflict, team member satisfaction, and team effectiveness: A meta-analysis'. *Journal of Applied Psychology*, 2003, 88, 741-749.

De Wit, F., Greer, L. and Jehn, K., 'The Paradox of Intragroup Conflict: A Meta-Analysis'. *Journal of Applied Psychology*, 2012, 97, 360-390.

Di Pietra, R., Grambovas, C., Raonic, I. and Riccaboni, A., 'The effects of board size and 'busy' directors on the market value of Italian companies'. *Journal of Management & Governance*, 2008, 12, pp. 73-91.

Doherty, A.J. and Carron, A.V., 'Cohesion in volunteer sport executive committees'. *Journal of sport management*, 2003, 17, pp 116-141

Doherty, A.J., Patterson, M. and Van Bussel, M., 'What do we expect? An examination of perceived committee norms in non-profit sport organisations'. *Sport Management Review*, 2004, 7, pp 109-132

Eisenhardt, K.M., Kahwajy, J.L. & Bourgeois, L.J., 'How management teams can have a good fight'. *Harvard Business Review*, 1997, 75, 77-85.

Ensley, M., Pearson A. and Amason, A., 'Understanding the dynamics of new venture top management teams, Cohesion, conflict, and new venture performance'. *Journal of Business Venturing*, 2002, 17, pp. 365-386.

Finkelstein, S. and Mooney, A., 'Not the usual suspects: How to use board process to make boards better'. *Academy of Management Executive*, 2003, 17, pp. 101-113.

Forbes, D. and Milliken, F., 'Cognition and Corporate Governance: Understanding Board of Directors as Strategic Decision-making Groups'. *Academy of Management Review*, 1999, 24, pp. 489-505.

Forbes, D., 'Measuring the Unmeasurable: Empirical Studies of Nonprofit Organization Effectiveness From 1977 to 1997'. *Nonprofit and Voluntary Sector Quarterly*, 1998, 27, pp. 183-202.

Heemskerck, E.M. *Decline of the Corporate Community. Network Dynamics of the Dutch Business Elite*. Amsterdam: Amsterdam University Press, 2007.

Heemskerck, K., Heemskerck, E.M. and Wats, M. 'Wat maakt goed onderwijsbestuur? De gedragsmatige determinanten van taakuitvoering door raden van toezicht in het voortgezet onderwijs', *Mens & Maatschappij*, 2014, 89(2), pp. 151-174.

Hermalin, B. and Weisbach, M., 'The Effects of Board Composition and Direct Incentives on Firm Performance'. *Financial Management*, 1991, 20, pp. 101-112.

Herman, R. and Renz, D., 'Theses on Nonprofit Organizational Effectiveness'. *Nonprofit and Voluntary Sector Quarterly*, 1999, 28, pp. 107-126.

Hogg, M. and Hains, S., 'Friendship and group identification: a new look at the role of cohesiveness in groupthink'. *European Journal of Social Psychology*, 1998, 28, pp. 323-341.

Hoye, R. and Doherty, A. 'Nonprofit sport board performance: a review and directions for future research'. *Journal of Sport Management*, 2011, 25, pp. 272-285

Huse, M., 'Accountability and Creating Accountability: a Framework for Exploring Behavioural Perspectives of Corporate Governance'. *British Journal of Management*, 2005, 16, pp. S65-S79.

Huse, M., 'Exploring methods and concepts in studies of board processes'. In: Huse (ed.) *The Value Creating Board, Corporate governance and organizational behaviour*. London, New York: Routledge, pp. 221-233, 2009a.

Huse, M., 'The 'value creating board' surveys: A benchmark'. In: Huse (ed.) *The Value Creating Board, Corporate governance and organizational behaviour*. London, New York: Routledge, pp. 367-383, 2009b.

Huse, M., Hoskisson, R., Zattoni, R. and Viganò, R., 'New perspectives on board research: changing the research agenda'. *Journal of Management and Governance*, 2011, 15(1), pp. 5-28.

Huse, M., Minichilli, A. and Schøning, M., 'Corporate Boards as Assets for Operating in the New Europe: The Value of Process-Oriented Boardroom Dynamics'. *Organizational Dynamics*, 2005, 34, pp. 285-297.

Jehn, K., 'A Multimethod Examination of the Benefits and Detriments of Intragroup Conflict'. *Administrative Science Quarterly*, 1995, 40, pp. 256-282.

Karsten, S., 'Neoliberal Education Reform in The Netherlands'. *Comparative Education*, 1999, 35, pp. 303-317.

Kumar, P. and Zattoni, A., 'Corporate Governance, Board of Directors, and Firm Performance'. *Corporate Governance*, 2013, 21, pp. 311-313.

Leblanc, R., 'What's Wrong with Corporate Governance: a note'. *Corporate Governance*, 2004, 12, pp. 436-441.

Lindgren, L., 'The Non-profit Sector Meets the Performance-management Movement, A Programme-theory Approach'. *Evaluation*, 2001, 7, pp. 285-303.

Mach, M., Dolan, S. and Tzafrir, S., 'The differential effect of team members' trust on team performance; The mediation role of team cohesion'. *Journal of Occupational and Organizational Psychology*, 2010, 83, pp. 771-794.

Minichilli, A., Zattoni, A. and Zona, F., 'Making Boards Effective: An Empirical Examination of Board Task Performance'. *British Journal of Management*, 2009, 20(1), pp. 55-74.

Minichilli, A., Zattoni, A., Nielsen, S. and Huse, M., 'Board task performance: An exploration of micro- and macro-level determinants of board effectiveness'. *Journal of Organizational Behavior*, 2012, 33, pp. 193-215.

Mooney, A., Holahan, P. and Amason, A., 'Don't Take It Personally: Exploring Cognitive Conflict as a Mediator of Affective Conflict'. *Journal of Management Studies*, 2007, 44, pp. 733-758.

Nadler, D., 'Building Better Boards'. *Harvard Business Review*, 2004, 82, pp. 102-111.

Nicholson, G. and Newton, C., 'An Empirical Investigation of Perceptions of Board Roles Among the Corporate Elite'. In: Kennedy and Di Milia (eds.) *Proceedings of the 20th ANZAM Conference "Management: Pragmatism, Philosophy, Priorities"*, 6-9 December. Australia, Queensland, Yeppoon, 2006.

Nicholson, G., Newton, C. and McGregor-Lowndes, M., 'The Nonprofit Board as a Team, Pilot Results and Initial Insights'. *Nonprofit Management & Leadership*, 2012, 22, pp. 461-481.

Nordqvist, M. and Minichilli, A., 'What makes boards in small firms active?' In: Huse (ed.) *The Value Creating Board, Corporate governance and organizational behaviour*. London, New York: Routledge, pp. 384-397, 2009.

O'Neill, T. A., Allen, N. J. & Hastings, S. E., 'Examining the 'Pros' and 'Cons' of Team Conflict: A Team-Level Meta-Analysis of Task, Relationship and Process Conflict'. *Human Performance*, 2013, 26, 236-260.

Park, W.-W., 'A comprehensive empirical investigation of the relationships among variables of the groupthink model'. *Journal of Organizational Behavior*, 2000, 21, pp. 873-887.

Petrovic, J., 'Unlocking the role of a board director: a review of the literature'. *Management Decision*, 2008, 46, pp. 1373-1392.

Pugliese, A., Minichilli, A. and Zattoni, A. , 'Integrating agency and resource dependence theory: Firm profitability, industry regulation and board task performance'. *Journal of Business Research*, 2013 (In Press).

Pye, A. and Pettigrew, A., 'Studying Board Context, Process and Dynamics: Some Challenges for the Future'. *British Journal of Management*, 2005, 16, pp. S27-S38.

Renz, D., 'Introduction'. *Nonprofit Management & Leadership*, 2012, 22, pp. 387-390.

Renz, D. and Andersson, F., 'Nonprofit Governance, A review of the field'. In: Cornforth and Brown (Eds): *Nonprofit Governance, Innovative Perspectives and Approaches*. Routledge, pp. 17-46, 2014.

Sellevoll, T., Huse, M. and Hansen, C., *The Value Creating Board, Results from the 'Follow-Up Surveys' 2005/2006 in Norwegian firms*. Oslo: Norwegian School of Management BI, 2007.

Simons, T. L. & Peterson, R. S., 'Task Conflict and Relationship Conflict in Top Management Teams: The Pivotal Role of Intragroup Trust'. *Journal of Applied Psychology*, 2000, 85, 102-111.

Stiles, P. and Taylor, B., *Boards at Work, How Directors View their Roles and Responsibilities*. Oxford: Oxford University Press, 2001.

Tekleab, A., Quigley, N. and Tesluk, P., 'A Longitudinal Study of Team Conflict, Conflict Management, Cohesion, and Team Effectiveness'. *Group & Organization Management*, 2009, 34, pp. 170-205.

Treiblmaier, H. and Filzmoser, P., 'Exploratory factor analysis revisited: How robust methods support the detection of hidden multivariate data structures in IS research'. *Information & Management*, 2010, 47, pp. 197–207.

Useem, M., 'Reaching Corporate Executives'. In: Hertz and Imber (eds.): *Studying Elites Using Qualitative Methods*. Thousand Oaks, London, New Delhi: Sage, pp. 18-39, 1995.

Van Ees, H., Gabrielsson, J. and Huse, M., 'Toward a Behavioural Theory of Boards and Corporate Governance'. *Corporate Governance*, 2009, 17, pp. 307-319.

Zona, F. and Zattoni, A., 'Beyond the Black Box of Demography: board processes and task effectiveness within Italian firms'. *Corporate Governance*, 2007, 15, pp. 852-864.