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Distrust, Identification and Collaboration Effectiveness in Multiparty Systems

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Abstract: Multiparty collaborative systems are created to tackle important societal challenges, yet studies that investigate the relational dynamics of such systems remain scant. Our study explores the role of distrust within and between parties, as well as identification with one's own party, in the collaborative effectiveness of such multiparty systems (MPS). We use a behavioral simulation context in which distrust, identification, and collaboration effectiveness are assessed at three moments in time: namely, at the onset of the MPS (expectations related to within and between group interactions), during the interactions, and at the end of the simulation. The simulation was played 11 times with different groups, as part of an organization development program for a large organization. We show that high initial expectations of distrust between parties decrease collaboration effectiveness over time, while identification with one's party has a positive influence on collaboration effectiveness. Moreover, our results show that distrust between parties interacts with distrust within parties in such a way that the highest level of collaboration effectiveness is reported by parties with low within-group distrust and low between-party distrust. The lowest collaboration effectiveness is reported by parties with low within-group distrust and high levels of between-party distrust.

Keywords: collaboration; multiparty systems; identification; trust; collaboration effectiveness

1. Introduction

One of the trademarks of the twenty-first century is complexity, reflected in a myriad of multifaceted and dynamic challenges with important societal, ecological and economic implications. Organizations and society at large have to rise to these challenges and in an attempt at doing so, multiparty systems are often created to tackle some of these modern and global challenges. Multiparty systems (MPS) are flexible organizational forms that span organizational and societal boundaries and include various stakeholders with an interest in the situation at hand [1–3]. Complex challenges such as combating child trafficking, complex construction projects, water management, deforestation, and regional development are often addressed by multiparty systems [4–8]. Multiparty systems are typically larger than organizational groups, have no pre-established role structure or clear task assignment and are composed of stakeholders that can represent various organizations or organizational units. Such multiparty systems rely on the positive interdependence of their stakeholders in order to achieve collaborative success. Individuals representing their organizations engage in within- and between-group interactions, explore their interdependencies, share their insights, and come to joint problem definitions that will ultimately help them achieve their interests and contribute to the collective good at the same time. Such inter-organizational relations in multi-party systems often start from distrust; trust has to be built as stakeholders start to interact. How does collaborative success emerge in such complex inter-organizational settings? We attempt to answer this question in an empirical study using a behavioral simulation where we investigate collaboration effectiveness as it is influenced by distrust between and within parties and identification with one's own party.

2. Theory and Hypotheses

2.1. (Dis)Trust in Multiparty Systems

Organizations engage in collaboration in order to realize goals they cannot achieve on their own, yet organizations that engage in such complex collaborative relations have to first define a joint task and agree on collective goals that will help each organization to achieve its own set of goals. Finding this common ground requires exploring interdependencies, working through differences, and integrating organizational interests into a joint goal. Collaboration effectiveness can thus be defined as the extent to which a joint goal is defined and realized. Yet the issue remains complex [9,10], as what exactly are the criteria for having realized the joint goal? Further, at what level should it be measured (the community level, the multiparty system level, the level of the individual stakeholder)? A subsequent question is whether collaboration effectiveness should be assessed by insiders or by outsiders. Assessments by insiders (i.e., stakeholders, whether organized or not), seem highly relevant, as these may have an impact on the continuation of the collaboration. Simultaneously, it can be argued that those without a stake may have the most objective view (e.g., researchers) on whether the joint goal is clearly defined and ultimately realized. When assessing the effectiveness of collaboration, we have earlier argued that one should not be immersed in the system while not being too distant either, so as not to be blinded by the dynamics (for an example regarding the role of an action researcher, see [8]). In the context of behavioral simulations, participants are involved in collaborative efforts and are engaged in defining and addressing the collective task, with the aim of learning experientially about collaboration; therefore, we have decided to rely on their self-reports to evaluate collaboration effectiveness [11].

Collaboration effectiveness depends, at least partly, on the quality of the interorganizational relationships. The relational dynamics of multiparty systems take place at various system levels simultaneously [12]: it is individuals representing their organizations that normally interact with other representatives: for example, in project meetings or work conferences. Yet these individuals, with their own idiosyncratic histories, are also organizational members and through these individuals it is organizations that encounter one another. Furthermore, the representatives themselves form a temporary group when meeting around a collaboration table. Tensions that are inherent to working in multiparty systems (as a consequence of the complexity of the issues at stake, the diversity of stakeholders present, and the ambiguity as multiparty systems start from being under organized [2]) are experienced by individuals (and not by groups or organizations) and get expressed in the interactions between and within parties, as they try to manage conflict, build trust, and develop their collaboration. Thus, individuals (without denying their individuality) are group members (cf. Social Identity Theory, [13]): they belong to their constituent organization (in-group) and relate to group members belonging to other organizations (out-groups). When we speak of parties interacting, we mean individuals interacting in their capacity of group member.

Newly formed multiparty systems bring together stakeholders that often have no previous experience in interacting with one another. Each stakeholder joins the system with specific interests, views, and opinions that are not necessarily known to the other parties or aligned with the interests, views, and opinions of the others [3,14]. Even if some of the stakeholders of the newly formed MPS share an interaction history (e.g., have worked together in the past), the nature of the task is likely to be different, the composition of the system (stakeholders) is new, and the general constraints of the situation constitute a complexity for which pre-existing interactional routines may prove useless [12]. Under such conditions, at the onset of the interactions, stakeholders are likely to be suspicious about the interests of others and show vigilance concerning their potential actions [15,16]. Therefore, we start from the presumption (also in line with Social Identity Theory, [13]) that newly formed MPS generally start from distrust rather than trust.

In line with Vlaar and colleagues [16], we distinguish between trust and distrust and, as said, argue that the onset of MPS interactions are marked by distrust expressed as

suspicion towards the other stakeholders, and fear that they will behave opportunistically. Trust has to be built during interactions and will ultimately be reflected in the perception that other stakeholders operate based on goodwill and are committed to the shared values and goals of the MPS. During interactions, trust and distrust can coexist, as stakeholders of MPSs may experience mutual distrust with respect to some issues, yet they may trust each other in some other aspects [15,16]. Parties have to work towards the development of a common understanding and mutual acceptance, and develop a sense of trust that will ultimately allow them to work towards the definition and accomplishment of a collective goal, while, at least in the initial stages, tolerate the existence of distrust [8,17,18]. The trust involved pertains not to institutional trust but relational trust: trust in the other person, in his or her representational role [16,19].

Interdependence theory [20] argues that at the onset of interpersonal interactions, protagonists form expectations related to the nature, goals, and outcomes of the interactions. Subsequently, they engage in behaviors that are aligned with these initial expectations. Stakeholders (represented by individuals) enter MPSs with expectations about future collaborative relations that are built on past behavior or the scattered information (including reputation) that is available about the MPSs' stakeholders [21]. If parties start from the expectation that intergroup relationships will be based on distrust rather than trust, true intergroup collaboration will be much more difficult to achieve than if the initial level of distrust is low [22]. If parties start from strong expectations of distrust towards other parties they will be less likely to engage with these parties in order to discover their interdependencies, to constructively work with their differences, and create a relational space that allows them to deal effectively with these initial expectations of distrust. In such conditions, collaboration effectiveness will more likely be impaired as compared with situations in which the initial expectations of distrust are not as strong [15,16]. Thus, despite the fact that distrust is likely to be present from the start, it is the degree of expected initial distrust that will have an impact on collaboration effectiveness.

In line with these arguments concerning the intergroup expectations, we hypothesize the following:

Hypothesis 1 (H1). *Initial expectations of between-party distrust in multiparty systems decrease collaboration effectiveness over time.*

MPSs are multilayered systems [12,23]; therefore, trust development processes unfold at all these relational layers. Curșeu and Schruijer [23] showed that the relational dynamics unfolding at the party level impact the relational dynamics that emerge at the MPS level, and vice versa. Building on these top-down and bottom-up relational processes we argue that effective collaboration in MPSs requires the development of trust at the party as well as at the multiparty system level. MPSs in which, at the onset of the interactions, the stakeholder parties share a high level of distrust, the development of collaborative relations is endangered (unless they manage to address the distrust and build trust simultaneously). Moreover, stakeholder parties in which, at the onset of intergroup interactions, the level of intragroup distrust is high, are likely to engage in within-party conflicts that may ultimately spill over to relational tensions at the MPS level [23]. This is because it is difficult to build trusting relations with others if one does not trust one's own party members to start with. We therefore expect both a direct negative effect of within-party distrust on collaboration effectiveness as well as a reinforcing effect of within-party distrust on the negative influence of between-party distrust. In line with these arguments, we hypothesize that:

Hypothesis 2 (H2). *Initial expectations of within-party distrust in multiparty systems decrease collaboration effectiveness in time.*

Hypothesis 3 (H3). *Distrust within parties accentuates the negative effect of distrust between parties on collaboration effectiveness.*

2.2. Identification in MPS

Social identification describes the extent to which an individual defines himself/herself in relation to a social entity (e.g., group, organization) [24]. A key tenet of the Social Identity Theory is that individuals strive to build and maintain a positive self-image and identifying with groups one belongs to is an important part of these attempts [13]. Multiparty systems create a conducive context for intergroup contact, as groups interact extensively and their members have ample opportunities to engage in social comparison, which is a key process for the emergence of a positive social identity. Both Social Identity Theory and Social Identification Theory predict that a strong identification with the group generates a tendency to engage in negative stereotyping towards out-groups and spur intergroup conflict [13,24]. In line with this social identity argument, identification with one's own party in MPSs is likely to stimulate intergroup conflict and decrease intergroup collaboration.

In MPSs, however, social identification is also beneficial for intergroup interactions. Groups have to serve their interests, follow their convictions, and bring these to the collaboration table. Bringing themselves in means enriching the other parties with their strengths and ideas, while it simultaneously means asserting oneself and one's interests in the (multiparty) relationship [8]. Further, in light of positive interdependence principles [25,26], parties in MPSs will be able to achieve their goals only to the extent to which all the other parties in the system will achieve theirs [14]. Building and maintaining a strong identification with one's party is therefore key for collaboration effectiveness. In light of this social interdependence argument, MPSs will be able to define and realize viable collective goals only to the extent to which the interests of the parties are followed and their identities remain intact.

Empirical evidence in the multi-team literature provides evidence for both these divergent lines of reasoning—that is, for the positive effects of intragroup identification as well as for the negative effects on intergroup collaborative efforts. For example, in multi-team systems, on the one hand, group identification reduces information sharing across group boundaries, and intergroup coordination [27–29]. Group identity as an emergent process leads members to derive their belonging needs from their own team rather than the multi-team system and ultimately undermines their collaborative efforts and systemic performance (Proposition 4) [30]. On the other hand, empirical evidence shows that boundary spanners' identification with their in-group decreases the likelihood of intergroup relationship conflict and intergroup goal conflict, while it increases intergroup productivity [31]. Moreover, in multi-team systems, strong identification with one's component team fosters intergroup coordination and multi-team performance [32]. Finally, it has been shown that in-group identification fosters engaging in intergroup interactions and cross-team innovative behavior [33].

Given the theoretical predictions derived from Social Identity Theory versus those derived from Social Interdependence Theory, as well as the divergent empirical evidence reported in the multi-team literature, we formulate two competing hypotheses concerning the influence of identification with one's party on collaborative effectiveness in MPSs.

Hypothesis 4a (H4a). *Initial identification with one's own party decreases collaboration effectiveness in time.*

Hypothesis 4b (H4b). *Initial identification with one's own party increases collaboration effectiveness in time.*

Complex social structures like multi-team systems and multiparty systems raise important challenges for identification, in that the target of social identification can shift between the focal party and the system as a whole [28]. A strong identification with the focal party at the onset of intergroup interactions in MPSs may increase the in-group focus and as such accentuate the negative impact of initial distrust experienced between parties. A study carried out in a project-based organization structure, [34] showed that identification

with the project leads to an in-group focus and negative stereotyping of the out-groups, while identification with the organization reduces these biases. Finally, in line with Social Identity Theory [13], we expect that in the context of MPSs, the detrimental influence of distrust between parties on collaborative effectiveness is accentuated by identification with one's own party. The more parties identify with their in-group, the more their between-group distrust will negatively influence collaboration effectiveness. From a social interdependence point of view, a strong identification with the focal party may also trigger a strong desire to achieve the party's goals and objectives. In MPSs, these goals and objectives are interdependent of those of the other parties; therefore, parties with strongly identified members may cherish this positive interdependence and reach out to the other parties, reducing the negative implications of distrust. This line of reasoning leads to opposite expectations concerning the interplay between identification and distrust between parties: namely, that strong initial identification with the focal party decreases the negative association of distrust between parties with collaboration effectiveness. To conclude, in a similar fashion with the hypotheses on identification, we formulate two competing hypotheses for the interplay of identification with distrust between parties.

Hypothesis 5a (H5a). *Initial identification with one's party accentuates the negative effect of distrust between parties on collaboration effectiveness.*

Hypothesis 5b (H5b). *Initial identification with one's party attenuates the negative effect of distrust between parties on collaboration effectiveness.*

3. Methods

3.1. Research Context

The organization where the research was carried out was a business unit of a large construction company. The construction company develops, builds and renovates housing for the profit and not-for-profit sectors, and is a major player on the Dutch housing market. Their recent strategic reorientation and consequent restructuring was intended to make the organization more customer focused. Personnel were relocated, some had to apply for new jobs as their old ones were abolished, and some became redundant. As a consequence of the restructuring, two departments, developing and building, which had hitherto operated relatively autonomously on their own targets were asked to collaborate, and, if they did collaborate, one would be the principal and the other the contractor party. Through this arrangement, they would share project responsibility and work towards shared targets. Simultaneously, commerce and production, which before were operating regionally under one management, were now to be separated. It is in this context—to support these changes—that the need was expressed to develop a program for directors, managers, and professional staff to organize a program to support the transition process the company was going through as a consequence of their strategic reorientation. The research that is reported here was part of this larger OD process aimed at learning experientially from working across departmental and organizational boundaries. Various activities were engaged in on and off the job, with directors, project leaders, managers, and staff. One of the workshops was a simulation, which aimed to help the participants become aware of the relational dynamics of multiparty collaboration.

3.2. Sample and Procedure

The study is based on 11 runs of a multiparty simulation called The Yacht Club (for comprehensive overviews see [12,23,35,36]. The purpose of participating in the simulation is to learn through experience about the relational challenges of working across organizational boundaries. Participants were 211 organizational members from different departments and hierarchical levels, distributed over the eleven simulations (there were 11 cohorts that each followed their own program as part of the OD process). The multiparty simulation takes place in real time, involves face-to-face interactions, lasts for two days, and

is organized in two parts. The simulation itself lasts for a little over one day and it involves seven interest parties that come together to deal with a complex regional development issue that has economic, social, and environmental dimensions. The remainder of the second day is devoted to debriefing and jointly reflecting on the dynamics that emerged during the simulation.

At the onset of the simulation, the participants are asked to express their first two preferences for stakeholders based on a summary description presented by the staff. In general (if the expressed preferences do not overlap excessively), they are assigned to their preferred party. During the simulation, participants are allowed, if they wish to do so, to engage in two forms of intergroup interactions, namely visiting (a maximum of 3 interest parties or their representatives can be present in the same physical space) and plenaries (or town hall meetings to which every party can send a delegate while their constituents can sit behind their representatives and send notes). Each party has a dedicated room in which they can receive visitors or work on their own strategy. The plenary is organized in the room of one of the parties: namely, the public authorities. The visiting and plenary sessions are alternated (five in total of each). Participants address complex and realistic issues related to the island of Kotlin in the Gulf of Finland. The parties are three yacht clubs (interested in developing tourism), two financiers (a bank and an investor), the public authorities, and a shipyard. Interactions are guided only by a few ground rules: the participants are asked not to role-play, they are asked to identify as much as possible with the interests of their own party, and to behave as they see fit. Participants do not receive a clear task formulation; it is up to them to come up with a joint task definition, based on the data provided in their party briefing, and to plan their actions and interactions accordingly.

Participants are asked to fill in short survey at three moments during the simulation: the first one before intergroup interactions tap participants' expectations, the second survey after the second plenary meeting asks for an assessment of their current interactions; the third, at the end of the simulation, asks participants to look back at their interactions. Answers are used to support the process of joint sense-making during the debriefing. All data reported in this paper were collected anonymously; therefore, no definable information was asked from participants (including gender and age). Apart from respecting privacy considerations, only asking for participants' interest party name strengthened the salience of one's group membership.

Distrust: Within-group trust and between-group distrust were assessed separately. Each form of distrust was evaluated using a single item, at three moments in time: "To what extent [do you expect/is/was] the atmosphere within your [own party/between parties] [to be] distrustful" rated on a five-point Likert scale (1 = not at all, to 5 = to a very high degree). We opted for using a single item measure in order to not interfere too much with the simulation dynamics and because distrust is a construct that participants could easily grasp. In line with the recommendations of Fulmer and Gelfand [37] for evaluating trust at different levels of analysis, in order to capture the distrust between versus within parties we have used different referents: namely, at the simulation level and at the party level, respectively. The within-group agreement indices (we used the RWG index [38]) were 0.71 for both within- as well as between-party distrust. For within-party distrust data were aggregated at the party level and the average score was used as an indicator of distrust. For between-party distrust, data were aggregated at the simulation level and these scores were used in subsequent analyses.

Collaboration effectiveness was assessed with four items: "To what extent do you expect (time 1)/did you experience (times 2 and 3) the collaboration between the parties to be: (1) effective; (2) realistic; (3) successful; (4) sustainable". For each of the items, answers were recorded on a five-point Likert scale ranging from 1 = not at all, to 5 = to a very high degree. Cronbach's alpha for this scale was 0.75 and the omega was 0.77, indicating that the scale has acceptable internal consistency. The median scores of the within-group agreement for this scale were: 0.94 for time 1, 0.93 at time 2, and 0.92 at time 3, showing sufficient

within-group agreement to support aggregation at the party level. Scores were aggregated at the party level and these scores were used in subsequent analyses.
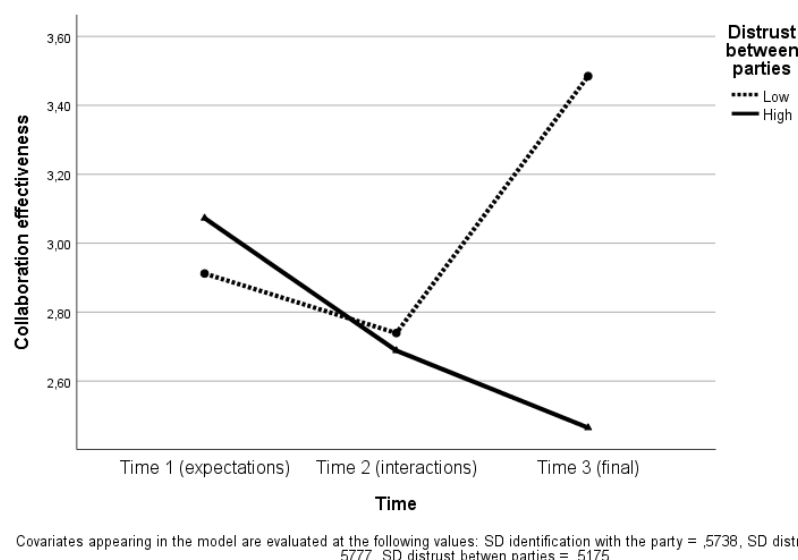
Identification with the party was evaluated with two items: "I feel identified with my interest party"; "I feel engaged with my interest party". Answers were recorded using the same anchors as for the other scales. Cronbach's alpha for this scale was 0.86, indicating the good internal consistency of the two items. The median score of the within group agreement index (RWG) was 0.83, supporting the aggregation of the scores at the party level. These party level scores were used in subsequent analyses.
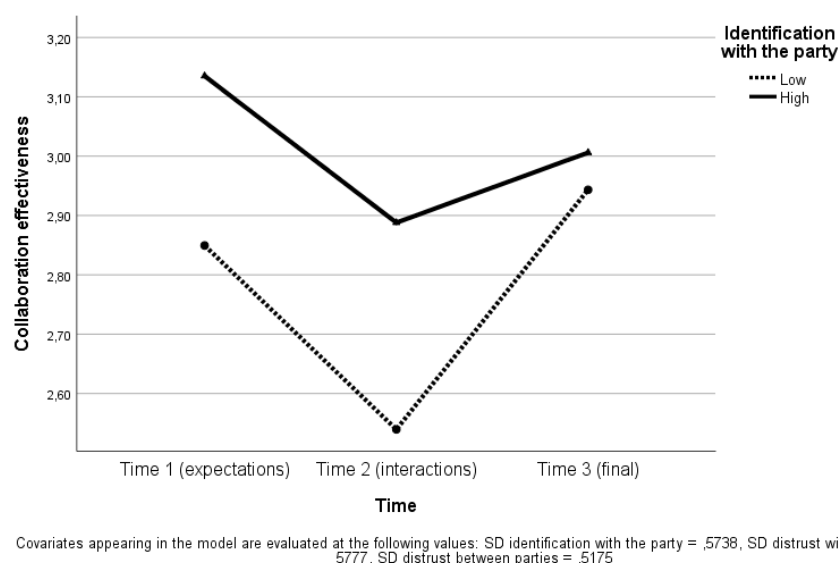
4. Results

We have used a repeated measures ANOVA to test the hypotheses. The collaboration effectiveness scores rated at times 1 to 3 (we further refer to this repeated measure as Time) were entered as a dependent variable, and the initial expectations of distrust (within and between parties) and identification in the multiparty system were used to create dummy variables using a mean split procedure. The dummy variables (0 = scores lower than the mean sample scores and 1 = scores higher than the mean sample score) were entered as between-subject factors in the repeated measures ANOVA. Although the median scores for the within-group agreement indices were higher than the recommended 0.70, some of the groups had scores as low as 0.52, indicating some degree of within-party variability in the individual scores. In order to account for the variance of scores within groups, we entered as covariates the within-group standard deviations for distrust within parties and identification with one's party, as well as the simulation level standard deviation for distrust between parties. As a test of our hypotheses, we first observed the interaction effect of the within-group factor Time and the between-group factors, with collaboration effectiveness as the dependent variable. The interaction between Time and between-party distrust was significant (F(2,130) = 20.86 ($p < 0.001$), $\eta^2 = 0.24$, $\pi = 1.00$). This significant interaction effect is presented in Figure 1, and it shows, indeed, that as the simulations evolved, groups that had high initial levels of distrust reported a steady decrease in collaboration effectiveness. Parties in which distrust between parties was initially low reported an increase in collaboration effectiveness from time 1 to time 3. We can therefore conclude that the first hypothesis is supported. The interaction between Time and within-party distrust was not significant (F(2,132) = 0.29 ($p = 0.75$), $\eta^2 = 0.004$, $\pi = 0.10$). We can therefore conclude that the second hypothesis is not supported by the data. Moreover, the interaction effect between Time and Identification with one's party is marginally significant (F(1,130) = 2.70 ($p = 0.07$), $\eta^2 = 0.04$, $\pi = 0.53$). The interaction effect is depicted in Figure 2. It shows that although in all three time points, parties with high identification reported higher collaborative effectiveness than parties with low identification with one's party, this difference decreased in time. This pattern of results is aligned with Hypothesis 4b. Additional analyses will be reported below to further test this hypothesis. Finally, an additional significant interaction effect between Time and the standard deviation of the distrust between parties was obtained (F(1,130) = 6.05 ($p = 0.003$), $\eta^2 = 0.09$, $\pi = 0.88$). The interaction effect is depicted in Figure 3. It shows that although at the onset of the simulation, groups with more heterogeneous expectations of between-party distrust also expected higher collaboration effectiveness. As intergroup interactions proceeded, groups with more homogeneous perceptions of between-party distrust reported higher levels of collaboration effectiveness.

Our analyses also revealed a significant main effect of between-party distrust (F(1,65) = 8.42 ($p = 0.005$), $\eta^2 = 0.12$, $\pi = 0.82$), as illustrated in Figure 1. Parties that reported lower levels of distrust of the other parties reported higher scores for collaboration effectiveness than parties that reported higher levels of distrust between parties. This significant main effect offers additional support to Hypothesis 1. Additionally, the main effect of identification is significant (F(1,65) = 11.20 ($p = 0.001$), $\eta^2 = 0.15$, $\pi = 0.91$). As illustrated in Figure 2, parties with high identification reported higher levels of collaboration effectiveness than the ones with lower levels of identification. The

positive and significant main effect of identification on collaboration effectiveness is in line with Hypothesis 4b; therefore, Hypothesis 4a is not supported by the data. Moreover, the interaction effect of Between-party distrust and Within-party distrust is significant (F(1,65) = 5.13 (p = 0.03), η^2 = 0.07, π = 0.61). The interaction effect is depicted in Figure 4. It shows that, as predicted, distrust within parties accentuates the negative association between distrust between parties and collaborative effectiveness across the three time intervals. This significant interaction effect fully supports Hypothesis 3. The interaction effect of between-party distrust and identification is not significant (F(1,65) = 0.01 (p = 0.97), η^2 = 0.00, π = 0.05); therefore, Hypothesis 5 is not supported. A significant interaction of identification with within-party distrust was observed (F(1,65) = 6.44 (p = 0.01), η^2 = 0.09, π = 0.71). The interaction effect is depicted in Figure 5. It shows that distrust within parties diminishes the positive association between identification with the party and collaborative effectiveness. We have cross-checked the robustness of our analyses by running the repeated measures ANOVA without any control variables, and the results did not change significantly.
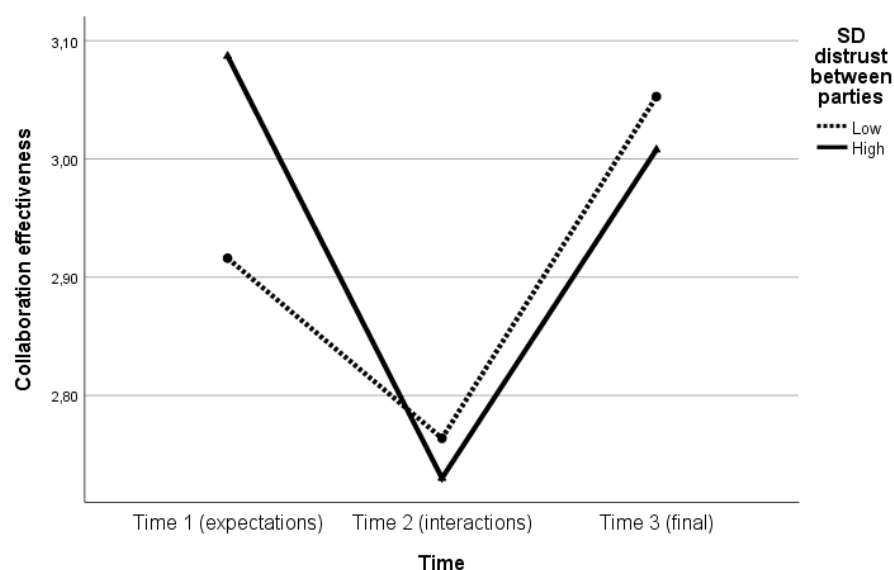

Covariates appearing in the model are evaluated at the following values: SD identification with the party = ,5738, SD distrust within parties = ,5777, SD distrust between parties = ,5175

Figure 1. Evolution in time of collaboration effectiveness depending on distrust between parties.

Covariates appearing in the model are evaluated at the following values: SD identification with the party = ,5738, SD distrust within parties = ,5777, SD distrust between parties = ,5175
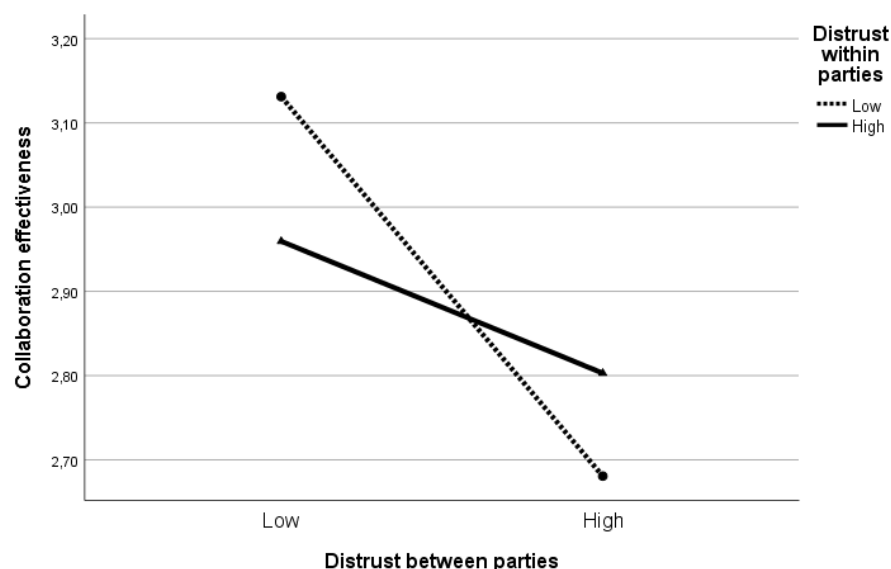
Figure 2. Evolution in time of collaboration effectiveness depending on identification with the party.

Covariates appearing in the model are evaluated at the following values: distrust within parties = 1,5735, SD distrust within parties = ,5777, identification with the party = 3,7434, SD identification with the party = ,5738, distrust between parties = 3,0943
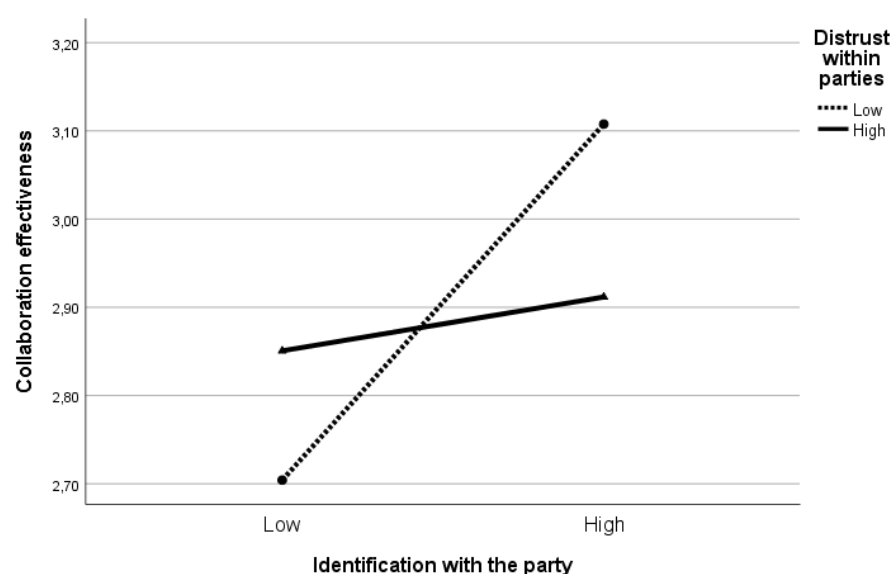
Figure 3. Evolution in time of collaboration effectiveness depending on the standard deviation of distrust between parties.

Covariates appearing in the model are evaluated at the following values: SD identification with the parrty = ,5738, SD distrust within parties = , 5777 , SD distrust between parties = ,5175

Figure 4. The interaction effect of distrust between and within parties on collaboration effectiveness.

In order to further check the nature of the interaction effects, we used a method described in Montoya [39] for testing moderation effects in within-subject designs with two subsequent evaluations. This method estimates of the effects of change in a particular pair of variables from one evaluation to the next. For this set of analyses, we used the continuous party level scores for identification with the team and distrust within parties, as well as the continuous simulation level scores for distrust between parties. We estimated two relevant changes: namely, from time 1 to time 2 (from expectations to interactions) and from time 2 to time 3 (from interactions to closure). The results of the regression analyses are summarized in Table 1.

Covariates appearing in the model are evaluated at the following values: SD identification with the party = ,5738, SD distrust within parties = , 5777, SD distrust between parties = ,5175

Figure 5. The interaction effect of distrust within parties and identification with the party on collaboration effectiveness.

Table 1. Results of the repeated measures moderation analyses.

Variable	CE T1	CE T2	CE T3	CET2-CET1	CET3-CET2
Constant	3.01 *** (0.04)	2.75 ***(0.05)	3.03 *** (0.05)	−0.26 *** (0.05)	0.28 *** (0.06)
Distrust within parties	−0.06 (0.07)	−0.11 (0.08)	−0.11 (0.09)	−0.05 (0.09)	0.002 (0.11)
Identification with the party	0.30 *** (0.06)	0.35 *** (0.08)	0.03 (0.08)	0.04 (0.08)	−0.32 ** (0.10)
Distrust between parties	−0.04 (0.21)	−0.02 (0.26)	−2.04 *** (0.28)	0.01 (0.28)	−2.01 *** (0.34)
N	76	76	76	76	76
Adjusted R^2	0.25	0.23	0.45	0.01	0.40
F statistic	7.81 ***	7.07 ***	19.46 ***	0.20	15.98 ***

Note. Unstandardized regression coefficients are presented in the table with standard errors in between brackets. ** $p < 0.01$; *** $p < 0.001$; CE T1 = Collaboration effectiveness at time 1; CE T2 = Collaboration effectiveness at time 2; CE T3 = Collaboration effectiveness at time 3.

In a similar fashion to the ANOVA analyses, we used the average distrust between parties, and the average identification with one's party, as moderators of the change in collaboration effectiveness from time 2 to time 3. The change in collaboration effectiveness from time 1 to time 2 was not significantly predicted by any of the predictors. The change in collaboration effectiveness from time 2 to time 3 was negatively and significantly predicted by the mean distrust between parties as well as the mean level of identification with the party. These results are in line with the ones reported in the repeated measures ANOVA, showing that the parties that started with a high level of distrust experienced a significantly lower increase in collaboration effectiveness from time 2 to time 3 than parties that reported lower distrust in the other parties at the onset of the simulation. Moreover, parties that reported high levels of identification with one's party at the onset of the simulation reported higher levels of collaboration effectiveness at times 1 and 2 as well as a lower increase in collaboration effectiveness from time 2 to time 3. This pattern of results lends support to Hypothesis 4b, although the effect on the change in collaboration effectiveness from time 2 to time 3 is in line with Hypothesis 4a.

5. Discussion

The first aim of our paper was to test the effect of the interplay of distrust within and between parties in MPSs on collaboration effectiveness and the sustainability of inter-organizational relationships. We answered the call for more research on the cognitive and affective dimensions of inter-organizational collaboration, and our results show that initial

expectations of distrust between parties have lasting detrimental effects on collaboration effectiveness in MPSs. Such strong distrust expectations, if remained unaddressed, backfire and prevent the MPS from defining joint goals and achieving these collaboratively [15,16]. Moreover, our results shed light on the joint effects of within- and between-parties distrust on collaboration effectiveness, and show that within-party distrust accentuates the negative influence of between-party distrust on collaboration effectiveness. An important issue to discuss is the conceptual distinctiveness between trust and distrust. The phrasing used in our study captured distrust, yet it would have been interesting to determine the extent to which low distrust scores are naturally associated with high trust scores, or in other words, whether trust and distrust are orthogonal variables. In MPSs, relational expectations are particularly complex, because on the one hand, parties may realize the interdependence necessary for the achievement of their goals, a fact that may lead to the expectation that ultimately they will trust each other. However, when expecting to engage in interactions with new parties, it is also very likely that interaction expectations express distrust. Future research should use measures of trust and distrust simultaneously and explore their joint evolution during MPS interactions. As said, MPSs almost always start with distrust between parties. If this remains unaddressed, collaboration effectiveness will suffer. The real challenge is to tolerate and address distrust while simultaneously developing trust. The shift from initial distrust to the development of trust is essential for the sustainability of inter-organizational relationships.

Our study contributes to the cross-level perspective on MPSs [23] and sheds light on the interplay between party-level and MPS-level factors as they shape the dynamics of these complex systems. Party-level dynamics are intertwined with MPS-level dynamics, and individual participants are exposed to influences stemming from these two social fields [40]. Each participant brings in a personal history, interpersonal preferences, opinions, and views, while at the same time representing an organization and engaging in a group around the table that crosses several organizational boundaries. From a Lewinian perspective [40], participants bring in their individuality (personality, intelligence, motivations, etc.) and act at the intersection of two social fields: namely, the organization they represent, and the newly formed MPS. Although expectations of distrust are assessed at the individual level, they reflect a more complex relational landscape in which organizational and inter-organizational social fields merge to impact individual evaluations and actions.

Our study has shown how identification with one's party functions as a contingency factor when it concerns the lasting impact of distrust expectations. The tension of being trapped between constraints stemming from different levels and social fields [40] may get expressed in social identification, as participants face the need to identify with their own party and the pressure to identify with the system as a whole (consisting of all the stakeholders). Static models of social identification and social identity cannot capture such complex identity work. Dynamic models of identification [41–43] are appropriate to address identity work [44] in complex multiparty systems. For example, our results show that identification with one's party positively predicts assessments of collaboration effectiveness at different moments in time. However, identification with one's party attenuates the increment of CE from time 2 to time 3; in other words, identification with the party and with the system may vary in time and influence collaboration effectiveness.

Thus, our results open venues for a dynamic perspective on identification in multiparty systems. Identification with one's party is certainly beneficial at the onset of the interactions, as it helps the party to clarify its objectives and interests, yet at the later stages, identification with the multiparty system as a whole is needed too in order to achieve and maintain systemic entitativity and performance. In multiparty systems, the target of social identification can thus shift over time along two dimensions: namely, with one's own party and with the system as whole [28], with implications for overall cooperation and performance. In MPSs, one may expect that high identification with the collaborative system without a strong identification with one's own party will result in neglecting the interests of one's own party, which in turn will jeopardize the multiparty endeavor alto-

gether. Multiparty collaboration can only be successful if parties can identify with and work towards a commonly defined goal while simultaneously serving one's own interests through that common goal [45,46]. Thus, a dual identification is needed: both with the collaborative (inter-organizational) system and with one's own party. Future research could build on the concept of identity work [44] in order to understand how the dynamic interplay between identification with the party versus identification with the MPS shapes the collaborative processes in such complex systems. We are currently investigating these identity dynamics.

Identity development is not only dynamic in nature: it is also the result of influences stemming from different levels of analysis and social fields. Identification with one's group is the result of the interplay between individual level (individual differences) as well as group level factors [43]. Moreover, identification can be conceptualized as a cause as well as a consequence of such multi-level influences [41]. Our emerging result concerning the interaction between identification with one's group and distrust within groups is likely to be due to such multi-level influences. Although counterintuitive, our results show that individuals in parties could have a high degree of identification with the party, yet also experience a high level of distrust within it. Such a combination, although rare, could be the result of the interplay between individual level factors (beliefs that, for example, one can successfully address major challenges, would lead to high identification with one's party, which has to tackle such challenges), group level factors (for example group composition, which may lead to a relative distrust of the other members' competencies or intentions to engage in the task), as well as multiparty level factors (a distrusting climate at the multiparty level that perspires into the party level). Thus, besides individual and party-level mechanisms which explain the cross-level influences in MPSs, other systemic, high order mechanisms could help us understand the way in which such cross-level influences work. The emergent result concerning the detrimental role of heterogeneous expectations of distrust between parties in MPS systems is an indication of or proxy for such systemic influences. According to our results, in MPSs in which parties differ in their distrust expectations (some parties express low while others express high distrust in other parties), collaboration effectiveness is lower than in situations in which such distrust expectations are more homogeneous (parties express similar levels of distrust). One could argue that MPSs characterized by heterogeneous expectations of distrust between parties create a "dysfunctional" context for collaboration. Such systemic configurations create a social influence field in which, due to their varying levels of distrust, parties engage with the task and the collective goals and interests in an unequal manner. Such an uneven engagement with the system will ultimately reduce collaboration effectiveness. Composition factors could therefore steer top-down influence processes which have an impact on collaboration effectiveness. Future research could take into account different compositional variables (e.g., homogeneity versus heterogeneity of interests, resources, power, engagement) as well as emergent system level phenomena (e.g., collective emotions) as they relate to collaboration effectiveness.

5.1. Limitations

Our study has a few limitations. First, we cannot make causal inferences due to the fact that none of the variables used as predictors were directly manipulated. Our results, however, are based on MPSs that operate under the same ground rules and have the same generic task structure, allowing us to control these task-related issues. Moreover, the uniqueness of this data set is that it was collected in a single organizational context; therefore, we could control for organizational culture, context, climate and other organizational level factors which could impact the participants' engagement in the MPS. Second, the results could be influenced by the common method bias, as all variables were evaluated from the same source. These concerns could be alleviated by the fact that we used a cross-lagged evaluation across three time intervals. Third, distrust was evaluated using a single item and this could have affected the validity of the distrust measure [47]. Single

item measures are, however, appropriate to use when the construct being evaluated is clear and non-ambiguous [48], as for example, distrust is. We opted for a single item measure because in the context of the simulations, having participants fill in lengthy surveys would have distracted them too much from the task and would have influenced the dynamics created in the system. Fourth, we used a behavioral simulation to test our hypotheses, which does not equal real life. The simulation took place in real time and participants had to operate under real time constraints, having a little over one day to work on a joint task definition, and to make strategies and action plans. The simulation was part of a large-scale organizational development program and participants' shared common organizational history could have influenced the dynamics of the simulations and the way in which the participants engaged with the task. As such, we could argue that the simulation provides on the one hand a realistic context for multiparty collaboration and on the other, having run the simulation many times in a relatively controlled setting, it makes for a unique research tool [14,35,49].

5.2. Practical Implications

We have shown that initial distrust between parties has a negative influence on collaborative effectiveness. It implies that such distrust needs to be managed and trust needs to be built in order to collaborate successfully. In the simulation used in this study, no formal interventions were made. The facilitators refrain from any intervention throughout the actual playing of the simulation, as the purpose of the simulation is to learn experientially from the group dynamics as these emerge from the stakeholders' actions and interactions. The participants themselves are typically so caught up in the dynamics that they cannot fully step aside and either make process interventions that could be helpful, or suggest other interventions. Interventions in real life, on the one hand, are aimed at helping participants tolerate the likely and intelligible feelings of distrust at the start of inter-organizational relationships (for example, by creating and developing reflective spaces where experiences can be shared and learned from), while, on the other hand, are aimed at creating conditions for building trust (setting ground rules, bringing the stakeholders together, and engaging in positive experiences in, for example, jointly designed working conferences) and at facilitating face-to-face meetings through process consultation [8].

One of the most important insights of our paper is that in MPSs, parties need to trust their own constituency as well as the multiparty system in order to collaborate effectively. It means that the effectiveness of collaboration is not only a function of what happens between parties but also within parties, as the collaborative efforts need to be supported by the constituencies, representatives need to feel trusted and supported, conflicting views within the constituencies with respect to the collaborative endeavors need to be dealt with, etc. Thus, trust and other interventions should not only be aimed at the interorganizational level but also the intra-organizational level.

Finally, we have shown that in MPSs, many system levels interact. There are individuals participating who enact a particular role (person-in-role) of representing their organization, and organizations which engage in a relationship with one another, thus creating a multiparty level. Moreover, all this takes place in a larger context where political, economic and social factors interact and impinge on collaborative efforts. These superordinate levels may have an impact on the quality of the relational dynamics between parties. It makes it very obvious that purely making individual interventions, as so often is the case, is insufficient and can even be counterproductive. Developing systemic awareness, while also creating reflective spaces to sort out the relative influences of the different levels together is needed, so that joint action can be taken to develop collaborations further [50].

Institutional Review Board Statement: The study was carried out as part of a large scale organizational development program, it was not expected to create distress or harm to the participants, no personal data was collected from them and the organization agreed with the publication of the results derived from the survey used in the simulations.

Informed Consent Statement: The study was based on naturalistic observations and was conducted anonymously therefore in line with article 8.05 of the APA informed consent was not asked from participants.

Data Availability Statement: Data is available from the authors upon motivated request.

Conflicts of Interest: The authors declare no conflict of interest.

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