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## **Review of Interorganizational Trust Models**

by:

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## Abstract

The Canadian government has sought a coherent strategy and policy for missions that rely on the integration and coordination of multiple government agencies so that national goals in international operations can be effectively achieved. Likewise, the recent Canadian Forces (CF) Joint Doctrine Manual (2009) explicitly called for a whole-of-government approach to operations. To this end, DRDC Toronto has recently begun an Applied Research Program (ARP) exploring the psychological dynamics of trust in the interagency domain, with the intent to develop a conceptual model. This report is in support of these efforts.

This report reviewed current interorganizational trust models, in particular those that would be relevant in a Joint, Interagency, Multinational, and Public (JIMP) context. Effort was made to find articles which were relevant to the Canadian military context; however, these articles were scarce, with most research performed in a business context. Approximately 30 primary articles identified in the search were selected and reviewed in detail. Challenges uncovered in this review included a lack of relevant research and models related to interorganizational trust, lack of empirical testing of models and the varying quality of the research that could be retrieved. Emerging themes including the importance of the level of analysis, the components, process and antecedents are discussed. The relationship between trust and performance, and the growing attention to trust violations and repair as well as measures of interorganizational trust are also explored.



## Resume

Le gouvernement du Canada a demandé que l'on élabore une stratégie et une politique cohérentes pour toute mission qui nécessite l'intégration et la coordination de multiples ministères et organismes du gouvernement, afin que l'on puisse accomplir efficacement les objectifs nationaux dans les opérations internationales. Dans le même ordre d'idées, le récent Manuel de doctrine interarmées des Forces canadiennes (2009) a explicitement demandé que l'on utilise une approche pangouvernementale pour les opérations. À cette fin, RDDC Toronto a récemment commencé un programme de recherche appliquée (PRA) qui étudie la dynamique psychologique de la confiance dans le domaine interorganisationnel, dans le but d'élaborer un modèle conceptuel. Le présent rapport appuie ces travaux de recherche.

Le rapport passe en revue les modèles actuels de confiance interorganisationnels, plus particulièrement ceux qui pourraient être utiles dans le cadre interarmées, interorganisationnel, multinational et public (IIMP). On s'est efforcé de trouver des articles pertinents au contexte des Forces canadiennes (FC); cependant, de tels articles sont rares, car la plupart des recherches ont été effectuées dans un contexte commercial. Environ 30 des principaux articles déterminés par les recherches ont été choisis et examinés en profondeur. Cet examen a permis de relever un certain nombre de difficultés, notamment le manque de recherches et de modèles pertinents sur la confiance interorganisationnelle, le manque de vérifications empiriques des modèles et la qualité variable des recherches que l'on pourrait utiliser. Le rapport relève aussi les thèmes prédominants, notamment l'importance du niveau d'analyse, les composantes, le processus et les antécédents. Il aborde en outre les relations entre la confiance et le rendement, ainsi que l'attention croissante accordée à l'abus et à la restauration de la confiance ainsi qu'aux critères de mesure de la confiance interorganisationnelle.

# Executive Summary

## Review of Interorganizational Trust Models

Barbara D. Adams, Craig Flear, Tamsen E. Taylor, Courtney D. Hall, and Cheryl Karthaus: Humansystems Incorporated, DRDC Toronto CR 2010-143; Defence R&D Canada – Toronto; September 2010.

The Canadian government has sought a coherent strategy and policy for missions that rely on the integration and coordination of multiple government agencies so that national goals in international operations can be effectively achieved. Likewise, the recent Canadian Forces (CF) Joint Doctrine Manual (2009) explicitly called for a whole-of-government approach to operations. To this end, DRDC Toronto has recently begun an Applied Research Program (ARP) exploring the psychological dynamics of trust in the interagency domain. A key objective of this ARP is the development of a conceptual model of interagency trust that is applicable to the comprehensive approach to operations. The interagency domain is generally agreed upon to include Other Government Departments (OGDs), Other Government Agencies (OGAs), and international government bodies such as United Nations (UN) agencies.

This report reviewed current interorganizational trust models, in particular those that would be relevant in a Joint, Interagency, Multinational, and Public (JIMP) context. Effort was made to find articles which were relevant to the Canadian military context; however, these articles were scarce, with most research performed in a business context. Approximately 30 primary articles identified in the search were selected and reviewed in detail.

Challenges uncovered in this review included a lack of relevant research and models related to interorganizational trust, lack of empirical testing of models and the varying quality of the research that could be retrieved. The goal of this project was to compile and review models of interorganizational trust, particularly those relevant to the JIMP context. Although we employed as exhaustive a search strategy as possible, there were relatively few models that emerged from our search. Although several models of interorganizational trust were found, there is a lack of extensive empirical testing of any of these proposed models. The models that did emerge have not been subject to more than a single validation effort. Unfortunately, the literature related to models of interorganizational trust seems particularly underdeveloped. Nonetheless, the articles reviewed in this report seem to provide the best available information, and there is still valuable information that can be gleaned from existing research that is an imperfect match to the domain of interest.

Emerging themes include the importance of the level of analysis in thinking about interorganizational trust. Some researchers have argued that there are at least three levels of trustors and trustees relevant within an interorganizational context: trust between partner companies, trust between groups within those companies (e.g., managers), and trust between individuals. However, there is little consistent agreement on exactly how these levels are related. A notable linkage in the interorganizational trust literature is made between the emergence of trust and the progressive development of collaborative alliances. Although this mapping is somewhat undifferentiated given the complex nature of trust (and alliances), understanding how trust evolves as collaborative relationships are formed is particularly germane to the future program of research. The remainder



of this report explores the core components of trust, the antecedents of trust, and the impact of trust on performance. Other notable themes are the focus on trust violation and repair within the interorganizational domain and the problem of measurement.

On one hand, the lack of well-developed models of interorganizational trust in the literature is somewhat discouraging. On the other hand, this area of research is clearly being given a good amount of attention, and there is very good potential for a motivated researcher with a systematic approach to model development and validation to make a significant contribution to this area.

## Sommaire

Barbara D. Adams, Craig Flear, Tamsen E. Taylor, Courtney D. Hall, and Cheryl Karthaus: Humansystems Incorporated, DRDC Toronto CR 2010-143; Defence R&D Canada – Toronto; September 2010.

Le gouvernement du Canada a demandé que l'on élabore une stratégie et une politique cohérentes pour toute mission qui nécessite l'intégration et la coordination de multiples ministères et organismes du gouvernement, afin que l'on puisse accomplir efficacement les objectifs nationaux dans les opérations internationales. Dans le même ordre d'idées, le récent Manuel de doctrine interarmées des Forces canadiennes (2009) a explicitement demandé que l'on utilise une approche pangouvernementale pour les opérations. À cette fin, RDDC Toronto a récemment commencé un programme de recherche appliquée (PRA) qui étudie la dynamique psychologique de la confiance dans le domaine interorganisationnel. Le principal objectif de ce PRA est d'élaborer un modèle conceptuel de la confiance interorganisationnelle applicable à l'approche globale des opérations. Il est généralement reconnu que le domaine interorganisationnel englobe les autres ministères (AM), les autres organismes gouvernementaux et des organismes internationaux comme les agences de l'ONU.

Le rapport passe en revue les modèles actuels de confiance interorganisationnelle, plus particulièrement ceux qui pourraient être utiles dans le cadre interarmées, interorganisationnel, multinational et public (IIMP). On s'est efforcé de trouver des articles pertinents au contexte des Forces canadiennes (FC); cependant, de tels articles sont rares, car la plupart des recherches ont été effectuées dans un contexte commercial. Parmi les 30 principaux articles déterminés par les recherches, on en a choisi quelques-uns pour un examen approfondi.

Cet examen a permis de relever un certain nombre de difficultés, notamment le manque de recherches et de modèles pertinents sur la confiance interorganisationnelle, le manque de vérifications empiriques des modèles et la qualité variable des recherches que l'on pourrait utiliser. Le but de ce projet était de compiler et d'examiner les modèles de confiance organisationnelle, particulièrement ceux qui sont pertinents au cadre interarmées, interorganisationnel, multinational et public. Nous avons utilisé une stratégie de recherche aussi exhaustive que possible, mais les résultats de la recherche se sont avérés relativement maigres. Bien que nous ayons trouvé de nombreux modèles de confiance interorganisationnelle, on constate que les modèles proposés n'ont pas fait l'objet d'une vérification empirique poussée. Les modèles qui se sont dégagés n'ont pas fait l'objet de plus d'une validation. Malheureusement, la documentation sur les modèles de confiance interorganisationnelle semble particulièrement peu élaborée. Néanmoins, les articles examinés dans le présent rapport semblent fournir la meilleure information disponible, et des renseignements utiles peuvent aussi être tirés de recherches qui ne correspondent pas entièrement à notre domaine d'intérêt.

Les thèmes répertoriés incluent l'importance du niveau d'analyse dans la réflexion sur la confiance organisationnelle. Certains chercheurs ont affirmé qu'il y a au moins trois niveaux de confiance pertinents (selon l'entité qui fait confiance ou à laquelle on fait confiance) dans un contexte interorganisationnel : la confiance entre deux organisations partenaires ainsi que la confiance entre deux groupes (p. ex. les gestionnaires) et la confiance entre deux personnes au sein de ces organisations. Cependant, aucun consensus ne se dégage pour ce qui est des relations exactes



existant entre ces trois niveaux de confiance. Dans les documents sur la confiance interorganisationnelle, on établit un lien évident entre l'émergence de la confiance et l'établissement progressif d'alliances et de collaborations. Bien que cette application soit quelque peu indifférenciée compte tenu de la nature complexe de la confiance (et des alliances), la compréhension de la façon dont la confiance évolue en tant que relation de collaboration présente un intérêt particulier pour le programme futur de recherches. Le reste du rapport traite des principaux éléments de la confiance, de ses antécédents, ainsi que de son incidence sur le rendement. Les autres thèmes dignes de mention sont l'accent mis sur l'abus de confiance et la restauration de la confiance dans le cadre interorganisationnel ainsi que le problème relatif à la mesure de la confiance.

D'une part, l'absence de modèles de confiance interorganisationnelle bien élaborés dans la documentation disponible est décourageante. D'autre part, il est clair que ce domaine de recherche reçoit beaucoup d'attention et offre, pour un chercheur motivé ayant une approche systématique à l'égard de l'élaboration et de la validation de modèles, de très bonnes possibilités d'y contribuer de façon contribution importante.

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# 1. Introduction and Methods

## 1.1 Background<sup>1</sup>

In 2005 the Canadian government initiated a new strategy for international operations, originally referred to as the 3D + C (Defence, Diplomacy, Development and Commerce) approach, and later adopting the terminology of “Whole of Government” (WoG) or “Team Canada”. In this approach the government sought to create a coherent strategy and policy for missions that rely on the integration and coordination of multiple government agencies to so that national goals in international operations can be achieved more effectively.

The recent Canadian Forces (CF) Joint Doctrine Manual (2009) also explicitly called for a WoG approach to operations:

In complex contemporary crises, activities and effects from a wide range of government participants need to be coordinated. The CF contribution to this Canadian “Whole of Government” (WoG) approach identifies an effects-based philosophy in seeking to stimulate, wherever possible, a cooperative culture and collaborative working environment between government departments and agencies. Within this philosophy, participants work proactively and share their understanding of situations and conduct planning and activities on the basis of shared favourable outcomes in the short, medium, and long term. (Canadian Military Doctrine, 2009, 6-4 – 6-5).

Although well-versed in multinational and joint operations, the interagency and public dimensions of Joint, Interagency, Multinational, and Public (JIMP) operations represent relatively newer territory for the CF (Gizewski & Rostek, 2007), and arguably these types of operations are much more challenging given the diversity of players that comprise the WoG spectrum.

In order to provide research support to the development of this new capability within the CF, Defence Research and Development Canada (DRDC) Toronto is conducting an Applied Research Program (ARP) exploring the psychological dynamics of trust in the interagency domain. The interagency domain is generally agreed upon to include Other Government Departments (OGDs), Other Government Agencies (OGAs), and international government bodies such as United Nations (UN) agencies.

A key objective of this ARP is the development of a conceptual model of interagency trust that is applicable to the comprehensive approach to operations. The organizational psychology literature has begun to make attempts to understand the dynamics of interagency trust, specifically in instances of international mergers and organizational collaborations. Thus the current call up requires a review of organizational trust models, in particular those that address the development of trust between organizations. This review should include the specifics of the models themselves, and should also address the preconditions, situational and contextual influences upon interorganizational trust, as well as outcomes and consequences that occur in these contexts when trust exists and, as importantly, when conditions of trust in such contexts are not achieved.

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<sup>1</sup> From the Statement of Work provided by the Scientific Authority

## 1.2 Scope

This literature review focuses on recent available research containing models and/or measures of interorganizational trust. Effort was made to find articles which were directly relevant to the Canadian military context. However, as such articles are extremely scarce, a broader search had to be undertaken, exploring the dynamics of interorganizational trust within the collaborative environments. Most articles found stemmed from the business context, but are still somewhat relevant to the JIMP context.

## 1.3 Work items

The following work items were performed:

- A search of the literature to identify relevant journal articles, reports, books, etc. containing models of interorganizational trust and/or measures of interorganizational trust. Most articles selected were published in 2004 or later.
- Approximately 30 primary articles identified in the search were selected and reviewed in detail.
- A report documenting the results of the literature review was composed.

## 1.4 Deliverables

The following deliverables were created under this contract:

- Electronic copies of the articles reviewed (including any possible measures)
- A report on the literature review

## 1.5 Methods

### 1.5.1 Keywords

The keywords were developed to focus the literature search. The team established a number of core concepts, which included interorganizational, trust, model, and military (see Table 1).

**Table 1. Keywords**

Core Concept	Primary Keywords
Trust	Belief, confidence, faith, reliance, dependence, assurance, certainty, stock, security, hope, expectation, integrity, cohesion, cooperation
Interorganizational trust	Interagency trust, trust between organizations, multinational trust, inter* and trust
Model	Model, framework
Measurement	Scale, questionnaire, inventory, test, indices, indicators, team performance

After establishing the core concepts, primary keywords were then developed. The core concepts were the most important words used in the search as they represented the broad constructs relevant to the research questions. The primary keywords ensured sampling of literature from several different domains within the core construct, and their use was guided by what emerged from the core concepts. For example, for the core concept of “interorganizational trust”, primary keywords such as “interagency trust” and “multinational trust” emerged. The primary keywords were used to further focus the results of the core concept search. This had the result of narrowing the search to the most relevant articles.

### 1.5.2 Databases

Searches were conducted of the following databases and sources:

- PsycINFO
- Google Scholar
- National Technical Information Service (NTIS)

PsycINFO is a resource maintained by the American Psychological Association (APA) that offers products to aid researchers in locating psychological literature. The database is based on Psychological Abstracts and contains non-evaluative summaries of literature in psychology and related fields (e.g., human factors, education, business and social studies). The database contains over one million electronically-stored bibliographic references with authors, titles, publication information, and abstracts or content summaries, covering material published in over 45 countries since 1967. References include journal articles, dissertations, reports, and book chapters.

Google Scholar is a specialty search engine maintained by Google which contains academic articles and presentations. Many disciplines are represented, and sources include articles, books, and abstracts from academic publishers, professional societies, online repositories, universities, and other web sites. Google scholar attempts to rank documents based on the full text of each document, where it was published, who it was written by, how recently it was cited, and how often it was cited in other scholarly literature.

NTIS is an agency of the United States (U.S.) Department of Commerce’s Technology Administration. It is the official source for government sponsored U.S. and worldwide scientific, technical, engineering, and business related information. The database maintained by NTIS contains almost three million titles, including 370,000 technical reports from U.S. government research. The information in the database is gathered from U.S. government agencies and government agencies of countries around the world.

### 1.5.3 Search

The databases were systematically searched using the keywords specified above. When a keyword yielded an unmanageable number of references, we systematically added additional keywords to refine the search. We also identified articles cited in the reference lists of the articles obtained for the review on the basis of their potential relevance to organizational trust.

### 1.5.4 Selection of Articles

Searching the databases for key terms did not generate a great number of relevant articles. All articles that appeared relevant based on their abstract were retrieved and were reviewed to

determine their actual relevance to the project. Only about 30 articles were determined to be relevant enough to this project to be fully reviewed.

### 1.5.5 Structure of the Report

The selected articles were read and detailed notes were created. These notes are contained in Chapter 2 (Review of Articles). After the articles were reviewed, broad issues and limitations were noted; these are discussed in Chapter 3 (Emerging Themes).

### 1.5.6 Progress Meeting with the Scientific Authority

At about the mid-point of this project, we met with the Scientific Authority to discuss our progress and to discuss the titles of the articles that had been retrieved to that point. We discussed the limitations of the articles that we had found to that point, and our concern that the quality of the articles was not as high as would be ideal, and that it would be difficult to find a large number of relevant articles that specifically addressed interorganizational trust. We agreed to try to review at least 30 articles that would be relevant to trust in interorganizational domains. As it became clear that it would be difficult to find relevant articles within the strictly interorganizational domain, we extended our review to a few articles in adjacent domains (e.g., Naquin and Kurtzberg, 2009, from the team negotiation domain) that might be especially relevant to the issue of trust in the interagency context.

### 1.5.7 Acronyms

Acronym	Definition
3D + C	Defence, Diplomacy, Development, and Commerce
APA	American Psychological Association
ARP	Applied Research Program
CARE	Cooperative for Assistance and Relief Everywhere
CBT	Calculus-Based Trust
CF	Canadian Forces
DRDC	Defence Research and Development Canada
IBT	Identification-Based Trust
INGOs	International Non-governmental Organization
JIMP	Joint, Interagency, Multinational, and Public
KBT	Knowledge-Based Trust
NATO	North Atlantic Treaty Organization
NGO	Non-governmental Organization
NTIS	National Technical Information Service

Acronym	Definition
OCHA	Office for the Coordination of Humanitarian Affairs
OGA(s)	Other Government Agency (Agencies)
OGD(s)	Other Government Department(s)
U.S.	United States
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Fund
WoG	Whole of Government
YTBF	Young Technology-Based Firms



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## 2. Review of Articles

This chapter presents the reviews of the selected articles. They are presented here in alphabetical order by author.

### 2.1 Bruneel, Spithoven, & Maesen (2007)

BRUNEEL, J., SPITHOVEN, A., and MAESEN, A. (2007). Building trust: A matter of proximity? In *Frontiers of Entrepreneurship Research*, 27(15), 1-12.

Bruneel, Spithoven, and Maesen (2007) explored the influence of various forms of proximity (i.e., cultural, cognitive and social) on interorganizational trust levels among new technology firms (called Young Technology-Based Firms or YTBF) and their partners. YTBFs were defined as “ventures that are less than 12 years old which have their own R&D activities and develop and commercialize new products of services based on a proprietary technology or skill.” (p. 4). An interesting observation from within this world was that YTBF with limited resources could strengthen their own positions by networking with other firms in order to develop their knowledge and capabilities. This meant that rather than relying on experiential learning, they could speed up their own emerging processes through alliances with other partners. Two factors purported to influence their ability to do this were social capital and proximity. Social capital refers to the ability to build relationships, and Bruneel et al. argued that trust was a key component of this. Proximity was an influence on the effectiveness of networking as well. They indicated several forms of proximity (i.e., cultural, cognitive and social proximity) at the organizational level that were relevant to networking and trust.

Cultural proximity refers to the similarity among different cultures on dimensions such as power distance, masculinity, individualism and uncertainty avoidance (Hofstede, 1980; cited in Bruneel et al., 2007). Bruneel et al. hypothesized that higher levels of cultural proximity would be positively associated with levels of interorganizational trust, as similarity typically increases trust. Cognitive proximity was conceptualized as relating to the complexity of the organizational context within which the firm worked, as a product of its “newness.” In explaining this construct, the authors argued, “Young firms have to learn how to operate in the market place, introduce products and compete with established firms. In addition, older organizations have a more and a stronger developed exchange relationships with other organizations that give external legitimization” (Bruneel, et al., 2007, p. 3). As such, they argued that trust will be higher when the organizational partner shows a higher level of complexity (what they call cognitive proximity). They defined social proximity in terms of the gap between two partners when relationships start, and argued that high social proximity promotes higher levels of trust in partnerships. Lastly, they argued that the negative effects of low levels of these 3 types of proximity would be mitigated by experience of the firms working together, as firms are “learning organizations”.

Using about 127 young technology-based firms in Belgium (identified by searching various high and medium technology databases), data was collected on 290 key partnerships during face-to-face interviews with the founder or CEO from each company.. Bruneel et al. (2007) examined interorganizational trust using a four item, 7-point Likert scale from Zaheer, McEvily and Perrone (1998; cited in Bruneel et al., 2007). Cultural, cognitive and social proximity were also measured. Cultural proximity was assessed from a subsample of 35 key partners, from subsidiaries of foreign companies located in Belgium. Average scores on five cultural dimensions (i.e., large power

distance, individualism, masculinity, uncertainty avoidance index, long-term orientation, Hofstede, 1980; 1991; cited in Bruneel et al., 2007), were calculated for the Belgian based companies, as well as for each “home country” represented in the subsample. These values were used to calculate the Euclidean distance<sup>2</sup> then translated into a value representing cultural proximity. Cognitive proximity was measured by the YTBF rating minus the partner’s rating. Lastly, three items measured social proximity of the organizations. Bruneel et al. (2007) also included 4 control variables, level of interaction (e.g., contact through email, phone, etc), longevity of the relationship (i.e., number of years of partnership), partner origin (i.e., whether or not the partner is Belgian), and type of partnership (e.g., customer, supplier, partner, investor).

Results showed that interorganizational trust was high in the relationships among the target firms and their key partners (mean = 5.09 on the 7-point scale). Moreover, interorganizational trust was significantly correlated with two of the three proximity variables, namely cognitive and social proximity.<sup>3</sup> Specifically, cognitive proximity was mildly and negatively related to trust. In other words, as the distance between a simple YTBF and the complex partner increased, interorganizational trust increased. Bruneel et al. (2007) attributed this finding to the low resources of the YTBF increasing the need for trust with their complex partner, presumably because having few resources would heighten the need for interdependence. Social proximity was strongly and positively correlated with trust. This finding indicates that higher levels of social proximity were associated with higher levels of interorganizational trust.<sup>4</sup> Other analyses showed that many factors influenced the degree of the effect of interorganizational trust on proximity including level of interaction ( $\beta = .10$ ), longevity of the relationship ( $\beta = .07$ ), and partner origin ( $\beta = .05$ ).

Thus, the findings of Bruneel et al. (2007) indicated that interorganizational trust was higher when partnerships were culturally different and close in social proximity, as well as when the partner to the YTBF was a more complex technology partner.

## 2.2 Bstieler (2006)

BSTIELER, L. (2006). Trust formation in collaborative new product development. *The Journal of Product Innovation Management*, 23, 56-72.

Bstieler (2006) investigated both the antecedents of trust formation in interorganizational partnerships as well as the effect of trust on the performance of these partnerships. The type of interorganizational relationship investigated by Bstieler (2006) is vertical partnerships; these relationships consist of collaborative and interim working relationships between manufacturers and suppliers or customers. These types of relationships are focused around the conception, testing, production, or marketing of a new product. This type of relationship was proposed to be more risky than many other types of buyer-seller relationships, because they involve a transfer of valuable information while typically involving only weak controls to prevent opportunistic behaviour.

One of the issues with developing trust in this type of interorganizational relationship is attaining the necessary balance of trust and maintenance of proprietary interests; if this balance is not maintained appropriately then the partnership is likely to fail. Trust is thought to be one of the main

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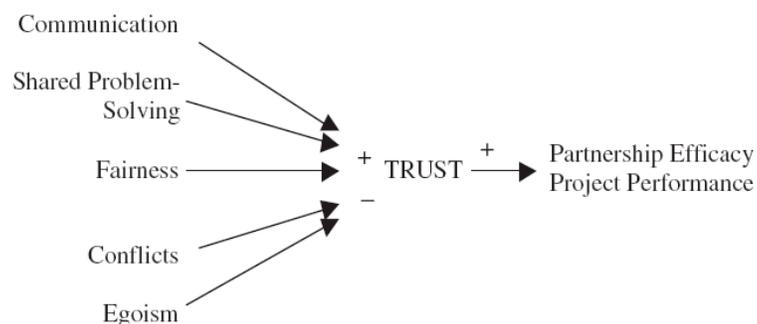
<sup>2</sup> See Bruneel et al.(2007) for a more detailed account of the calculation of Euclidian distance.

<sup>3</sup> Cultural proximity showed no relationship with trust.

<sup>4</sup> Other multiple regression analyses that were conducted are not reported in this review, as it is unclear whether they were conducted appropriately.

mechanisms for making behaviour predictable and for easing adaptation to the unexpected. According to Bstieler (2006), “trust is usually defined as the willingness to accept vulnerability based upon positive expectations of the intentions or behavior of another within a particular context” (p. 57). As such, trust is a useful tool for facilitating interorganizational relationships, as it promotes perceptions that one’s partner will fulfil their obligations and do so in a way that is not detrimental to the other party’s interests.

Trust was conceptualized as an outcome of three factors that promote trust (communication, shared problem-solving, and fairness) and two factors that diminish it (conflicts and egoism), as shown in Figure XX.



**Figure 1. Framework of trust formation in collaborative new product development (Bstieler, 2006, p. 58)**

Bstieler (2006) proposed that timely, accurate, open, and adequate communication builds trust through the development of a shared understanding. Shared problem-solving facilitates communication, creates an experience of shared instruction and learning, and gives concrete feedback about the skills of the partner, all of which facilitate trust. Fairness is the application of both procedural and distributive justice throughout the relationship. On the other hand, conflicts can develop because of a lack of shared understanding and these conflicts can increase tension. Egoism can undermine trust because it represents self-interested behaviour. Therefore, both conflicts and egoism were proposed to reduce levels of trust. Lastly, Bstieler argued that trust mediates the relationship between the antecedents of trust and performance. That is, performance is not directly impacted by communication and the other variables of interest; rather, these variables impact the level of trust, which then affects performance.

In order to test this model, data was collected for 44 new products developed in a partnership (n=44), from 34 manufacturers. Data was provided by the project manager responsible for the product development project using an in-person interview guided by a structured questionnaire. Trust was measured using questions related to honesty, frankness, and keeping promises. Measured outcomes included perceived partnership satisfaction (how satisfied individuals were with the partnership), perceived continuity (whether people thought that the partnership would continue into the future), perceived financial success, and perceived time efficiency. Antecedents related to communication quality, shared problem-solving, fairness, history of conflicts, and partner egoism were also measured. Several control variables were assessed, including relationship experience (amount of prior experience with the interorganizational partner), whether the relationship was from the perspective of the customer or supplier, and the innovativeness of the project.

Hierarchical multiple regression was used to explore the usefulness of the model. The first analysis involved regressing trust on the control variables. This showed that relationship experience was significantly associated with trust formation, but type of partnership or product newness showed no

relationship with trust. The next model added the individual variables to the control variables and regressed on trust. This showed that communication and fairness were positively related to trust, but that shared problem solving was not. Conflict history and egoism (on the part of the partner) were significantly negatively related to trust.

The next step of analyses involved the relationship between trust and the 4 dependent variables. This showed that trust was positively related to partnership satisfaction, intent to continue future partnerships, financial success and time efficiency.

The fourth step tested the overall prediction of the model, namely that trust would mediate the relationship between the independent variables and the performance of the partnership. This showed that trust fully mediated the effect of conflicts and partially mediated the effects of fairness on the partnership satisfaction aspect of performance. However, trust had no mediating effects on communication quality or partner egoism.

When using partnership continuity as the dependent variable, trust fully mediated the relationship between this and communication quality. And, when financial success was the outcome, trust fully mediated conflict and partially mediated fairness. Ironically, however, results also show that communication was negatively associated with both partnership satisfaction and financial success.

Bstieler (2006) concluded that timely, reliable, and adequate information sharing was necessary for trust to be developed. Perceived fairness was also thought to be essential for trust development. Conflicts and egoism negatively impacted trust formation. Trust had direct effects on performance, and mediated the relationships between other variables and performance outcomes.

### **2.3 Child, Faulkner, & Tallman (2005)**

CHILD, J., FAULKNER, D., & TALLMAN, S. (2005). Trust in cooperative strategies. In J. Child, D. Faulkner, & S. Tallman, *Cooperative Strategy: Managing Alliances, Networks, and Joint Ventures*, 2<sup>nd</sup> Edition (p. 50-70). New York: Oxford University Press.

As an essential part of cooperation, the authors explore trust in the context of strategic business alliances. They argue that trust is a complex phenomenon that can be examined through cost-benefit relationships, mutual understanding, and development of friendship/bonding between people. Insights into these phenomena help in understanding the nature of cooperative relationships. They argue that trust is the moderating factor between control and confidence in a partner.

The authors point out that, within the literature, statistics on partnership failures may be inflated as they seem to include all relationships that are disbanded rather than considering amicable or an agreed termination as successful partnerships that have come to an end.

According to Child, Faulkner, and Tallman (2005), trust in alliances is a multilevel phenomenon. The relations between organizations depend greatly on the quality of relations between groups and individuals. At least three levels of trust should be considered: that between partner companies, between groups such as partner managers, and the individual/employee level. Child et al. predict that these different levels of trust will be instantiated differently. For example, contractual trust is relevant to interactions among groups or companies, but this will not necessarily impact the trust between individuals. Child et al. did note that there are likely to be strong interdependencies between different levels of trust. For example, trust between groups might be undermined or strengthened by the level of trust between individuals.

Child et al. (2005) also argue that there are three insights from trust research which are particularly relevant to understanding trust within cooperative relationships. First, there are distinct forms of trust, including those based on calculation, understanding, and personal identification.

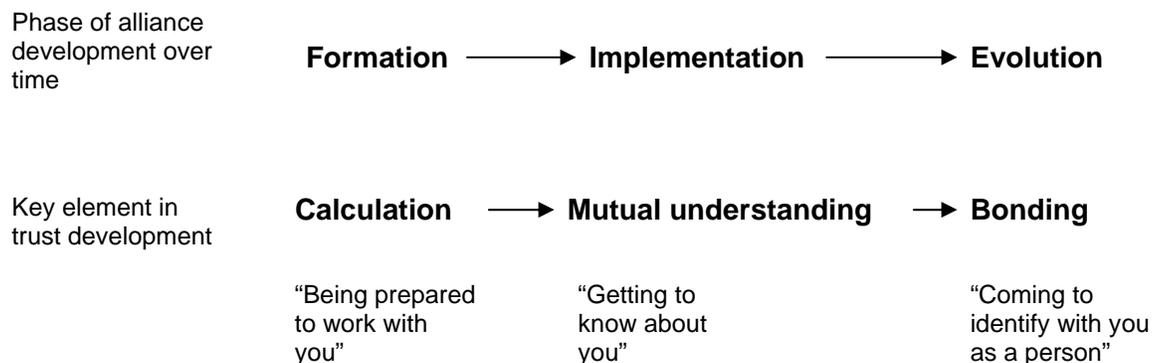
Calculative trust is trust on the basis of expectations made on the basis of calculations about the relative costs and benefits of interactions between the trustor and trustee. This view of trust has been criticized on the grounds that information uncertainty is essential to trust (i.e., there have to be risks, and uncertainty is essential for risk). Calculative trust tends to be especially relevant for new and/or arm's length relationships.

Trust based on understanding or knowledge-based trust is argued to be based on perceived similarities between the cognitions of the parties. These shared cognitions provide a way of predicting the partner's actions. Trust based on personal identification is rooted in common values, including a common concept of moral obligation. This type of trust typically takes a long time to develop, and is the type of trust which is commonly emotionally linked and involves genuine concern for the well-being of the trust partners.

Child et al. (2005) also argue that trust and cooperative relations develop over time. The development of trust and cooperation are mutually reinforcing, and development can stop at any stage, advance, or regress. If trust is negatively affected, a partner can choose to end the relationship. Predictability is likely an important factor; with increasing interaction, if behaviour is determined to be predictable (and positive) then trust is likely to increase.

Finally, trust is a social phenomenon which tends to be strengthened by cultural affinity between people and can be supported by institutional norms and sanctions. There are a number of social factors which impact cooperation and trust. As companies embrace technology, cooperation (even at the global level) is often necessary. Cultural differences can add increased complexity to trust within international strategic alliances. Cooperation may generally be easier between people with the same cultural norms. Differences in language and symbolism can cause a great deal of misunderstandings and make cooperation very difficult.

In further highlighting the importance of trust in cooperative business alliances, the authors discuss three stages of trust (calculation, understanding, and personal identification) that interact with the phases of alliance development (formation, implementation, and evolution), as shown in Figure 2.



**Figure 2. Phases of alliance development and the evolution of trust (Child et al., 2005, p. 61)**

The components can be described as follows:

- Formation and calculation – Early in the alliance formation process, there is little known about the potential ally; therefore, trust is based on calculation. The idea is that a calculation is made that the risks of the alliance are likely to be beneficial for the potential allies, and so the alliance is pursued. This allows an opportunity for the alliance, and other forms of trust, to develop as more information is gathered about the alliance partner
- Implementation and understanding – In this stage of the alliance, the purpose of the alliance starts to be realized, and information about competencies emerges. If competencies are not adequate, then the cooperative venture founders and generally will end. If competencies are adequate, further interaction will pave the way for building an understanding such that the alliance partner’s reactions are predictable. Cultural sensitivity is especially important at this stage
- Evolution and personal identification – As the alliance progresses and becomes successful, the alliance evolves into an independent entity with its own culture. A stable, ongoing relationship may develop to the extent that the purpose of the alliance allows ongoing collaboration.

It should be noted that Child et al. (2005) held the view that interorganizational trust is essentially interpersonal trust, and that trust between organizations comes down to the mutual trust between individuals who interact within the cooperative alliance. If turnover among these individuals is high, the capacity to develop trust within an alliance will also be limited.

Child et al. (2005) described several factors which they believe contribute to the development of interorganizational trust. They include the following factors:

- A basis for mutual benefit
  - Commitments must be realistic
  - Partners must be seen to be honouring their commitments
  - The project must be viable
  - Legal safeguards must be understood
  - An unambiguous (as much as possible) agreement must be made in writing
- Predictability and conflict resolution
  - Mechanisms for dispute resolution must be in place for both work-based and personal disputes
  - Roles and responsibilities must be agreed to
  - Free sharing of information
- Mutual bonding
  - Friendly personal contact between alliance leaders is regularly maintained
  - This friendly contact must be visible to those working under the leaders
  - Personal relationships must be given a lot of time to develop

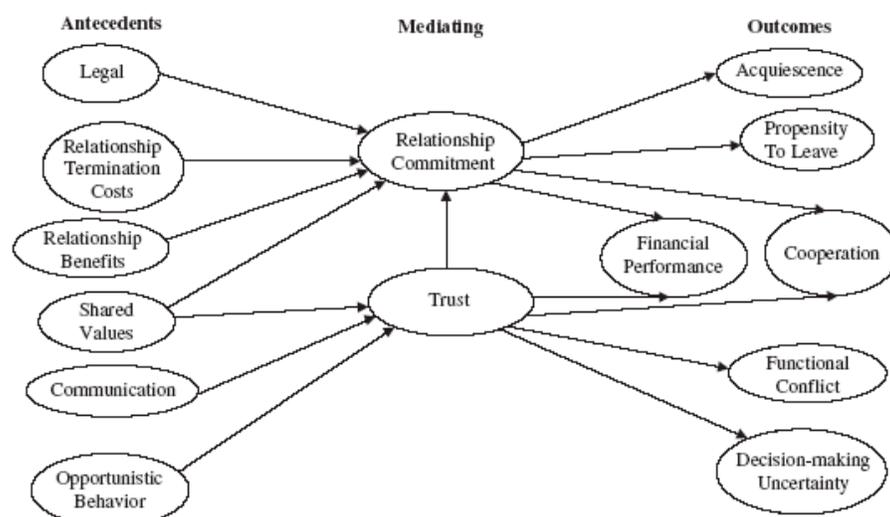
- Personnel should be working in relatively familiar environments (i.e., no “ghettos” where personnel from different cultures are treated differently)

In conclusion, the development of trust within strategic alliances is dependent on progression through the stages of trust. Though the emergence of trust in alliances involves risk and uncertainty, the potential advantages between partners and their employees are considerable as they “offer an opportunity to relieve (though not necessarily resolve) the dilemmas of control, integration, and learning which are inherent in organizing alliances” (Child et al, 2005, p. 68). This suggests that serious understanding of the dynamics of trust within the interorganizational context will be critical to successful collaboration.

## 2.4 Cote & Latham (2006)

COTE, J. & LATHAM, C. K. (2006). Trust and commitment: Intangible drivers of interorganizational performance. *Advances in Management Accounting*, 15, 293-325.

The authors focus on interorganizational alliances from the perspective of management accounting (that is, the aspects of finance within the organization that management uses to make decisions). Within this context, organizational performance is the desired indicator, but they argue that non-traditional influences such as trust and commitment have been underemphasized as drivers of performance. Of particular interest are the trust-relevant factors that management must be aware of to improve interorganizational relationships and the performance of the organization. Cote and Latham (2006) developed a model of trust and commitment that explicitly addressed the antecedents and outcomes of trust and commitments within interorganizational relationships. This causal model proposes how formal and informal interorganizational relationship structures impact trust and commitment, which then stimulate performance outcomes. The goal of this work was to bring trust and commitment issues into greater attention and develop a causal model that would lend itself to use in applied settings. Their model identifies six antecedent constructs that are all mediated by trust and commitment. These variables then lead to six identifiable outcomes, as shown in Figure 3.



**Figure 3. Trust and commitment model of interorganizational performance (Cote & Latham, 2006, p. 299)**

The antecedents include legal bonds (the extent to which formal contractual agreements are detailed; greater detail generally increases the willingness to invest in the relationship), termination costs, benefits, shared values, communication, and opportunistic behaviour. The outcomes considered were acquiescence (the extent to which a partner follows the other partner's requests), propensity to leave the relationship, financial performance, cooperation, functional conflict (resolution of disputes in an amicable manner), and decision-making uncertainty (confidence that the exchange partner will act in a predictable manner).

Most variables are tied only to one of either trust or relationship commitment. However, as an antecedent, shared values are posited to contribute to both trust and relationship commitment. As outcomes, financial performance and cooperation are also linked to both.

Cote and Latham (2006) explored the validity of their model in the healthcare context. There are a number of important organizations involved in health care (e.g., insurance organizations and physician practices). Both insurance organizations and physician practices bring important components to the table for healthcare delivery. Cooperation between these two organizations in a healthcare setting is required for optimal performance, yet these relationships are often tense and lack trust. Thus, the health care context was seen to be an ideal context within which to empirically test the model.

Data was collected from 166 physician practice managers and staff at 29 data collection sites. Participants included physician practice employees who routinely interacted with insurance companies during their work. Each participant responded with respect to one insurance company that they dealt with, and were to ask to choose the company with which they were the most familiar. Trust was measured with five items which assessed the insurer's honesty, integrity, fairness, consistency, and reliability. The other elements of the model were also measured. Structural equation modelling was used to determine the relationships between the variables.

Cote and Latham (2006) found the following patterns relevant to trust:

- Commitment to the interorganizational relationship was increased when partners had a higher measure of relationship benefits or a higher degree of trust.
- Interorganizational partners with an appropriate degree of formal and informal communication had greater trust.
- Interorganizational partners where a higher degree of opportunistic behaviour existed had less trust.
- Interorganizational partners who had higher levels of relationship commitment were more willing to make relationship-specific adaptations and were more likely to cooperate.
- Interorganizational partners who had a higher measure of trust were more likely to cooperate, were more likely to resolve disputes in an amicable manner (functional conflict), and were less likely to have decision-making uncertainty.

Interestingly, however, two hypotheses related to shared values were not supported, as having shared values did not significantly influence relationship commitment or trust. Cote and Latham (2006) noted this finding was surprising, but that participants might have had a difficult time assessing the values of the insurance companies. The authors also noted the significant positive impact of trust and commitment on financial outcomes, which they state was a unique finding.

The model attempts to provide managers with explicit knowledge of specific constructs that influence interorganizational relationships. From the perspective of the researchers, the critical

finding of their research is that when organizations are required to work together, non-traditional factors such as trust and commitment can have a serious impact on performance outcomes. If problems can be identified, effort can then be focused toward improving commitment and trust as means to ultimately improving the organization's financial performance.

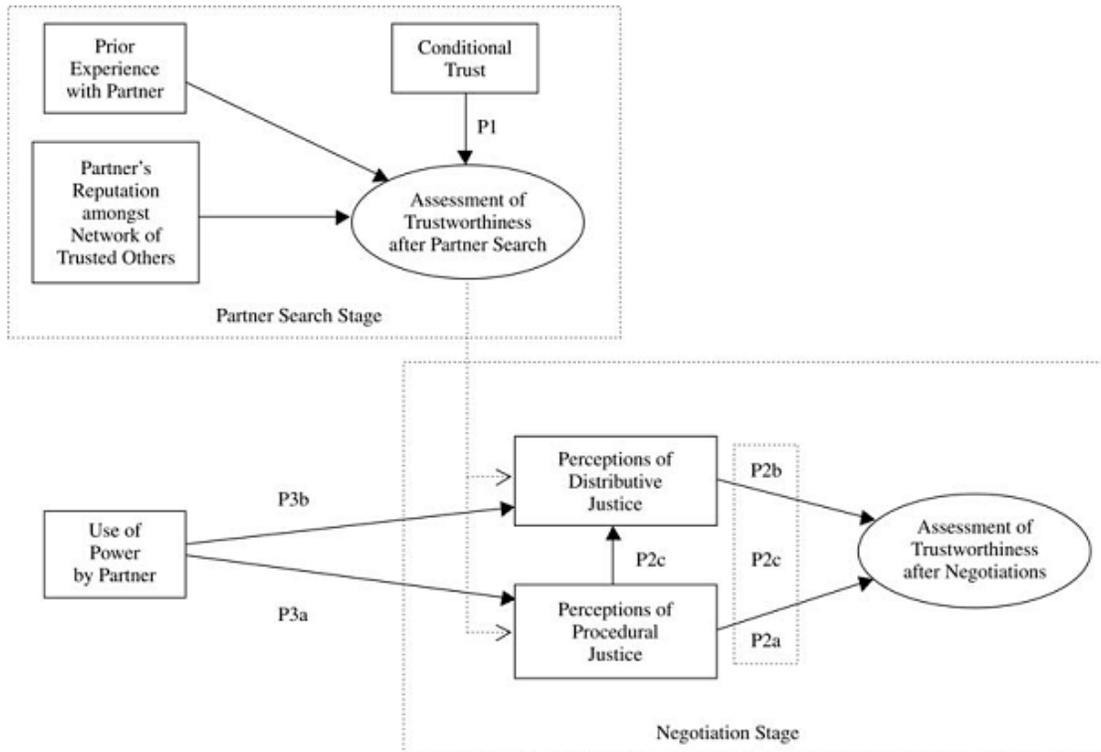
## 2.5 Daellenbach & Davenport (2004)

DAELLENBACH, U. & DAVENPORT, S. (2004). Establishing trust during the formation of technology alliances. *Journal of Technology Transfer*, 29, 187-202.

Daellenbach and Davenport (2004) investigated factors which influence the formation of organizational alliances based primarily on technology transfer and sharing of proprietary knowledge. They argue that self-interest can often influence these alliances negatively, and they hope to contribute to equipping management with the information necessary for forming alliances and developing relationships that improve knowledge-sharing, interorganizational alliances and joint ventures. They argue further that one of the ways to overcome potential problems within this area is to help potential alliance partners to be more aware of issues of trust and trustworthiness. To do this, they used a case study approach to understand the formation of a technology-based alliance within the robotics industry. This case study involved an initiative called "the shiny robot venture", an alliance formed among a set of diverse organizations, and interviews were conducted with 4 members of the initiative and a total of 15 individual members.

Daellenbach and Davenport (2004) noted that, except in cases where organizations had previous alliances with one another, trust is initially undeveloped at the start of alliances. In these cases, an initial assessment of trustworthiness of the prospective organization is used. There are several factors which might influence this trustworthiness assessment during alliance negotiations, but the boundary spanners who interact personally with members of the other organization(s) play a very important role in this process. Daellenbach and Davenport argue that most trustworthiness assessments are based on the perceptions of these individuals. Information about trustworthiness is gathered during the search for organizations with which to partner, the assessment of whether the partnership should be pursued, and negotiations to create the partnership.

Two stages of alliance formation are identified as being particularly relevant, including searching for a partner and conducting negotiations. At the stage of searching for an alliance partner, three factors are posited to contribute to this partner's perceived trustworthiness, as shown in the top half of Figure 4.



**Figure 4. Factors affecting trustworthiness assessments during alliance formation (Daellenbach & Davenport, 2004, p. 192)**

These include prior experience with the partner and the partner's reputation within known networks of trusted others. With prior experience (presumably only successful experience), they argue that procedural norms would have been created, and that knowledge-based trust would have developed. Reputation is also an influence on early perceptions of trustworthiness. They argue that "a firm's reputation for trustworthiness acts as a proxy for shared collaborative history" (p. 192).

Conditional trust is also posited as an influence on perceived trustworthiness, and is particularly important when other information is not available. This trust is described as a presumptive form of trust for "...a completely unknown but capable potential partner, that is, a favourable enough assessment for negotiation of the potential alliance to take place" (p. 193). This stage of trust, they argue, is based primarily on perceptions of the partner's ability, or the skill set or competencies that the partner has in a particular area.

The negotiation stage is also relevant to the development of perceptions of trustworthiness in one's alliance partner. A part of the impact of reputation relates to perceptions of distributive and procedural justice in the prospective alliance's system, Procedural justice has to do with assessing whether a process was fair; distributive justice has to do with assessing whether an outcome was fair. Factors impacting at the negotiation stage are shown in the bottom half of Figure 4. They argued that procedural justice is another important part of the determination of the trustworthiness of a potential alliance partner. In fact, they proposed that procedural justice will have a major impact on initial assessments of trustworthiness and therefore on the creation of new alliances. Considerations about procedural justice shift the focus from competencies and skills to integrity, benevolence and affect. Procedural justice has a strong influence on commitment, trust, and social

harmony, and has been found to be very important during the creation of new organizations. Distributive justice was also posited to play a role, but a less critical one, and they argue that distributive justice is primarily influenced by perceptions of competence of the alliance partner.

The model also argues that the use of power during alliances can play a key role in shaping perceptions of justice. By definition, they argue that power is a non-cooperative activity. When working to define the terms of the alliance, it is clear that each member of the alliance must push to ensure that their own interests are likely to be met (i.e., that they ultimately have a sense of distributive justice). Using power in this context, then, is not posited to adversely affect distributive justice. On the other hand, using power when working to determine control procedures could damage the perceived legitimacy of the relationship and lower levels of perceived procedural justice.

In the end, however, this work echoes the importance of the interpersonal aspects of interorganizational trust. They argue that using skilled negotiators who are sensitive to the factors in the model would be critical. Interestingly, they also emphasize the “dispositional qualities of the potential partners” (p. 198) as an important influence. However, they also note the difficulty of attempting to transpose this construct to the organizational context. Although this model was not tested, they argued that their unique contribution was the identification of the two stages during which interorganizational trust is developing and evolving. At the search stage, initial assessments of the partner must occur. At the second stage, the negotiation experience will drive how the relationship develops. Use of power and perceptions of justice will influence perceptions of trustworthiness. As a whole, then, this report presents a relatively simple view of the emergence of trust within interorganizational contexts.

## 2.6 Dirks, Lewicki, & Zaheer (2009)

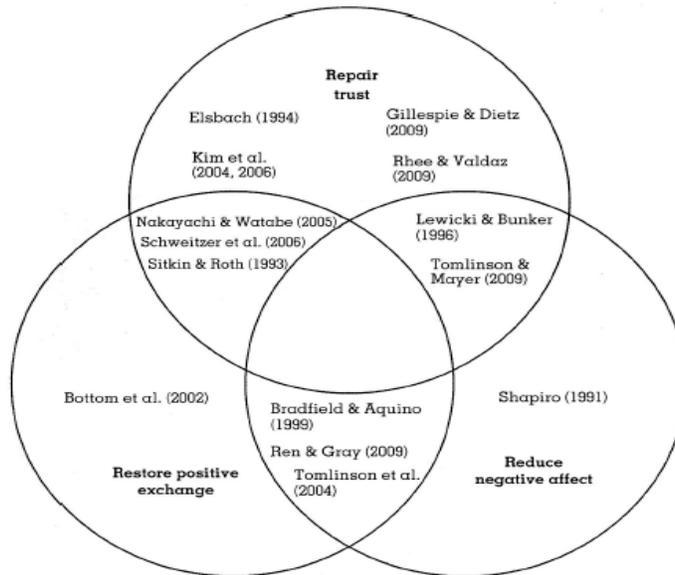
DIRKS, K. T., LEWICKI, R. J., & ZAHEER, Z. (2009). Repairing relationships within and between organizations: Building a conceptual foundation. *Academy of Management Review*, 34, 68-84.

As part of a special topic forum, this article provides an introduction to explore issues related to relationship repair as it is currently an underexplored domain. Dirks, Lewicki, and Zaheer (2009) attempted to organize the existing literature and stimulate future research on relationship repair by providing a conceptual structure and by raising questions for future research. Specifically, the authors investigated the ways that interorganizational relationships can be repaired after they have been damaged.

Dirks et al. (2009) defined repairing a relationship as occurring when “a transgression causes the positive state(s) that constitute(s) the relationship to disappear and/or negative states to arise, as perceived by one or both parties, and activities by one or both parties substantively return the relationship to a positive state” (p. 69). The authors noted that many different (but interacting) parts of the relationship have been examined. Thus, one of the goals of this paper was to determine what underlying structure of a relationship is damaged by transgressions, and therefore what needs to be repaired.

Previous research reviewed by Dirks et al. (2009) identified three factors important for relationships and relationship repair. They argue that when transgressions happen in relationships, three primary factors are likely to be impacted. These include trust levels (which diminish), negative affect (which intensifies), and changes in the nature of exchanges (e.g., suspension of

positive exchange and/or initiation of negative exchanges such as revenge or retribution). A conceptual map of research exploring each of these factors is shown in Figure 6.



**Figure 6. Concept map of literature related to relationship repair (Dirks et al., 2009, p. 71)**

As the map shows, although there is some research exploring at least 2 of the 3 domains, there is no current research that has explored all 3 domains.

Dirks and Lewicki also argue that there are several relevant theoretical processes underlying relationship repair efforts. These include attributional, social equilibrium, and structural perspectives, and these approaches have different perspectives, assumptions and implications for relationship repair as shown in Figure 7.

	Attributional	Social Equilibrium	Structural
Perspective	Transgression leads to loss of trust through attribution process; repair involves cognitive processes by which trust is restored	Transgression leads to disequilibrium in relationship and social context; repair involves social processes by which equilibrium in relationship is restored	Transgression leads to breakdown in positive exchange and increase in negative exchange; repair involves structural processes by which negative exchange is discouraged and positive exchange is encouraged
Assumption	Individual differences of actor (trustworthiness) are primary determinant of behavior; therefore, perceivers are motivated to draw attributions and targets are motivated to shape those attributions	Individuals desire to have equilibrium in norms and social relationships	Individuals are motivated by self-interest in relationships; targets engage in transgressions when the incentives of a situation make it profitable to do so and perceivers will help maintain relationship so long as it is profitable
Implications for repair strategies and tactics	Targets will try to shape perceivers' attributions about whether they committed a transgression, whether it reflects on their true nature, or whether they experienced redemption Examples of tactics: social accounts, apologies, denial, penance	Targets will engage in appropriate social rituals to restore equilibrium in standing and norms Examples of tactics: penance, punishment, apologies	Targets will implement structures or use other signals to provide credible assurance of positive exchange and prevent future transgressions Examples of tactics: legalistic remedies (incentives, monitoring), social structures
Examples of articles	Gillespie & Dietz (2009); Kim, Dirks, Cooper, & Ferrin (2006); Kim, Ferrin, Cooper, & Dirks (2004); Rhee & Valdez (2009); Tomlinson & Mayer (2009)	Bottom, Gibson, Daniels, & Murnighan (2002); Bradfield & Aquino (1999); Reb, Goldman, Kray, & Cropanzano (2006); Ren & Gray (2009)	Gillespie & Dietz (2009); Lindsold (1978); Nakayachi & Watabe (2005); Sitkin & Roth (1993)

**Figure 7. Perspectives on relationship repair and implications (Dirks et al., 2009, p. 72)**

Attributional theories propose that one party uses information about a transgression to draw a negative inference about the other party; in this case, repair must provide contradictory information or the violator must be perceived as experiencing redemption. Examples of managing the attribution process include making apologies or giving explanations about why the transgression occurred. The authors noted that this theory is equally most helpful for repairing trust, and is equally applicable to the individual, group or organizational level. This process might also help with the exchange aspect of relationships.

Social equilibrium theories state that transgressions disturb the social order, and therefore they create social disequilibrium. To repair the relationship, the partners must re-establish equilibrium by restoring the relative standing of the parties and reaffirm the social norms which exist between them. There are various social rituals that perform this function, including apologies, penance, and punishment. This account of relationship repair is argued to be particularly helpful for understanding trust repair in interorganizational relationships. This process is argued to be most helpful for decreasing negative affect and promoting positive exchange, but can also indirectly promote trust.

Although the previous two theoretical accounts focus on addressing the attributions of the violated party and on the social aspects of a violation, the structural approach frames trust repair from a

more systemic perspective. Structural theories propose that it is necessary to change the context of the damaged relationships; this usually involves installing structures, systems, or incentives which are aimed at limiting future transgressions. For example, Sitkin and Roth's (1993) notion of "legalistic remedies" and the introduction of control mechanisms (policies, procedures and contracts) fall into this category. These theories usually focus on outcomes which restore positive exchange, rather than on promoting trust or lessening negative affect.

Dirks et al. (2009) pointed out that it is important to ask the important question of what relationship repair actually means, since there are several ways in which relationships that can be damaged. For example, if distrust, negative affect, and negative exchange are all present when a transgression occurs, is the relationship really repaired unless all three aspects of the relationship recover? It might be the case, for example, that even after positive exchanges have re-emerged in a relationship, a continuing lack of trust or negative affect could lead to the eventual end of the relationship. They argue that there are no easy answers to this problem, but that ultimately defining relationship repair too narrowly might be problematic while higher levels of complexity might make it harder to actually apply these theories to understand relationship repair. In the end, they argue that researchers must make the tradeoffs they see as being appropriate.

Assumptions around the nature of trust are also a critical part of understanding relationship repair. There is an assumption in the literature that repair moves relationships on a continuum from negative to more positive. However, Dirks and Lewicki point out that repair might be relevant to movement on both positive and negative planes. That is, a person could be simultaneously perceived to be trustworthy in one context but distrustworthy in another. Moreover, there is also potential for "spillover" from one domain to another when violations occur. Hence, they argue that ambivalence models (e.g., simultaneous trust and distrust) may be possible particularly when the negative and positive attributes can be seen as distinct (e.g., no spillover from one domain to another).

Dirks et al. (2009) noted that the impact of transgressions may depend on the type of violations that occur. Violations related to integrity and values are more likely to lead to dispositional attributions, than are violations of competence. This makes integrity violations more likely to spill over than competence violations.

Even though the 3 core relationship repair processes have typically been studied in isolation, they also noted potential links among relationship repair processes. As noted earlier, the 3 different accounts make different assumptions about "where the action is" (Dirks and Lewicki, p.75). The attributional perspective focuses on the perceptions of the individual, social equilibrium on relationships among them, and structural perspectives focus on the context. However, these processes may be interlinked and suggest one process may facilitate, or inhibit another, or in other cases be interdependent, as shown in Figure 8.

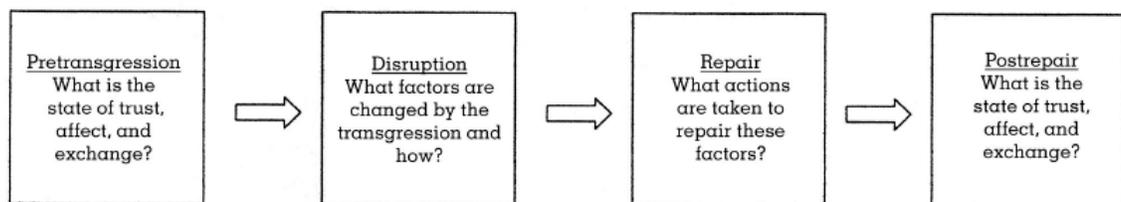
		<u>Process as antecedent</u>		
		<u>Attributional</u>	<u>Social equilibrium</u>	<u>Structural</u>
<u>Process as outcome</u>	<u>Attributional</u>	—	Facilitate: Reducing disequilibrium and emotional tension may facilitate trust repair by removing negative bias in perceptions	Inhibit: Structures decrease the opportunity to make or change internal attributions (e.g., behavior indicates that a person is trustworthy)
	<u>Social equilibrium</u>	Facilitate: Change in attributions may decrease perceived disequilibrium and reduce emotions	—	Facilitate: Structures may reaffirm or formalize norms and may limit or discourage future transgressions
	<u>Structural</u>	Independent: Assumption of structural perspective is that all people will commit transgressions if given a sufficient incentive	Independent: Assumption of structural perspective is that all people will commit transgressions if given a sufficient incentive	—

Note: Figure is arranged to show potential effects of antecedent process (columns) on outcome process (rows).

**Figure 8. Potential links among processes (Dirks et al., 2009, p. 76)**

This table shows that structural processes operate relatively independently of the other two that is, while attributional and social processes tend to interact to influence repair processes within a specific relationship context, structural processes “are intended to curb such behaviours in a uniform way across parties” (Dirks et al., 2009, p. 76).

Another limitation of the previous relationship repair literature is that researchers tend to examine relationship repair as a snapshot a point in time, or a series of snapshots; Dirks et al. (2009) argue that it is better seen as a process involving four discrete stages, each of which has a different set of issues, as shown in Figure 9.



**Figure 9. Relationship repair as a process (Dirks et al., 2009, p. 78)**

This figure argues that the outcome of a repair effort will depend on the status of the relationship prior to the transgression, in terms of trust, affect and exchange processes. This is described as the absolute or “raw” level of trust, varying from low positive to high positive. A disruption is described as an external event that may vary in complexity and that changes some aspects of the relationship (e.g., trust, affect). Repair refers to what was done to attempt to remediate the effect on the relationship. Lastly, postrepair refers to the state of the relationship after the repair efforts. The authors noted that the process is more fluid than apparent in the diagram, but the four-stage process provides a simple diagrammatic understanding.

This article provided a conceptual basis for future research on relationship repair and argues the case that this topic is fundamental to organizations and requires more study. They argue that the steps of relationship repair should be treated discretely in future research, and present more future questions that could be addressed. These include whether transgressions can ever fully be forgotten or whether they continue to influence trust levels later in relationships.

They also consider whether relationship repair is the same at all the different possible levels, including between co-workers, employee-organization and two institutions (stakeholder-organization). They simplify these distinctions to interpersonal and interorganizational levels. They argue that these two levels could have different requirements for relationship repair, in part, because they differ in compositional and contractual ways. Interpersonal relationships are composed of individuals, whereas interorganizational relationships involve a collection of individuals who trust another collection of individuals. This difference could also have implications for the drivers of trust at these levels. For example, trust at the interpersonal level has often been described as related to integrity, competence and benevolence. There may be similar differences at different levels for affect and exchange. However, they argue that reliability, predictability and fairness have been shown to be important at the organizational level. Moreover, research by Hamilton and Sherman, 1996; cited in Dirks and Lewicki, 2009) also suggests that although attributional processes about individuals and homogeneous organizations are both similar, attribution processes might differ somewhat when organizations are perceived to be diverse. For example, within an organizational context, attribution-based repair would logically require for many different people to recalibrate their views (rather than a single person) putting different demands on the repair process.

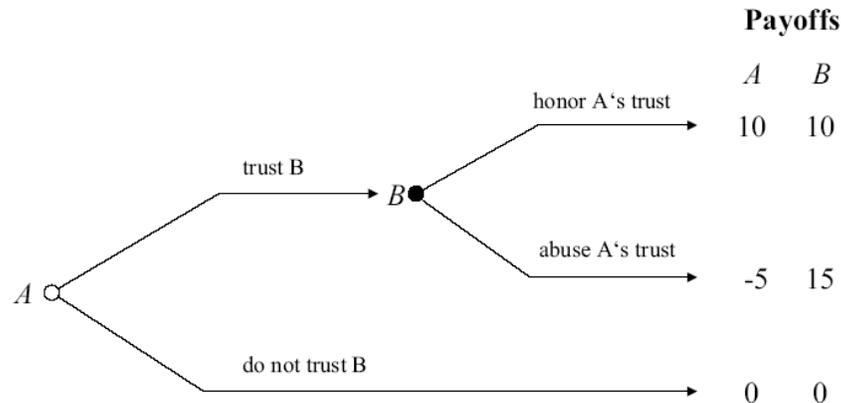
The contractual form of the relationship could also differ from interpersonal to interorganizational contexts. In either, contracts could be relational (e.g., social) or more transactional (e.g., economic). Given this, they argue that using a 2x2 matrix (contractual form: relational or economic) and composition (individuals vs. collectives) would be one way to start disentangled the nuances of relationship repair. Overall, this important paper seeks more conceptual clarity in thinking and future research around relationship repair in the organizational and interorganizational context.

## 2.7 Eberl (2004)

EBERL, P. (2004). The development of trust and implications for organizational design: A game- and attribution-theoretical framework. *Schmalenbach Business Review*, 56, 258-273.

Eberl (2004) uses game theory and attribution theory to better understand trust within an organizational context. The author described trust as a fundamentally relational phenomenon, either between individuals or organizations. Eberl makes a distinction between trust and confidence, with confidence being related to a relatively more simple assumption of competence, whereas trust requires perceptions that the partner won't act opportunistically. This is thought to require an attribution about the motivation behind a partner's actions, as well as inherent uncertainty and risk within the situation.

Game-theoretic modelling can be helpful for understanding social dilemmas. Hence, Eberl uses it to analyze situations in which trust might be an issue. The modelling used involves sequential interdependence; choices are made in sequence and will be influenced by the actions of the partner. Figure 10 provides a visualization of the trust game decisions and potential payoffs assuming that individuals are likely to be motivated to maximize their profits.



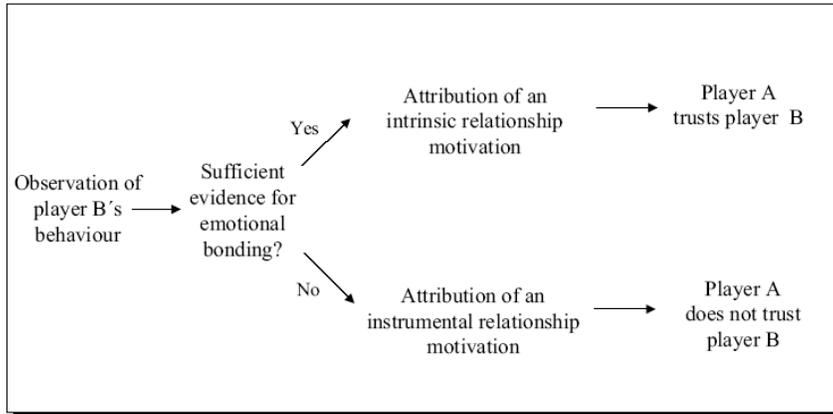
**Figure 10. The trust game (Eberl, 2004, p. 260)**

Partner A makes the first choice, whether or not to trust player B; if player A does not trust player B, then both lose (both get zero points). If player A does trust player B, then player B has to decide whether to behave in a way that honours the trust of player A, in which case both players get 10 points; if player B acts opportunistically, then player A gets 5 points and player B gets 15 points.

Eberl (2004) discussed the potential motivations and options of player B given different scenarios. If there is to be only one game, and if player A trusts player B, player B would benefit most from betraying player A. However, when the game is to be repeated a number of times, Eberl argues that trust dynamics change. Repetition increases the benefit to player B of honouring player A's trust, as over time that will maximize player B's points (assuming that once player A is betrayed they will no longer trust player B and act accordingly in their first choice of the game). Eberl (2004) argued that trust due to repetition is not "real" trust, because classic game theory would predict that player B would still choose to betray player A's trust and gain additional points. In fact, Eberl argues that conventions, social norms and emotions are all irrelevant within a strictly (and conventionally) defined game theory context.

Reputation effects may serve to create a situation which fosters trust, as players may wish to maintain their reputations, especially if more than one other player is involved. This is also not considered real trust, as the motivation is simply to maintain future opportunities; if future opportunities can be saved while trust is betrayed, then player B will still act opportunistically.

Eberl (2004) attempted to explain "real" trust as a result of emotional bonding between the players; in essence, player B's conscience comes into play if there is an emotional bond, and continuing a productive and positive relationship becomes a reward in itself. Eberl invoked attribution theory to explain how causal attributions were made as a result of emotional bonding, as shown in Figure 11.



**Figure 11. Guidelines for trust-based organizational design (Eberl, 2004, p. 270)**

Eberl noted that, in interorganizational trust, the bond isn't between the organizations themselves, but rather between representatives of the different organizations.

Eberl (2004) argued that trust can be positively affected by organizational designs which encourage:

- a high interaction frequency
- a relationship where partners are equally dependent
- many different types of interactions in different contexts
- rewards for cooperative behaviour

As a theoretical work (Eberl, 2004), this paper argues that organizational designs can foster trust and ultimately closer relationships between the individuals that represent different organizations by setting the stage for emotionally-based relationships to develop. Eberl suggests some general guidelines regarding the facilitation of trust and its encouragement through organizational design choices. First, increasing interaction frequency through task structure will provide relationship members an opportunity to engage in the attributional process. Over time, a shared interaction history supports relational communications, enabling the development of intrinsic relationship motivation. It is also important to recognize the “symmetry of dependence” that exists between interaction partners in lateral relationships (as compared to more asymmetric vertical relationships). With this in mind, organizations would be best to design organizational structures that have “low or fluctuating hierarchical differentiation,” which encourages teamwork, and supports the creation of emotional-based relationships (p. 269). Eberl also places importance on the “multiplexity of relationships;” through which partners can verify attributions made about the other by observing their behaviours in a variety of situations and contexts, essentially making an environmental explanation for partners’ behaviours less plausible. Therefore, organizational design should ensure that teamwork is done in a variety of ways (e.g., emphasizing various “contents of communications”). Lastly, Eberl encourages cooperation-related incentives to be built in to rewards systems, so that cooperation increases—whether trust exists or not. By increasing the likelihood of shared achievement experiences, recognition of the potential advantages and benefits of cooperative behaviour becomes more likely, which promotes an environment where members are more apt to develop emotionally-based relationships.

Unfortunately, no new empirical evidence is offered to support these hypotheses. This paper seems to represent the fact that game theorists seem to have come “full circle” toward understanding the key difference between cooperative behaviour that could indicate trust but which could also be the product of self-serving motives. The inclusion of the emotional bonding component of trust and the use of attribution theory to explain trust-relevant motivations provide a more complex perspective on trust at the organizational level.

## 2.8 Faem, Janseens, Madhok, Looy (2008)

Faem, D., Janssens, M., Madhok, A. & Van Looy, B. (2008). Toward an integrative perspective on alliance governance: Connecting contract design, trust dynamics and contract application. *Academy of Management Journal*, 51(6), 1053-1076.

These researchers explore trust as it relates to alliance governance, in terms of both operational and managerial levels. Historically, governance has been understood from 2 contrasting perspectives. The first is structural, and emphasizes single transactions, the role of legally binding formal contracts. This enhanced control, in theory, provides protection for both parties.

The relational perspective, on the other hand, focuses on the quality of the relationship among key parties, and particularly emphasizes the role of trust in helping to safeguard and protect the interests of all parties.

These 2 perspectives on alliance governance are explored using a case study approach of 2 research and development alliances between the same 2 firms. The core differences among the structural and relational perspectives on alliance governance are shown in Figure 12.

Characteristic	Structural Perspective	Relational Perspective
Focus of analysis	Single transaction	Interfirm relationship
Theoretical basis	Transaction cost theory	Social exchange theory
Main assumptions	Partners tend to act opportunistically	Partners tend to act in a trustworthy fashion
	Alliance performance is driven by the quality of the initial structural design	Alliance performance is driven by the quality of the ongoing relational processes
Proposed governance mechanism	Complex contracts	Trust
Criticism	Undersocialized view of human action	Oversocialized view of human action
Reference publications	Pisano, Russo, & Teece (1988) Pisano (1990) Williamson (1991) Hennart (1991, 2006) Parkhe (1993a) Oxley (1997) Sampson (2004)	Larson (1992) Ring & Van de Ven (1992) Zaheer & Venkatraman (1995) Gulati (1995) Uzzi (1997) Dyer & Singh (1998) Salk (2005)

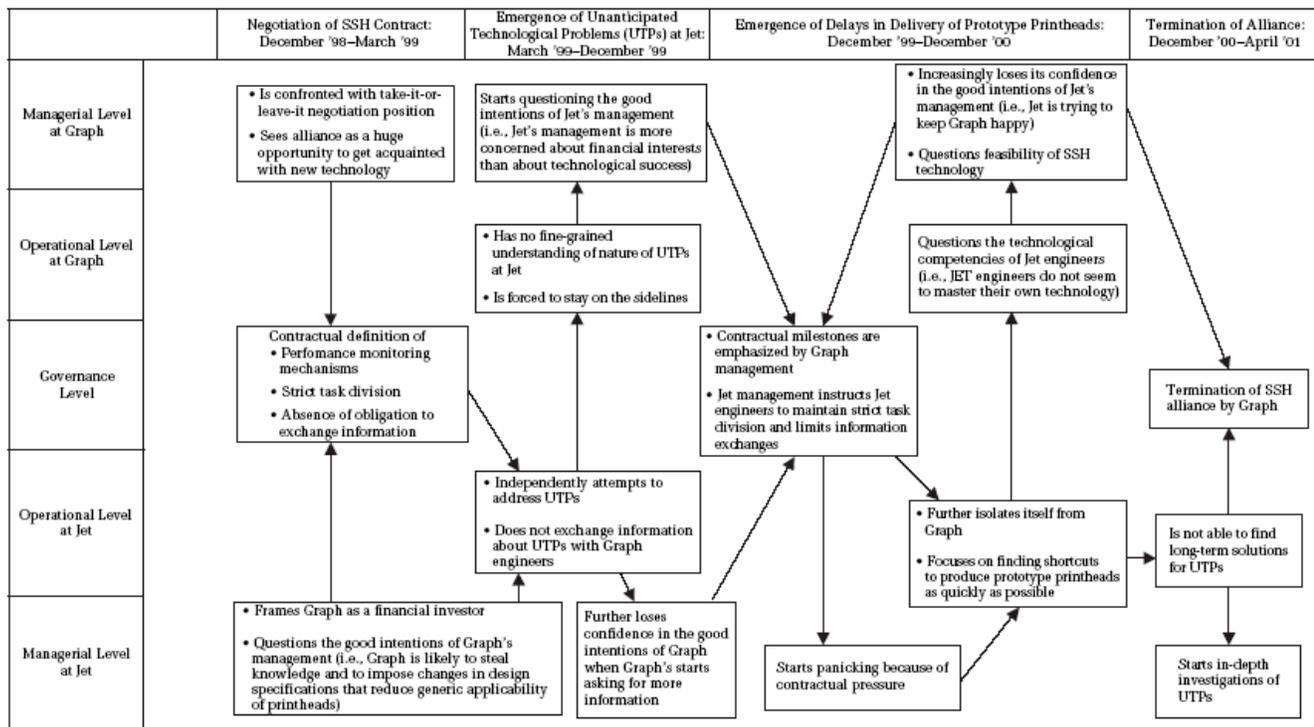
**Figure 12. Structural vs. relational perspectives on alliance governance (Faem et al., p. 1055)**

As this figure shows, these approaches make very different assumption about how governance is best achieved within alliances. Structural models emphasize control mechanisms such as complex contracts, whereas relational perspectives focus on trust. Each approach, of course, has its merits and limitations.

Faem et al. (2008) were interested in working to meld the two approaches, and they consider past research that explored the relationships between structural and relational approaches. However, they conclude that past research had methodological limitations which they propose to avoid in their study. First, they note that past research on alliance governance had only measured the degree of alliance formalization, their methodology called for an in-depth content analysis examining the nature of contractual formalization. Past research had taken a static view of trust (i.e., measuring it a single point in time) whereas Faem et al. took a more dynamic view, measuring how expectations evolve during the relationship. Further, this study interviewed employees at multiple levels (operational and managerial) in *both* firms, allowing for a multi-level analysis that previous studies had lacked. Lastly, past research has focused on a single alliance transaction *or* the interfirm relationship; the current study investigated two transactions *within* the same alliance.

Case studies of two companies were conducted The first company (called “Graph”) was a very large multinational company and the second was a small inkjet company (called “Jet”). The purpose of the alliances was to investigate new emerging technologies. Within each company, engineering teams consisted of 5 engineers who reported to 2 senior managers, and a retrospective approach was used. Data collection consisted of document analysis and semi-structured interviews (with both managers and engineers).

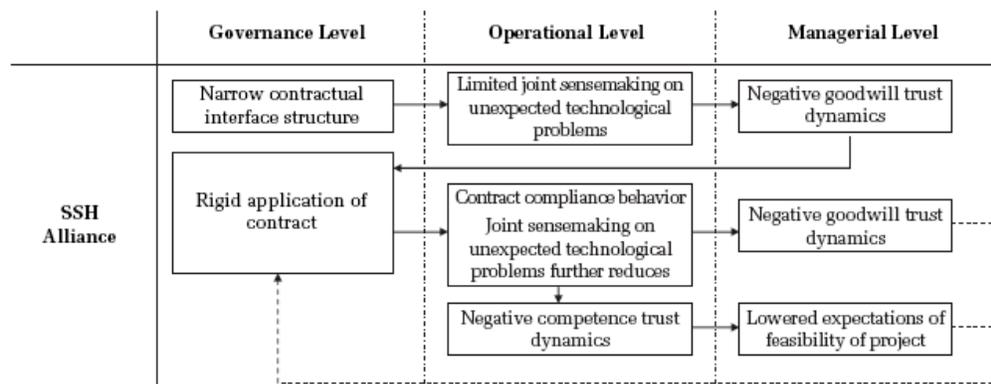
An analysis of the timeline and dynamics of one alliance (Side Shooter Head Alliance - SSHA) is shown in Figure 13.



**Figure 13. Dynamics of collaboration in SSH alliance (Faem et al., p. 1062)**

As Figure 13 shows, this unsuccessful alliance had 4 key stages including negotiations, unanticipated technological problems, delays for delivery of prototypes and eventually dissolution of the alliance. To briefly summarize, the agreement was that Graph would fund Jet’s development of a new print head, and Graph would provide a prototype system. Jet had taken an aggressive stance in negotiations, insisted on formal contracts, and did not work collaboratively. The contracts as defined by Jet included limited information exchange and monitoring opportunities. Graph agreed to these terms in order to get the project started. Unexpected technical problems emerged at the next stage, and Jet did not feel obliged to provide much information to Graph alliance members, leaving them feeling excluded. This led to questioning of Jet engineers’ ability, as well as of the intention of Jet management. These perceptions came into play at the next stage, wherein Graph management (frustrated by delays) insisted on contractual milestones. Jet then became nervous about the financial consequences of not delivering on time to Graph, and became even more closed about communication while beginning to seek “shortcuts”. When the print heads were delivered, they were judged by Graph to be of poor quality, and Graph’s growing doubts about both the Jet engineers and managers were confirmed. Their confidence in the technological feasibility of the technology waned, and they terminated the alliance.

The dynamics of this alliance at each level are shown in Figure 14.



**Figure 14. Modeling dynamics of collaboration in SSH alliance (Faem et al., p. 1068)**

Rigidity at the governance level, and trust-relevant questions about competence and goodwill of the other parties seemed to jeopardize the success of the alliance.<sup>5</sup>

This example shows how transactional factors (such as the rigidity of formal contracts) can combine with relational factors to influence the success of alliances. Trust (and more specifically, a lack of trust) became a serious problem as the alliance progressed and encountered challenges. A key part of the description from interviewees was that members of the alliance could no longer accept the risks that they perceived once problems started to occur. This was exacerbated by a lack of communication that did not support joint sense-making. Another important finding of this case study was that trust-relevant issues at the operational level came to influence issues at the managerial level.

This work is important at several levels. This report elucidates the relationship between transactional and relational factors, and the “spread” of perceptions from one level to another. This

<sup>5</sup> Interestingly, a second alliance reported in this paper showed a more positive outcome.

work also shows a very interesting way to analyze the dynamics of a discrete collaborative alliance, in an effort to understand how trust might have influenced inter-organizational relationships.

## 2.9 Fang, Palmatier, Scheer, & Li (2008)

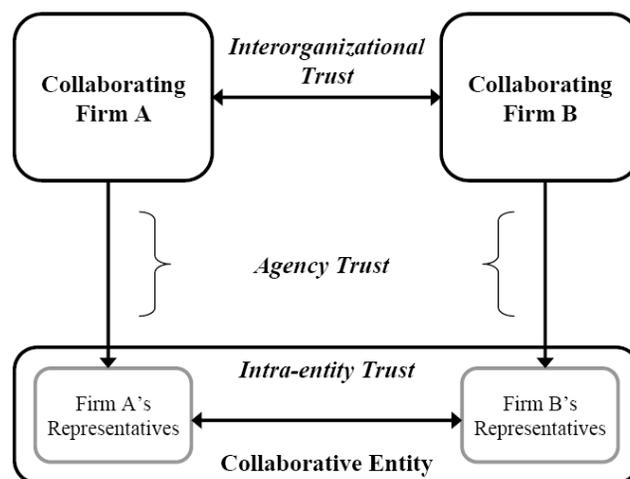
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FANG, E., PALMATIER, R. W., SCHEER, L. K., & LI, N. (2008). Trust at different organizational levels. *Journal of Marketing*, 72, 80-98.

Fang, Palmatier, Scheer, and Li (2008) explore trust as an essential element within cooperative interorganizational relationships. Specifically, they focus on the formation and function of the collaborative entity or 'co-entity'; groups of employees from each organization tasked to work together on a joint venture.

In developing a model of trust between the two organizations, they depict the collaborative entity as the interactive body between two firms. Fang et al. (2008) discussed the complexity of co-entity relationships, and the fact that members of a co-entity have multiple relationships with one another at a given time. Members have a position within the co-entity, but also within their parent organization. Resource investments and resource utilization are the major ways in which organization can achieve their aims; these in turn are influenced by trust. Lack of trust is thought to be one of the main reasons why joint ventures fail.

Fang et al. proposed three distinct levels of trust in interorganizational partnerships using co-entities: interorganizational trust (mutual trust between the collaborating firms), agency trust (the trust each firm has in its own representatives), and intra-entity trust (the trust each firm's representatives have in one another). Figure 15 shows a diagrammatic representation of a co-entity's relationship with its collaborating firms and the multiple levels of trust that are relevant for co-entities.



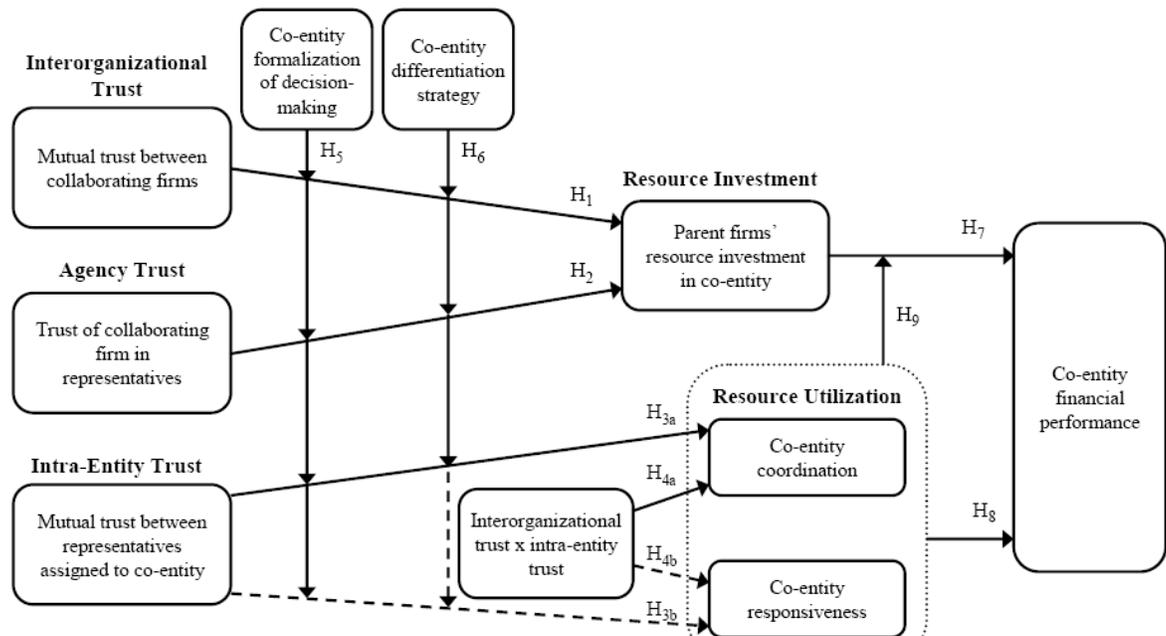
**Figure 15. Impact of trust at different levels on collaborative entity/co-entity financial performance (Fang, Palmatier, Scheer & Li, 2008, p. 39)**

To provide empirical support for their model, one hundred fourteen international joint ventures in China were examined. The joint ventures were composed of at least one partner outside China and

one Chinese organization. Fang et al. (2008) performed a two-stage data-collection process. Survey data was collected from the senior partners assigned to the joint venture in the first stage of data collection; agency trust, interorganizational trust, and intra-entity trust were all assessed. The second stage of data collection involved obtaining archival financial performance data two years later to assess performance of the co-entity (sales/total assets and profits/investments).

Fang et al. (2008) developed a new scale to assess parent firms' interorganizational trust and intra-entity trust; trust was conceptualized as both reliability and benevolence. New measures were also developed or adapted from existing measures to assess other factors that could influence interorganizational trust and/or co-entity performance, including co-entity coordination (defined as the effectiveness with which the representatives work together to use invested resources), co-entity responsiveness to rapid environmental changes, formalization of decision-making (the extent to which decision-making processes emphasize and follow specific rules and procedures), and differentiation strategy (the strategic emphasis of the co-entity in creating and delivering unique customer benefits in new and distinct ways).

Using a theoretical model comparison, the authors tested their hypotheses concerning the different levels of trust and their influence on resource investments, resource utilization, and consequently financial performance, as shown in Figure 16.



**Figure 16. Impact of trust at different levels on collaborative entity/co-entity financial performance (Fang, Palmatier, Scheer & Li, 2008, p. 40)**

This model depicts the 3 different forms of trust as influences on resource investment, resource utilization and ultimately on co-entity financial performance. The impact of trust on these variables is also moderated by decision-making and differentiation strategies. These hypotheses were tested using ordinary least squares.

Their findings showed that parent firm trust in the co-entity was positively associated with investment of resources in the co-entity. However, interorganizational trust (i.e., trust between the two parent organizations) did not always positively affect resource investment in the co-entity (it

did for foreign companies, but not for the Chinese companies). As well, trust within the co-entity increased co-entity coordination but negatively affected the co-entities responsiveness to environmental changes. Interestingly, financial performance was positively influenced by co-entity responsiveness, but not by co-entity coordination.<sup>6</sup>

This article shows the complexity of interorganizational trust, particularly in the context of joint ventures which involve subsets of two (or more) organizations (i.e., co-entities). Fang et al. claim that their contribution to the interorganizational trust literature is that they consider three levels of trust which affect interorganizational trust, and also the moderating effects that the co-entity characteristics may have on interorganizational trust. Interorganizational, agency, intra-entity, and presumably interpersonal trust will all likely play a role and influence the performance of the co-entity. This research also suggests that the relationships between the variables and their impact on performance are far from clear-cut and further research is required to more fully understand these processes and effects.

## 2.10 Ferrin, Bligh, & Kohles (2007)

FERRIN, D. L., BLIGH, M. C., & KOHLES, J. C. (2007). Can I trust you to trust me? A theory of trust, monitoring, and cooperation in interpersonal and intergroup relationships. *Group & Organization Management*, 32, 465-499.

Ferrin, Bligh, and Kohles (2007) sought to better understand the relationship among constructs (i.e., trust, monitoring, and cooperation) influential in interorganizational relationships. Specifically, the authors were interested in uncovering and understanding the complexities involved in interpersonal and intergroup relationships. To do so they adopted a holistic view to explore literature related to game theory, negotiation, interpersonal trust, and interorganizational relationships.

The authors make note of the disconcerting range of perspectives that have been taken by theorists regarding the specific roles played by trust, cooperation, and monitoring. For instance, game theory researchers have operationalized trust as equivalent with cooperative behaviour (Bigley & Pearce, 1998; cited in Ferrin, Bligh, & Kohles, 2007, p. 471). Negotiation researchers, on the other hand, have conceptualized trust as an antecedent of cooperation, as a consequence, and even equated trust with joint gain outcomes (Ross & LaCroix, 1996; cited in Ferrin, Bligh, & Kohles, 2007). In interpersonal research, trust has been shown to lead to cooperative outcomes, though it can also be conceptualized as a consequence of cooperative activities. However, due to the cross-sectional designs used in most interpersonal field research, the direction of the causal relationships among trust and other constructs remains uncertain (Dirks & Ferrin, 2002; cited in Ferrin, Bligh, & Kohles, 2007). To add to the uncertainty, within interorganizational relationships, monitoring and trust have been found to impact levels of cooperation—though their specific interrelationships are yet to be established—and there is even some debate as to whether monitoring increases or decreases cooperation levels.

To deal with these perplexing and sometimes conflicting research findings, the authors aimed to integrate findings from the four research areas, and to develop a comprehensive set of theoretical propositions about the relationships among constructs. Ferrin et al. (2007) suggested imagining the relevant concepts as having an isomorphic relationship (i.e., constructs of varying structure,

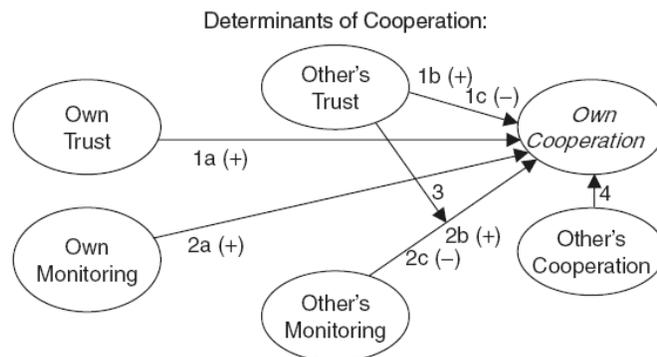
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<sup>6</sup> The authors noted the presence of significant interactions, so advised caution in the interpretations of their results.

performing similar functions) as they developed their thinking. They noted that although the three constructs may differ in structure across levels (i.e., individual, group), they still have similar functions (i.e., improving interpersonal and/or intergroup relationships). They argued that especially in the early stages of multilevel theory development, it could be advantageous to focus on the comparable functions of complex collective phenomena, and make integration across levels of analysis easier to do.

They identified the need for a distinction between *own and other's* trust, *own and other's* monitoring, and *own and other's* cooperation. Developing a more refined set of construct definitions was also seen to be critical. Trust was redefined as “an individual’s or group’s belief that another individual or group makes efforts to uphold commitments, is honest, and does not take advantage given the opportunity” (Ferrin et al., 2007, p. 470). This definition allows trust to be applied to an individual or organization and is consistent with most other definitions of trust (e.g., including benevolence and integrity components). They defined monitoring as “behaviors conducted by one party to gain information about another party’s level of cooperation” (p. 470). Co-operation was defined as “the extent to which a party will pursue mutually compatible interests rather than acting opportunistically” (p. 469). The authors did note, however, that cooperation is found in all interpersonal and intergroup relationships and is often mixed with conflicting motives to compete because individuals and groups want to maximize both self-interest and collective interests.

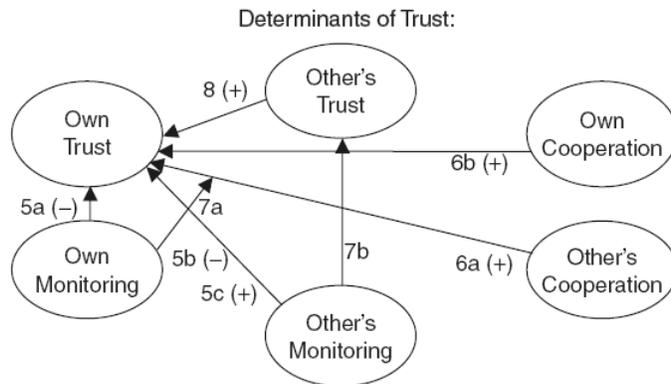
With three models, Ferrin and colleagues attempted to assimilate the findings from the four domains of literature concerning each of the target constructs. The model related to cooperation is shown in Figure 17.



**Figure 17. Graphic summary of determinants of cooperation (based on Ferrin et al., 2007)**

This model shows that one’s own cooperation is facilitated by own trust, own and other’s monitoring, and other’s cooperation. Other’s trust and other’s monitoring are also argued to determine one’s own cooperation. Specifically, they argue that as other’s trust increases, other’s monitoring will impact less on cooperation (and vice versa). One’s cooperation is also facilitated by the cooperation of the other party.

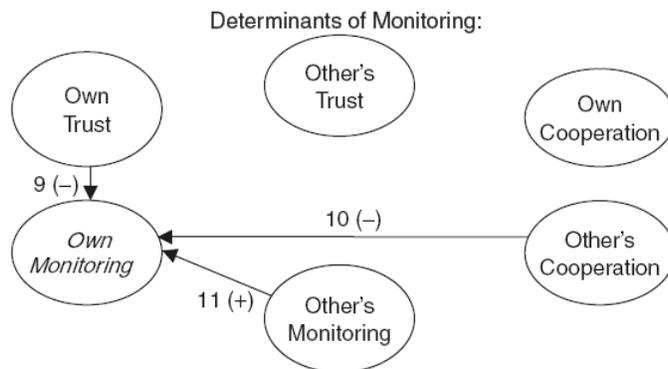
The proposed model showing the proposed determinants of trust is shown in Figure 18.



**Figure 18. Graphic summary of determinants of trust (based on Ferrin et al., 2007)**

This proposed model posits a number of influences on one's own trust. Specifically, own and other cooperation are both positive influences on own trust. In accordance with self-perception theory, own monitoring and other monitoring are also posited to reduce own trust. Own monitoring is also posited to interact with other's cooperation to facilitate own trust.

The proposed model related to monitoring is shown in Figure 19.



**Figure 19. Graphic summary of determinants of monitoring (based on Ferrin et al., 2007)**

This model suggests that our own monitoring is relatively related to our own trust (i.e., that we monitor less when we trust) and the perceived cooperation of other, and positively related to other's monitoring.

These models identify some of the patterns evident in the existing literature, as a basis for future experimentation. Nonetheless, Ferrin et al. (2007) note that these models should be seen as very tentative, given the following range of contradictory findings in the literature:

- Other's trust will increase own cooperation (desire for fairness, normative, and avoidance of sanctions) or other's trust decreases own cooperation (if betrayal is perceived as likely to be undetected)
- Other's monitoring increases own cooperation (as it allows competition to be recognized) or other's monitoring decreases own cooperation (moving from intrinsic to extrinsic reasons for cooperation, impairment of intrinsic motivation)

- Other's monitoring reduces own trust (monitoring signals low trust) or other's monitoring increases own trust (monitoring signals interest and responsibility)

Future research will hopefully resolve some of the current discrepancies in the accumulated research record. What this article does provide, however, is a more integrative and functional way of thinking about trust, cooperation, and monitoring, by providing more precise construct definitions and predictions about the nature of their interrelations. Moreover, because the authors based their predictions on knowledge drawn from four diverse contexts, their suggestions reflect a more holistic approach to understanding the dynamics of interorganizational trust.

## 2.11 Gargiulo & Ertug (2006)

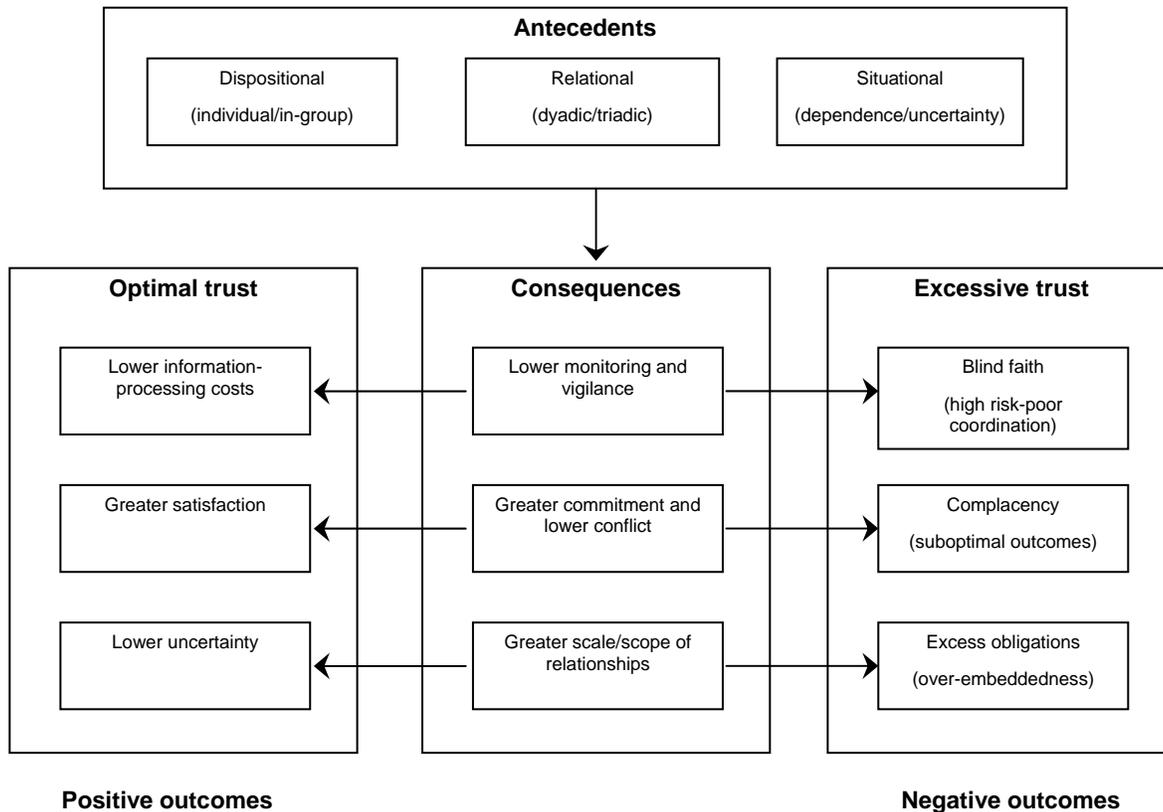
GARGIULO, M. & ERTUG, G. (2006). The dark side of trust. In *Handbook of Trust Research* (R. Bachmann & A. Zaheer, Eds.), p. 165-186. Cheltenham, UK: Edward Elgar Publishing Limited.

Gargiulo and Ertug (2006) sought to correct the optimism bias evident in the trust research literature and to contribute to a more integrated theoretical approach. This approach is intended to consider all aspects of trust on outcomes that affect the well being of both parties involved in a relationship. The authors' main argument is that the "detrimental effects of trust are closely linked to its purported benefits" (p. 165), and that relative to research about the benefits of trust, research exploring the "dark side of trust" has been sparse. Although they agreed that lack of trust ("insufficient trust") can lead to negative consequences, the authors in this paper concentrated on the potential problems associated with having too much trust.

Gargiulo and Ertug (2006) make three key assumptions about the nature of trust. First, they define trust as a "belief that reflects an actor's expectations (the trustor) about another actor (the trustee)" (p. 166). Second, they assume that a trustee typically intends to refrain from acting in a way that will be detrimental to the trustor. This is in contrast to the trustee actively cooperating and contributing to assist the trustor. The assumption is that for a trusting event to occur the trustor must be willing to be vulnerable to the actions of the trustee and the trustee must intend (and is able to) behave in a way that will not harm the trustor.

The authors noted that most trust research focuses on the positive aspects of trust, and possible negative effects are often ignored or downplayed. They argue that benefits of trust have often obscured the dark side of trust. They discussed situations which they call "excessive trust", meaning that more trust is displayed than actually warranted. For instance, Gargiulo and Ertug argue that although trust in a relationship tends to reduce the costs associated with information gathering and processing by reducing the need to monitor the partner's activities, it can also lead to a "blind faith" in their partner, which may "substantially increases the risk of malfeasance" (p. 165). Another potential negative to trust is that the satisfaction and commitment arising in a trusting relationship can also lead to complacency and the acceptance of sub-par outcomes. Lastly, they argue that because trust leads to extended communication characterized by information exchange, relationships can become over-embedded, which can lead to unnecessary and debilitating mutual obligations.

In developing the idea that both positive and negative outcomes can develop from trust, Gargiulo and Ertug (2006) propose a model that identifies the antecedents, consequences and outcomes of both optimal and excessive trust, as shown in Figure 20.



**Figure 20. Antecedents, consequences and outcomes of trust (Gargiulo & Ertug 2006, p. 181)**

*Antecedents* of trust include *dispositional factors* such as trustor and trustee's individual traits, and predisposition to trust; *relational factors* that focus on the past and duration of current experiences (direct or indirect) between the trustee and the trustor. This also includes influence of a third party that can either contribute or dissipate trust between two parties. Lastly, *situational factors* take into account the environment or context in which the relationship evolves. As noted, trust depends on the willingness of the trustor to be vulnerable to the actions of the trustee, and an opportunity to prove trust. Uncertain situations can provide opportunities for defection, whereas acceptance of the uncertainty may signal trust.

Trust antecedents give rise to the *behavioural consequences of trust*. Consequences are behaviours that can produce both positive and negative outcomes depending on whether trust is warranted or is actually excessive. It has been shown that *monitoring and vigilance* are negatively related to the level of trust within a relationship. High levels of *commitment* and low levels of conflict have been shown to be associated with trust. The final element is the scale and scope of the relationship. In this context, scale is intended to represent the openness of partner communication, whereas scope is a measure of the degree of information transfer between the partners. High levels of trust in a relationship are also expected to lead to multiplex ties (i.e., multiple economic or social exchanges which act to further embed the parties in the relationship). Trust grows as the scale and scope of communication increases and as a result of multiplex ties. Consequences thus can lead to *optimal trust* or *excessive trust*.

When trust is at optimal levels, the true benefits of trust can accrue. Trust can lower information processing costs, because there is less need to monitor and safeguard oneself within the relationship. Satisfaction has been shown to be at a higher level for those who have high levels of trust, particularly in the work place (p.173, Gargiulo & Ertug, 2006). Lower uncertainty is another benefit of trust in interorganizational relationships. Parties with higher trust in their relationships tend to behave more in line with trustor's expectations (p. 173, Gargiulo & Ertug, 2006). On the reverse, excessive trust can result in the negative or detrimental outcomes discussed previously (i.e., blind faith, complacency, and excess obligations).

Overall, this report emphasizes some of the implications of optimal and excessive trust. One issue discussed by Gargiulo and Ertug (2006) is that different levels of trust may be optimal in different contexts, therefore it may not be as simple as discovering an *absolute* optimal level of trust for all relationships. Although existing literature often implies a linear relationship between trust levels and desirable outcomes, this might not be the reality. This paper argues that—counter to conventional accounts—the relationship between trust and positive outcomes (e.g., performance) is likely curvilinear in nature. Specifically, once a certain level of trust is established, additional efforts aimed at enhancing trust may hinder performance rather than help it.

As a whole, then, this paper presents a cautionary perspective on the potential disadvantages of excessive trust.

## 2.12 Janowicz & Noorderhaven (2006)

JANOWICZ, M. & NOORDERHAVEN, N. (2006). Levels of inter-organizational trust: Conceptualization and measurement. In R. Bachmann & A. Zaheer (Eds), *Handbook of Trust Research* (p. 264-279). Cheltenham, UK: Edward Elgar Publishing Limited.

In their chapter, Janowicz and Noorderhaven (2006) examined the existing interorganizational trust research and made an effort to provide an organizing structure, and to bring coherence to the variety of theoretical approaches used to study interorganizational trust. The authors aim to offer a systematic, more refined framework. This framework is intended to guide future research efforts and help ensure proper study design and measurement techniques are used in interorganizational research. This framework analyzes the interorganizational context in terms of the trustee and the trustor, as shown in Figure 21.

		Who is trusted? (i.e. trustee)	
		Individual	Organization
Who trusts? (i.e. trustor)	Individual	<b>Top-level INDIVIDUAL → INDIVIDUAL / ORGANIZATION</b> Strategic-level trust	
	Organization	<b>ORGANIZATION → INDIVIDUAL</b>	<b>ORGANIZATION → ORGANIZATION</b>

**Figure 21. Strategic and organizational levels of interorganizational trust (Janowicz & Noorderhaven, 2006, p. 275)**

This model argues that interorganizational trust can be conceptualized on three levels: as a purely interpersonal phenomenon (i.e., between two individuals), as an individual trusting an organization, or as something that occurs between two organizations. Janowicz and Noorderhaven argued that trust is more fundamentally an attitude rather than a behaviour, as a “trusting” behaviour could actually be motivated for other reasons and not actually indicate the actual level of trust present. This model assumes that within the interorganizational trust context, the trustor is always an individual. If trust is thought to be an attitude, an organization cannot really have an attitude; hence, only an individual can be a trustor. On the other hand, a trustee could either be a partnered organization as a whole, or individual members within that organization. If trust is conceptualized as a behaviour, actions taken by an organization can be evaluated as trusting or not, and so an organization can be both a subject and an object of trust. The choice of whether to treat trust as an attitude or as a behaviour involves how the level of trust in a relationship can be inferred.

As depicted, the framework suggests a number of important questions researchers need to address explicitly during the preliminary phases of a study’s design. The authors also point out that in the past these questions were not an explicit consideration, which has resulted in loosely defined constructs, less reliable measures, and findings with reduced validity.

Further, the authors suggest that the trust of boundary-spanners is the most important to assess when thinking about trust at the interorganizational level. Boundary-spanners play a critical role as it is through them that the interorganizational relationship is enacted. It is also important to determine whether boundary-spanners are at the operational or strategic levels because these levels have different implications for interfirm collaboration. For example, the people who work strategically to build alliances with other organizations (i.e., strategic boundary-spanners) are seldom the same people who actually enact that alliance (i.e., operational boundary-spanners). Thus, the causes and consequences of interorganizational trust are likely to be different at the strategic and operational levels, yet this is a variable that has seldom been considered in interorganizational trust research.

Lastly, Janowicz and Noorderhaven (2006) emphasized that there must be a match between the conceptualization of interorganizational trust used and the measures with which data is collected

and assessed. There have been some authors who have argued that assessing the trust of individuals within an organization is not an adequate way of assessing organization-level trust. However, Janowicz and Noorderhaven argued that this is acceptable as long as the individuals who provide data are consistent with the definition. For example, if organizational trust is identified as project managers' assessments of the other firm, then as long as project managers are used in the assessments this should be a valid way of testing the theory. The authors also argued that, even if the trustor is conceptualized as the organization as a whole, individual-level data can be used as a window into what people within the organization believe.

Overall, this article is important because it introduces an organizing framework and helps to refine the definition of interorganizational trust, (i.e., trustor as an individual, trustee as an individual *or* an organization). It also emphasizes the importance of the trustor's position within their company (i.e., strategic vs. operational boundary-spanners). By defining interorganizational trust in this way data collection in field research becomes more pragmatic. As noted by Janowicz and Noorderhaven (2006, p. 277) "if an individual is assumed to be the trusting party at both levels of analysis, than obtaining data concerning the level of trust at both levels from an individual is justified..." From this perspective boundary-spanners can be reliable sources of information concerning interorganizational trust.

### **2.13 Janowicz-Panjaitan & Krishnan (2009)**

JANOWICZ-PANJAITAN, M. & KRISHNAN, R. (2009). Measures for dealing with competence and integrity violations of interorganizational trust at the corporate and operating levels of organizational hierarchy. *Journal of Management Studies*, 46, 245-268.

Janowicz-Panjaitan and Krishnan (2009) explored the impact of trust violations on interorganizational alliances, including whether (and if so, how) trust can be repaired once damaged. If trust cannot be repaired, these researchers considered measures that might allow for the alliance to be preserved. Building on the work of Kim et al. (2004; cited in Janowicz-Panjaitan and Krishnan, 2009) which showed that the effectiveness of trust repair in interpersonal contexts depended on the type of violation, this work considered four additional factors: (1) the role played by the boundary spanners at operating and corporate levels; (2) the severity and frequency of the violation; (3) the level of organizational constraint on the boundary spanner, and; (4) the level of the trustor's dependence on the trustee.

A trust violation is the failure of one party to perform consistently with the expectations of the other party. Janowicz-Panjaitan and Krishnan have noted that the repair of trust in an interorganizational context has received little attention. According to Janowicz-Panjaitan and Krishnan (2009), repairing trust requires different strategies from those used to build trust initially. However, they also argue that trust cannot be repaired in all cases. They argue that individuals' expectations, perceptions, and behaviours are determined largely by their organizational role and by the type of trust violation that has occurred. It is, therefore, important to consider these factors when investigating interorganizational trust.

Janowicz-Panjaitan and Krishnan (2009) created a conceptual model exploring how violations of trust within an interorganizational relationship can be managed using legalistic measures (i.e., formal mechanisms for preventing or mitigating future trust violations such as contractual changes), and non-legalistic measures (i.e., social control, such as apologies; these may further be divided into internal versus external attribution, depending on the degree to which the trustee takes the blame for the trust violation). This model is shown in Figure 22.

		Low frequency/severity of violation	High frequency/severity of violation
<b>OPERATING LEVEL</b>	Competence-related violation	P1: NON-LEGALISTIC MEASURE WITH INTERNAL ATTRIBUTION (Repairs trust)	P2: LEGALISTIC MEASURE (Repairs trust)
	Integrity-related violation	Constraining context	P3: NON-LEGALISTIC MEASURE WITH EXTERNAL ATTRIBUTION (Repairs trust)
Un-constraining context		P4: NON-LEGALISTIC MEASURE WITH INTERNAL ATTRIBUTION (Repairs trust)	
<b>CORPORATE LEVEL</b>	Competence-related violation	P6: LEGALISTIC MEASURE (Repairs trust)	P7: EXIT
	Integrity-related violation	High dependence	P8: LEGALISTIC MEASURE (Preserves the relationship, does not repair trust)
Low dependence		P9: EXIT	

**Figure 22. Conceptual model: measures for dealing with trust violations (Janowicz-Panjaitan & Krishnan, 2009, p. 248)**

This model has a number of dimensions that require further explanation. According to the authors, the appropriateness and effectiveness of legalistic versus non-legalistic measures in dealing with trust violations “is a function of the hierarchical level at which the violation occurred” (p. 245) — operating versus corporate. The authors made a distinction between boundary spanners working at “lower” operating levels within the organization, and those working at a “higher” corporate level as top managers fulfilling a boundary spanner role. Corporate-level trust is defined as “the shared attitude of a company’s corporate-level boundary spanners towards their counterparts in the partner organization” (Janowicz & Krishnan, 2009, p. 249). A conceptually similar definition was used for defining trust violations at the operational level. In all cases, trust violations were defined as occurring when the willingness of boundary spanners to make themselves vulnerable to partners was disrupted. Some approaches are legalistic, which use formal control mechanisms to prevent future violations. Non-legalistic measures, they argued, involve more social processes, wherein the trustee’s perceptions about the trust violator’s responsibility for the violation are influenced (e.g., by excuse, justification or apology).

Internal or external attributions are also posited to be a key factor in how violations are managed. The authors also categorize the nature of the violation as reflecting either the competence or the

integrity of a partner. Interestingly, these researchers argued that competence and integrity are the major drivers of trust in interorganizational alliances, because it is assumed that each company is actually motivated to protect its own financial interests (Janowicz-Panjaitan & Krishnan, 2009). As such, benevolent, non-egoistic motives are not necessarily critical for the creation or maintenance of interorganizational trust.

Boundary spanners<sup>7</sup> were proposed to be the mechanism by which trust violations are discovered, how trust violations are categorized (e.g., competence versus integrity), and how the frequency and severity of the violation is judged. After a violation of expectations has been discovered, it is thought that there will be a “sensemaking” process by which the level of culpability of the trustee is assessed (i.e., to what extent factors outside the trustee’s control caused the circumstances which violated expectations). This sensemaking process determines whether the boundary spanner believes that a trust violation has occurred, and how the frequency and severity of the violation is classified. The explicit assumption of this model is that a trust violation has been perceived, and that the determination then is how this violation should be managed. The perceived constraint of the boundary spanner within the organization would also affect how a violation could be interpreted. If they function within a corporation that is highly structured, a violation of trust may be perceived as due to constraints imposed by the corporation.

Janowicz-Panjaitan and Krishnan (2009) noted that there are a number of possible responses to trust violations, based on these many factors. Looking first at the operating level, some low frequency or less severe trust violations can be repaired with non-legalistic approaches wherein the violator takes internal responsibility for the violation. For example, for a competence violation, internal responsibility and non-legalistic measures can repair trust (P1). The same is true for an integrity violation in an un-constraining context (P4). However, in a constraining context, external attributions of responsibility and non-legalistic measures are adequate to offset the impact of the violation (P3). For high frequency or severity violations at the operating level, legalistic interventions may allow the relationship to continue (e.g., P2, P5), although trust may not be repaired after an integrity violation.

At the corporate level, non-legalistic interventions are not likely to be effective. At the corporate level, if the frequency and severity of the violation are low, violations of competence can be repaired if dealt with in legalistic terms (P6); if the violation is high then the relationship will likely be terminated (P7). All integrity violations at the corporate level are argued to be of high severity because of collaborative relationships are at stake, and trust at the corporate level is very fragile. The impact of integrity violations is determined only by whether they emerge in high or low dependence relationships (i.e., but not in relation to high or low frequency or severity). Under conditions of high dependency, an integrity violation can be addressed well enough to preserve the relationship, although trust is not repaired (P8). Under conditions of low dependence, integrity violations are expected to lead to dissolution of the relationship (P9).

This article (and the proposed model) contributes to the literature in a number of ways; first it addresses a weakness identified by critics of previous trust research (e.g., Schoorman, Mayer & Davis, 2007; cited in Janowicz-Panjaitan & Krishnan, 2009). That is, prior to this effort, trust had been examined at a single level of analysis (i.e., didactic trust relationships within organizations *or* trust between organizations), whereas Janowicz-Panjaitan and Krishnan (2009), analyzed “interpersonal relationships of organizational boundary spanners in an interorganizational context” (p.

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<sup>7</sup> Note that the trust level of boundary spanners was used as a proxy for measuring interorganizational trust.

262), thus synthesizing two distinct levels of interorganizational relationships and providing a more holistic view of interorganizational trust dynamics. Second, this research speaks to the differing roles played by boundary spanners located at various levels of their organization's structure (e.g., corporate vs. operations), by identifying appropriate types of relationship repair methods that should be undertaken given the type of violation (integrity vs. competence) and the specifics of the organizational context. It suggests that violations of trust at the corporate level are much more severe than violations at the operating level, and even a single violation could result in the dissolution of a collaborative relationship. Finally, although this article does introduce a more comprehensive perspective on the types, consequences, and remediation strategies regarding interorganizational trust violations, it is important to note that this work involved the development of a conceptual model only, and no additional empirical evidence was offered in support of authors' claims.

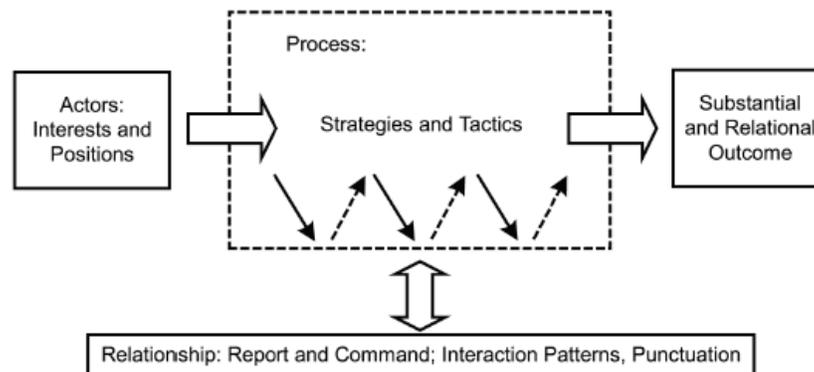
## 2.14 Koeszegi (2004)

KOESZEGI, S. T. (2004). Trust-building strategies in inter-organizational negotiations. *Journal of Managerial Psychology*, 19, 640-660.

The focus of this paper was on the effects of trust in negotiations and how negotiation processes can facilitate trust building. According to Koeszegi (2004), negotiation is generally used as an attempt to manage interdependence and conflict between parties (as contrasted with fighting or avoiding). Negotiations are often aimed at establishing, defining, or redefining a relationship. Negotiation effort and style are influenced by many factors, including cultural differences (e.g., individualistic versus collectivistic). There is a tendency for collectivistic cultures to see negotiation as embedded within a larger personal relationship. The importance of relationships in negotiation was interpreted by Koeszegi (2004) as evidence that transactional frameworks of negotiation should be expanded to include a more relational perspective that includes factors such as trust and relationship building.

According to Koeszegi (2004), the main elements in the conventional PIN (processes of international negotiations) framework of negotiation analysis include actors, strategies, process, structure, and outcomes. Actors are argued to use strategies to get their interests met, and these interaction patterns become a process. Background factors that change slowly form the structure within which the negotiation unfolds. This process culminates as an outcome representing the results of the negotiation. To this basic model, Koeszegi adds the relationship as another central part of the negotiation process, as shown in Figure 23.

Structure: Issues, Parties, Power, etc.



**Figure 23. Negotiation analysis framework (Koeszegi, 2004, p. 641)**

The relationship is both a contributor to the negotiation outcome, as well as the quality of the relationship being cast as an outcome itself. According to Koeszegi (2004), the traditional negotiation framework is focused on understanding the effect of power on negotiation processes and outcomes; it is useful to include trust because trust creates dependency and dependency is associated with power. That is, Koeszegi argues that trust increases the dependency between the negotiation partners, and this can lead to exploitation and may be interpreted as weakness on the part of the more trusting partner.

To better understand the role of trust in negotiation, Koeszegi first explores the concept of risk. Trust can be used in negotiations to cope with social risks such as opportunistic behaviour from partners and information asymmetry. There are two main types of strategies; risk-preventing and risk-taking. Risk-preventing strategies are intended to reduce or shift social risk; such strategies will likely be perceived as mistrusting, and therefore the result could be a negative influence on negotiations. This will likely have a strong negative effect in some situations, such as in collectivistic cultures in which negotiation is seen as embedded within a broader relationship.

Risk-taking strategies are intended to reduce uncertainty about the negotiation partner's intentions. First-order strategies include strategies such as acquiring information about the trustworthiness of partners through third parties or taking small risks to encourage reciprocity. These first-order strategies can be quite successful; however, they generally take a long time to establish high levels of trust. In second-order strategies, large risks are taken to quickly establish trust. Using these strategies may require ignoring reciprocity norms, as the amount of trust given initially is higher than normal, or a norm of distrust will have to be ignored. This type of strategy can be successful and will likely establish trust more quickly than first-order strategies as shown in Figure 24.

Types of risk-coping strategies	Risk-preventing strategies	Risk-taking strategies	
		First-order strategies	Second-order strategies
Relationship based on Mechanism	Distrust Norm of reciprocity	Trust Norm of reciprocity, reputation	Trust Disrupting reciprocity
Examples	Third party guarantee, exchange of credible commitments	Small risk taking, GRID, Tit-for-tat	Dramatic conciliatory initiatives, enlarging the pie

**Figure 24. Risk-coping negotiation strategies (Koeszegi, 2004, p. 654)**

Koeszegi (2004) discussed the fact that trust is multidimensional, and that the attitude and the behaviour (i.e., choice) must be distinguished when investigating the relationship between trust and risk. Risk-taking actions may not always be performed because of trust; there may be a greater propensity for risk, fewer perceived options, and other reasons to engage in risky behaviour besides trust in a partner. Trust as an attitude may not be expressed in behaviour, for similar reasons (e.g., there may be a tendency to be risk-averse, and therefore behaviours might seem distrustful even though a relatively trusting attitude exists). Thus, it is Koeszegi's view that trust requires choice; that is, there must be a conscious decision in favour of a trustful action. It is also true that when trust is betrayed, the betrayed partner withdraws from the relationship.

Koeszegi (2004) discussed the importance of communication and trust, and how they interact to define the relationship. Koeszegi argued that communication itself constantly defines the relationship, both with the content of messages and the context which must be used to interpret messages. A context of trust or distrust will fundamentally affect communication and be affected in turn. This leads to another point made by Koeszegi; that interactions are circular, and mutually reinforcing. In this way trust is resilient; however, too much evidence against trust will tend to result in a spiral of distrust.

Mechanisms which enhance trust building were proposed:

- The circularity of action patterns in relationships makes trusting and distrusting self-enforcing processes; initial trusting will generally result in increased trusting during the relationship
- Reputation is important for facilitating trust-building as opportunistic behaviour and failure to reciprocate benevolent actions will result in a loss of reputation, and trusting behaviour will tend to result in a positive reputation which will reinforce trust in newer relationships
- There is generally a norm of reciprocity and a belief that helping rather than hurting behaviour is to be preferred; Koeszegi (2004) states that this seems to be a culturally universal norm, and is reinforced by disapproval from others when that norm is violated

Koeszegi (2004) discussed the "illusion of control" with respect to reciprocating trusting behaviours. Because of the strength of the norm of reciprocity, individuals create an illusion of control over the partner's behaviour when they perform benevolent actions. That is, when one party does something beneficial to another party, the expectation is that the behaviour of the party that received the initial benefit will then behave more positively toward the giver. There is a strong

moral obligation on the part of the receiver toward the giver. Another aspect of this norm is that behaving as if you trust marks you as trustworthy yourself.

This paper aims to integrate ideas of trust and relationship building into common transactional frameworks of negotiation, and contributes to our understanding of stress by exploring a set of tactics and strategies managers can put into action during negotiations that will help to establish relationships that are based on mutual trust and understanding, which, ultimately will facilitate the achievement of satisfactory agreements and allow for improved management of inter-organizational dependencies and its associated threats.

## 2.15 Krishnan, Martin, & Noorderhaven (2006)

KRISHNAN, R., MARTIN, X., & NOORDERHAVEN, N. G. (2006). When does trust matter to alliance performance? *Academy of Management Journal*, 49, 894-917.

Krishnan, Martin, and Noorderhaven (2006) examined how behavioural uncertainty (i.e., uncertainty about predicting and understanding a partner's actions) and externally caused environmental uncertainty moderate the relationship between trust and performance in interorganizational alliances. According to Krishnan et al., it is widely accepted that interorganizational trust is a key factor that contributes to alliance success; however, the relationship between interorganizational trust and alliance performance is not always straightforward. Krishnan et al. (2006) defined interorganizational trust as "the expectation held by one firm that another will not exploit its vulnerabilities when faced with the opportunity to do so" (p. 895). It was proposed that interorganizational trust is composed of three components; reliability, fairness, and goodwill.

Krishnan et al. (2006) argued that how organizations deal with uncertainty is affected by the levels of interorganizational trust among organizations. Within any strategic alliance, there are at least 2 distinct forms of uncertainty relevant. The first is that it is impossible to know how another organization is likely to behave (behavioural uncertainty). The second is that the environment that permeates in and around strategic alliances carries an inherent level of uncertainty (environmental uncertainty). Evidence suggests that one of the possible ways to reduce uncertainty is through the development of trust. However, Krishnan et al. worry that although the reduction of behavioural uncertainty may be good, "letting down one's guard" could lower the capacity for dealing with environmental uncertainty. Thus, there is reason to expect that interorganizational trust is advantageous in situations of low environmental uncertainty, but it may be disadvantageous when environmental uncertainty is high. According to Krishnan et al. (2006), behavioural uncertainty is potentially very high in 2 kinds of alliances. Alliances with high levels of interdependence (i.e., contributions are "highly intertwined") and alliances in which opportunistic behaviour on the part of both partners is possible both contain high levels of behavioural uncertainty.

They also argue that trust is positively related to alliance performance, but that this relationship will be higher in alliances with high interdependence than those with low interdependence. Similarly, the positive trust-performance link will be stronger when there is high potential for interpartner competition than low potential for competition. Trust at this level reduces behavioural uncertainty.

This research also considers the role of trust in alleviating environmental uncertainty (and whether this is necessarily adaptive in all contexts). Although Krishnan et al. do argue that trust is positively related to performance, this relationship is argued to be weaker when market instability and unpredictability are high rather than low.

Krishnan et al. (2006) collected survey data from 126 international strategic alliances operating in India. These strategic alliances were “extended cooperative agreements intended to jointly develop, manufacture, and/or distribute products” (p. 898). Alliance performance was measured as a function of 1) how satisfied the local partner was with overall alliance performance, 2) how satisfied the local partner thought the international partner was with overall alliance performance, 3) satisfaction with respect to the attainment of goals, 4) the extent to which the local partner was satisfied with financial performance, and 5) the extent to which the local partner believed the international partner was satisfied with financial performance. Interorganizational trust was measured using a questionnaire reflecting levels of fairness, reliability, and goodwill in the relationship. Interdependence was measured as a function of strategic rationales for why the alliance was formed. Categories of strategic alliances included pooled (limited coordination required), sequential (intermediate levels of coordination), and reciprocal (extensive coordination) levels of interdependence. Three degrees of competitive overlap were also assessed. Product-market instability was used as an indicator of environmental instability and unpredictability. Control variables included investment size, cultural distance, equity alliance (equity versus nonequity governance mode), alliance duration, quality of information exchanged, position of respondent, local partner size, and type of industry.

Krishnan et al. (2006) found that trust was positively related to alliance performance, and that alliance performance benefitted more from interorganizational trust when the degree of interdependence between two organizations was higher, and when interpartner competition was higher. In accordance with their predictions, Krishnan et al. also found that when environmental instability was higher, the relationship between trust and alliance performance was weaker. The same pattern was seen for environmental unpredictability. The relationship between trust and alliance performance became nonsignificant at very high levels of environmental unpredictability. Thus, although the relationship between trust and alliance performance is generally assumed to be positive, if the degree of environmental instability and unpredictability are high, this relationship may wane. As a whole, then, this research shows that the relationship between trust and alliance performance depends on the type of uncertainty being considered – behavioural uncertainty increases the relationship, whereas environmental uncertainty can weaken the relationship.

## 2.16 Laaksonen, Pajunen, & Kumala (2008)

LAAKSONEN, T., PAJUNEN, K., & KULMALA, H. I. (2008). Co-evolution of trust and dependence in customer-supplier relationships. *Industrial Marketing Management*, 37, 910-920.

Laaksonen, Pajunen, and Kumala (2008) examined how trust and dependence co-evolve in customer-supplier relationships. They used a case study to develop a model about how interorganizational trust and dependence co-evolve through different relationship phases, and distinguished three types of trust:

- Contractual trust: the assumption that the other party will carry out its agreements
- Competence trust: the partner has the ability to perform according to agreements
- Goodwill trust: the partner has the intention to perform according to agreements

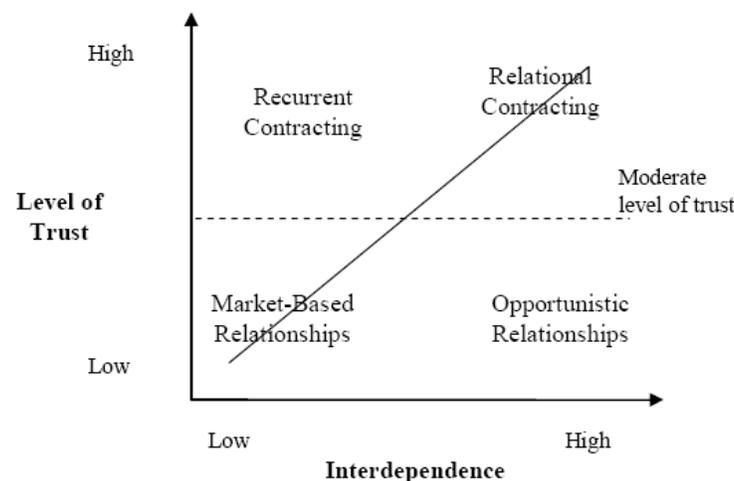
These three forms of trust are generally at least somewhat present in an interorganizational relationship and develop dynamically over time. It is expected that the more trust is present, the lower transaction costs will be. As a customer-supplier relationship increases in duration, dependence tends to increase; this dependence will increase the vulnerability of each partner to

opportunistic behaviour by the other. Thus, if adequate levels of interorganizational trust do not develop, relationships may be terminated before they reach a level of dependence that is perceived to be too risky. Figure 25 shows the specific conditions which facilitate the emergence of interorganizational trust and the studies that show these effects.

Type of Trust	Conditions conducive to the emergence of trust	Author
<b>Contractual trust</b>	Reliance on oral agreements Contracting costs are avoided Legal sanctions like non-disclosure agreements are not used	Sako, 1992 Dyer & Singh, 1998 Gulati & Singh, 1998 Pisano, 1990
<b>Competence trust</b>	Good and competent reputation Consistent deliveries of high quality products in a timely accurate manner Transaction specific investments and commitment Repeated interaction Minor use of formal output controls	Barney & Hansen, 1994 Gulati et al., 2000 Cooper & Slagmulder, 2004 Sako, 1992 Suh & Kwon, 2006 Gulati, 1995 Tsai & Ghoshal, 1998 Das & Teng, 2001
<b>Goodwill trust</b>	Cooperative supplier management practices: avoiding competitive bidding, supplier selection based on competence rather than price Decentralization of decision making The fairness of the relationship: risk sharing and profit distribution agreements Sharing of valuable information Long-term projected length of trading	Sako & Helper, 1998 Sako, 1992 Ring & Van de Ven, 1992 Das & Teng, 1998a Jarillo, 1988 Dyer & Chu, 2003

**Figure 25. Laaksonen et al., 2008, p. 41)**

Laaksonen et al. (2008) further categorized four different types of interorganizational relationships. These relationships vary in terms of the levels of trust and interdependence that they require as shown in Figure 26.



**Figure 26. Four types of interorganizational relationships distinguished by level of trust and interdependence (Laaksonen et al., 2008, p. 43)**

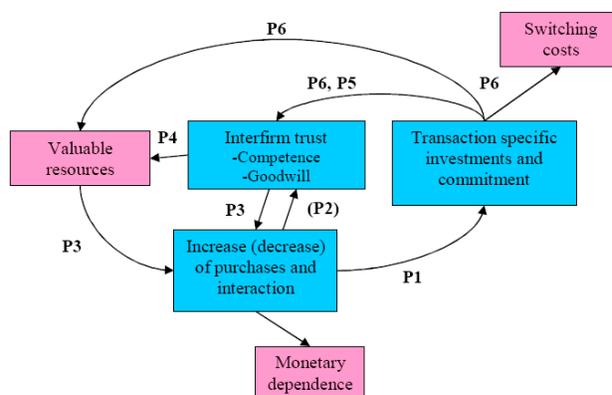
Each of these quadrants represents a different form of relationship, as follows:

- Market-based relationships exist among a number of market alternatives; those in the alliance are seeking short-term benefits without making transaction specific investments; trust and interdependence are low;
- Opportunistic relationships feature high interdependence with low levels of trust and represent the most risky type of relationships. To manage this type of relationship the authors suggest companies terminate the alliance, or work to build the level of mutual inter-firm trust;
- Recurrent contracting entails the lowest level of risk for both parties, and is characterized by low asset specificity, a high number of alternative partners, and high mutual trust;
- Relational contracting involves high levels of trust and interdependence. Parties are characterized by high asset specificity and small bargaining conditions.

According to the authors, relationships characterized by deep interdependence run an elevated risk of suffering from opportunism, poor coordination, and unreliability. To assuage these risks an appropriate level of trust (appropriate for the nature of the relationship) must be identified and fostered:

Laaksonen et al. (2008) followed a case-study approach in developing a model. Data consisted of 12 structured and 14 unstructured interviews; interviewees were managing directors of suppliers or purchasing or maintenance managers of the customers. The level of interdependence was assessed as the resources and switching costs of the supplier (higher cost = more dependence). A questionnaire to assess trust was developed in the unstructured interviews and guided the structured interviews.

Based on these interviews, Laaksonen et al. (2008) developed a four-phase model depicting how interdependence and trust develop as customer/supplier relationships develop. The development process is considered to be circular, and a single relationship can move through the phases many times, as shown in Figure 27.



**Figure 27. Development of interorganizational trust and dependence (Laaksonen et al., 2008, p. 46)<sup>8</sup>**

<sup>8</sup> Note that P2 refers to a negative effect; other relationships involve positive effects.

In Laaksonen et al.'s (2008) model, within interfirm relationships, interdependence stems from the sharing of valuable resources, monetary dependence, and switching costs. These factors “tie in” partners and make them dependent on the other firm. Interfirm trust, purchases and interactions, and transaction-specific investments and commitment are considered to be variables which impact these dimensions. This paper focuses on the development of a model, however the findings are limited by the small sample of only 12 customer-supplier relationship dyads, all belonging to the Finnish paper industry. The primary contribution of this study was to “illustrate the co-evolution of interfirm trust and interdependence” (p. 27) in the context of customer-supplier relationships, along with the author’s suggestion to consider both interfirm trust and interdependence when examining the success of business relationships.

## 2.17 Lui, Ngo, & Hon (2006)

LUI, S. S., NGO, H.-Y., & HON, A. H. Y. (2006). Coercive strategy in interfirm cooperation: Mediating roles of interpersonal and interorganizational trust. *Journal of Business Research*, 59, 466-474.

Lui, Ngo, and Hon (2006) examined the use of coercive strategy as a conflict resolution technique in interfirm cooperation, and how the use of these strategies is influenced by trust (both interpersonal and interorganizational). Lui et al. defined coercive strategy as “high-pressure influence towards others in the form of threats, promises, and/or legalistic pleas to elicit immediate behavioral responses from them”, and expanded the definition to include “manipulation and reciprocation towards partners with an aim to influence their immediate actions” (p. 466). Lui et al. also noted that reciprocating positive actions can also be a form of coercive strategy, as they create a sense of obligation. Lui et al. stated that coercive strategy is an influential conflict resolution technique used in interfirm cooperation. The use of coercive strategy is a way to manage the interdependence and uncertainty which is present when firms take on joint ventures.

Lui et al. (2006) defined trust as “the expectation of another’s reliability, predictability, and fairness” (p. 467). They argued that trust provides an organizing logic for an interorganizational relationship, and provides a reference when attempting to determine how to behave in an exchange system. Lui et al. pointed out discrepancies in the literature about the different roles of interpersonal and interorganizational trust in cooperative business relationships. For example, there is disagreement about whether antecedent conditions and outcomes of interpersonal and interorganizational trust are the same.

Three characteristics have been shown to influence the pattern of interactions in an interorganizational relationship: reputation of a partner, similarity (in terms of culture and processes used), and the non-reversible assets invested in the partnership. Lui et al. (2006) proposed that these three characteristics are likely to influence the use of coercive strategies, and that trust will act as a mediator between these characteristics and their effect on coercive strategy use. Partner reputation is “the evaluation of a partner in terms of its affect, esteem, and knowledge” (Lui et al., 2006, p. 467). A reputable partner is likely to be concerned with acting in a trustworthy manner to maintain their reputation; this means that such a partner is generally evaluated as more trustworthy. Because a high level of trust would be likely to lead to a low level of coercive strategy, Lui et al. hypothesized that trust would mediate the relationship between partner reputation and coercive strategy.

Firm similarity refers to the cultural similarities and similarity of practice between partners. Because higher firm similarity is likely to evoke fewer misunderstandings (e.g., because of shared

norms and values) Lui et al. (2006) argued that trust will be higher, and therefore coercive strategy use will be lessened when similarity is high. Therefore, one hypothesis was that the relationship between firm similarity and coercive strategy use is mediated by trust.

Asset specificity is the non-recoverable investment made by firms in a cooperative relationship. If an organization has resource investments which cannot be recovered if a cooperative relationship fails, then partners have a monetary interest in making sure that the relationship is a positive one. Such commitment is thought to decrease opportunistic behaviour, which increases perceived trust. With higher perceived trust, coercive strategy use should be lessened; as with partner reputation and firm similarity, trust is thought to act as a mediator between asset specificity and coercive strategy use.

Lui et al. (2006) examined their hypotheses in the context of a survey of architects examining architect-contractor partnerships in Hong Kong. Lui et al. described the architect-contractor relationship as being derived from separate contracts with a developer, but the architects and contractors interacted frequently, and were required to negotiate and cooperate. Two hundred twenty-eight questionnaires regarding projects on which the architects acted as project managers were analyzed. Measures included: interorganizational trust, interpersonal trust, partner reputation, firm similarity, asset specificity, coercive strategy use, and prior experience with the contractor.

Lui et al. (2006) found that interorganizational trust fully mediated the relationships between firm similarity, partner reputation, and asset specificity with coercive strategy use. Thus, these three variables do not appear to directly impact coercive strategy use. Prior experience with the partner also had a positive impact on interorganizational trust.

This main finding is that to the degree that one is working with a partner who has a positive reputation, or who is similar to one's self, both personal and organizational trust are facilitated. When a high level of trust exists in an alliance, partners tend to employ fewer coercive tactics during negotiations and other interactions. One interesting finding was a difference between interpersonal and interorganizational trust. Interorganizational trust mediated the effect of asset specificity on coercive strategy use, but interpersonal trust did not. Lui et al. (2006) proposed that perhaps calculative trust (trust based on rational calculation, in this case due to the fact of mutual investment) may increase with asset specificity, but interpersonal trust remains unaffected. This shows the importance of considering both interpersonal and interorganizational trust when attempting to understand the role of trust in performance, as they may have different but complimentary effects.

## **2.18 Millard, Harpviken, & Kjellman (2002)**

MILLARD, A. S., HARPVIKEN, K. B., & KJELLMAN, K. E. (2002). Risk removed? Steps towards building trust in humanitarian mine action. *Disasters*, 2002, 161-174.

Millard, Harpviken, and Kjellman (2002) discussed building trust in the context of landmine-clearing operations in Angola, Mozambique, and Afghanistan. Because damage from landmines can be so devastating, local populations were understandably reluctant to reclaim land even after it had been cleared. A great deal of trust in the mine clearing team was required before the land was seen as safe. It is in the interest of mine-clearing organizations to understand how best and quickly trust can be developed in this context. The fact that the location had recently been a warzone (or may still be a warzone) is an additional complication to building trust.

Handover ceremonies are often used as a way of strengthening trust, but Millard et al. argue that other than these handover ceremonies, little has been done to understand trust in this context. Little is known about how trust building could occur at other stages of de-mining, because trust is usually investigated as one event rather than as a developing process.

To explore trust within these contexts, explorative community studies were conducted at 8 different sites (representing 4 distinct countries). Methodologies used included open interviews with key respondents as well as household surveys and group interviews. Trust was seen to be a significant issue in each of these sites. Interestingly, another impediment to progress in de-mining activities is the use of former military personnel in this work. Military personnel, they argue, “tend to focus almost exclusively on the technical aspects of mine action” (p. 164), when the real need is to adopt a broader social emphasis. Millard et al. (2002) argued that there is a tendency to view de-mining operations in technical terms, rather than sociological or psychological terms, and such approaches do not consider very important factors in reducing the impact of landmines.

Millard et al. (2002) discussed two views of trust: social and instrumental. Social trust is a function of repeated and sustained social interactions. Instrumental trust results from strategic and calculative decision-making, emphasizing incentives rather than emotional ties. They further categorize trust as being interpersonal trust, organisational trust, and generalised trust. The authors argued that generalized trust, or the broad feeling that a society’s inner workings are dependable and can be relied upon, is a critical kind of trust which is often damaged in these situations where communities have been affected by war. Hence, they argue that organisational trust and interpersonal trust are the most immediate forms of trust that need to be addressed when working within the de-mining context.

Another important theme noted by Millard et al. is that a single trust violation can have a serious impact that might be difficult to mitigate. They give an example of a village in the northwest area of Afghanistan where various mine clearance operations had concluded. When a local farmer found a mine in what should have been a cleared area, this news spread to other nearby villages quickly, and this had a negative impact on trust in the mine clearing operations. This problem was exacerbated by the failure of mine clearing agencies to adequately provide information about how such an incident could occur, and this incident further damaged their trust and credibility. However, they also noted that this incident was not as damaging as it could have been because there had been a history of progressive trust being built because agencies had operated there for prolonged periods in previous years.

Millard et al. (2002) also noted “fragility of trust”, which refers to the fact that it is much harder to establish and build trust than it is to break trust down. This is a particular problem when generalised trust is compromised. People living in armed conflict zones have often had their trust violated by social and political systems that require considerable trust. Moreover, these violations are highly visible and shared. This erosion is much more difficult to repair because it is at a systemic level. They argue that attempting to rebuild at the interpersonal or organizational levels may be the best place to start in these cases.

Millard et al. (2002) also provide an interesting discussion about the relationship between trust and risk. In line with the rest of the literature, they argue that trust can only truly develop in the presence of risk, and the risk involving in land mines seems clear. On the other hand, they also argue that it is important that the behaviour of local people that seems to indicate trusting attitudes should not be misunderstood. The acceptance of risk (on its own) does not necessarily indicate trust – it may simply indicate a lack of viable alternatives.

They also argue that simply providing high quality de-mining will not necessarily be sufficient for building optimal levels of trust. Trust must be actively cultivated and nurtured. Formal and informal contact between agency staff and affected communities is one tool for rebuilding trust. There is some evidence that repeated, informal actions between community members and de-mining staff can result in higher levels of trust. If the local population can observe the de-mining operation and it is done with the appearance of great care and safety then this can also strengthen trust.

As a whole, then, this paper provides an interesting application of trust within a complex humanitarian de-mining context and emphasizes the importance of working actively to build and maintain trust.

## 2.19 Mizrachi, Drori, & Anspach (2007)

MIZRACHI, N., DRORI, I., & ANSPACH, R. R. (2007). Repertoires of trust: The practice of trust in a multinational organization amid political conflict. *American Sociological Review*, 72, 143-165.

Mizrachi, Drori, and Anspach (2007) investigated trust at a multinational corporation which was operating in a politically-charged environment. This ethnographic analysis was conducted on a corporation called GlobeWear, a multinational Israeli textile company that had relocated its production facilities to Jordan. Israel and Jordan, of course, had been enemies in recent history and had both had political unrest related to the Intifada el Aqsa. Although this was an investigation of trust within one organization, it is possible to relate this work to interorganizational trust, both because it involves two ethnicities which are associated with different countries (Israeli and Jordanian) as well as an organization with multiple locations.

The authors proposed a new theoretical view of trust, arguing that people have “trust repertoires”. This perspective emphasizes that people have a role in selecting and using different forms of trust at different times, and that trust is not completely dictated by other contextual factors. Thus, trust is an active form of both thinking and behaviour rather than just a consequence of given factors. They argue that three dimensions influence how trust actually occurs:

1. Agency - People can choose and apply different trust strategies in different contexts
2. Culture as a repertoire of symbols and practices from which forms of trust are selected, composed, and applied
3. Power and the political context - shape the choice of trust strategy and the meaning associated with it (strategy choice depends on available resources, trust has political meaning, and trust is related to control)

Their unique view of trust is encapsulated in two assertions. The first is that trusters are active, intelligent agents who apply different forms of trust to the context in which they are situated. The second is captured in the following quote, “Rather than depicting cultures as independent variables shaping the truster’s behaviour, we view culture as a repertoire of skills and habits actors use as resources for pursuing their goals and interests.” (Mizrachi et al., 2007). Data collection took place from 1999 to 2001, and this time span includes both a time of peace and a time of political unrest. Behaviour was observed for 2-3 days per week and interviews were conducted with Jordanian and Israeli managers.

Results of this study are described in terms of two discrete phases. The first is the normalization phase (as the Israeli company moved to Jordan), and this phase was described as “a new historical collaboration between two former enemies” (p. 152). Perhaps not surprisingly, this phase began with distrust on both sides. During the peaceful phase, the Jordanians appeared to display normative trust (defined as an emotional commitment to hospitality); this was reinforced by positive personal relationships that developed between the Israelis and Jordanians in this period of time. In this same period of time, the Israelis appeared to display paternalistic, calculative trust. Their trust was conditional and evidence-based. Because the two conceptions of trust didn’t match, the Jordanians felt that control was too tight and tried to develop the Israeli’s trust into a more personal matter; the Israelis reacted by creating strict barriers between business and personal roles. This often led to misunderstandings.

When the Israeli-Palestinian conflict was active, there were trust-relevant repercussions within the GlobeWear Corporation. The safe passage of Israeli managers across the Jordanian border could no longer be assured, and so operations (e.g., quality control) had to be managed remotely from the company’s headquarters in Israel. The Israelis had to transfer more control to the Jordanians and their trust became more normative as management’s role changed from control to one of support. In turn, the trust displayed by Jordanian personnel turned into a more calculative style of trust; concerned with safeguarding their new found autonomy, they trusted the Israelis only to the point that the Israelis demonstrated competence by reliably shipping raw materials from Israel. Jordanians were forced (partially due to pressure from their society and from the withdrawal of the Israelis) to distance themselves from personal ties to Israeli individuals. Thus, this research showed some evidence of different trust repertoires being in play. How trust was enacted was influenced by the context, and individuals chose what types of trust to display and were active participants in creating a trust situation.

## 2.20 Nielsen (2004)

NIELSEN, B. B. (2004). The role of trust in collaborative relationships: A multi-dimensional approach. *Management*, 7, 239-256.

Nielsen (2004) attempted to clarify the role of trust in collaborative relationships. He argued that trust has been a catch-all term for complex processes, and the relationship between trust and performance should be clarified. Trust has been treated as an antecedent, a feature, and an outcome of relationship quality. Moreover, Nielsen argued that trust has dynamic, recursive, and overlapping properties in the context of alliance evolution. During alliance formation, trust is thought to be a precondition for a successful collaboration as it facilitates exchanges and the willingness to share resources. If there is no previous experience with a potential partner, that partner’s reputation might act as a guide for the level of trust that is appropriate. Most companies operate within company networks which provide information about one another, and these relationships may act to constrain partnership opportunities.

In order to begin to understand trust in the context of collaborative efforts, Nielsen (2004) first works to plot out the role of trust in collaboration in previous literature as shown in Figure 28.

Type of trust	Theoretical grounding	Definition	Level of analysis	Role of trust in collaboration
Cognitive-based trust or fragile trust	Rational prediction—sociology/psychology	Assessment of reliability is based on past behavior and cognitive reasoning (Lewis and Wiegert, 1985)	Interpersonal	Antecedent role as enabling condition which facilitates formation of ongoing networks (Ring, 1996; Das and Teng, 1998)
Affect-based trust or resilient trust	Emotional prediction—sociology/psychology	Non-calculative reliance on the moral integrity, or goodwill, of others based on emotional bonds between individual and social interaction (Homans, 1961; Lewis and Wiegert, 1985)	Interpersonal	Antecedent role as firms learn from each other and develop trust over time through ongoing interaction and reciprocity (Axelrod, 1984; Gulati, 1993; Ring, 1996)
Calculus-based trust	Rational choice—economics	Trust emerges when the trustor perceives that the trustee intends to perform an action that is beneficial (cost/benefit)	Interpersonal/ (inter)organizational	Antecedent role as firms seek credible information regarding intentions and competence of partner. (Luhmann, 1979) Moderating and effect role as risks are continually monitored and evaluated against performance (Das and Teng, 1998)
Deterrence-based trust	Utilitarian—economics	Enables one party to believe that another will be trustworthy, because the costly sanctions in place for breach of trust exceeds any potential benefits from opportunistic behavior (Ring and Van de Ven, 1992; 1994)	(Inter)organizational	Moderating role as institutional sanctions and assets specificity effects may act as substitutes for control (Bradach and Eccles, 1989) Effect role as cost of sanction may deter from opportunistic behavior in performance evaluation
Institution-based trust	Conditional—institutional economics and sociology	Institutional factors can act as broad supports for the critical mass of trust that sustains further risk taking and trust behavior (Zucker, 1986; Gulati, 1995; Sitkin, 1995)	(Inter)organizational/ societal	Antecedent role as legal systems and reputational sanctions act as a deterrent from opportunism. (Fukuyama, 1995) Moderating role as facilitator of collaborative culture (Miles and Creed, 1995) Effect role as trust is dependent variable (Hagen and Choe, 1998)

**Figure 28. The role of trust in collaboration.**

Clearly, the role of trust in collaboration has been conceptualized in many different ways in the existing literature, at the interpersonal, interorganizational and societal levels of analysis.

After exploring the different forms of trust, Nielsen also considers trust in alliances as they are emerging in relation to the identified phases of alliance development, as shown in Figure 29.

	Phase		
Issue	Alliance Formation	Alliance Implementation	Alliance Evolution
Managerial issue(s)	Partner selection and initial trust building	Governance and control	Performance evaluation
Type(s) of trust	Cognitive-based trust Affect-based trust Calculus-based trust Institution-based trust	Deterrence-based trust Institution-based trust	Calculus-based trust Deterrence-based trust Institution-based trust
Role of trust	Antecedent: information seeking and uncertainty (risk) reducing Effect: transparency and embeddedness leads to more trust	Moderation: relational governance mitigating risk Mediation: indirect, intervening effect on governance choice	Mediating: indirect, intervening effect on objective and subjective performance Effect: reducing conflict and instability caused by ambiguity in formal contracts
Managerial mechanism(s)	Select partner with whom you have prior experience of collaboration, if no such partner is available, select partner with favorable reputation Transparency, flexibility, and willingness to adapt	Ensure goal congruency and design flexible contracts Develop collaborative know-how and capabilities	Specify method and terms of performance evaluation early during relationship development Allow for flexibility but reduce ambiguity clearly communicating goals and expectations
Operationalization of trust	Nature and degree of physical interaction Nature and degree of knowledge transfer Nature and degree of adaptation and flexibility	Model trust as partially moderating and/or mediating the effects of the antecedent variables on performance	Impact of interpersonal and (inter)firm trust on a combination of objective and subjective measures, assessed in the short, medium, and long-term

**Figure 29. Trust in evolving alliances relationships**

At the alliance formation stage, Nielsen (2004) argued that building trust requires open and honest communication and proactive information exchange and a willingness to adapt. Given the relatively limited experience, reputation may play an important role.

During the implementation phase of the alliance, rules of governance must be established; in this phase, trust may be seen as a type of control mechanism that reinforces rules and equity. Nielson makes a distinction between equity and non-equity alliances, and argues that they have different governance issues. Equity alliances involve common ownership and are truly joint ventures, whereas non-equity alliances are more “arms length” exchanges. Researchers within the field have generally argued that non-equity alliances require more trust, because there is likely to be greater uncertainty around the partner’s behaviour. However, given the increased interdependence required in equity relationships, Nielsen argues that they might actually require more trust.

As relationships progress to the next stage, the issue becomes more about assessing performance and distributing the profits or losses stemming from the relationship. In working toward optimal alliance performance, trust is thought to increase cooperation, improve flexibility, reduce the need for and cost of coordinating activities, and increase knowledge transfer and learning opportunities.

Nielsen (2004) concluded that trust in interorganizational relationships is multidimensional and should be investigated in terms of phases of the relationship and different roles that trust can play. No new empirical work is described in this article.

## 2.21 Naquin and Kurtzberg (2009)

Naquin, C. E. and Kurtzberg, T. R. (2009). Team negotiation and perceptions of trustworthiness: The whole versus the sum of the parts. *Group Dynamics: Theory, Research and Practice*, 13(2), 133-150.

An interesting study within the group domain explores how perceptions of trustworthiness are applied from the individual level to the group level.<sup>9</sup> These researchers argue that in negotiations among two different teams, existing literature is mute on the issue of exactly how team members might gauge the trustworthiness of the other team (speaking only to trust in other individual team members). This research has 2 key questions. The first is whether (and if so, how) these judgements might be combined to determine how trustworthy the team as a whole might be. The second question is how collective perceptions of trustworthiness might impact on negotiation behaviour.

There are several hints in the literature that assuming that the transfer from trust at the individual level to the team level may not be straightforward. Negativity biases (i.e., negative information receiving more weight than positive information) that can impact on judgement might also impact on how trust-relevant perceptions of groups might emerge. Within a team of diverse individuals, perceptions of the trustworthiness of each individual will naturally vary. If this is the case, then, Naquin and Kurtzberg argue that these negative trust perceptions of one individual may unduly influence perceptions of the trustworthiness of the team. One relevant theme emerges from literature related to the interindividual-intergroup discontinuity effect (e.g., Insko, Kirchner, Pinter, Efav and Wildschut, 2005) is that people may be more likely to distrust a whole group than an individual within that group. When people perceive themselves to be in a different group than another group, they are likely to see the other collective less positively than they see their own

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<sup>9</sup> This article is included because it seems particularly germane to the issue of how trust judgements might be made within the interorganizational context.

group. Taken together, these 2 findings mean that when people judge the trustworthiness of a team, their judgement about the trustworthiness of the team is likely to be skewed toward the least trusted individual member. In fact, Naquin and Kurtzberg argue that team trustworthiness might be lower than the average perceived trustworthiness of individual members, and will be very close to the mean of the least trusted member.

As noted earlier, a second line of inquiry is whether positive perceptions of trust in a team will influence the ability to reach a successful negotiated agreement with them.

These ideas were explored in 2 studies. In the first, participants were randomly placed into teams and were asked to assume the role of either management or labour union officials attempting to negotiate with each other. The negotiation had 3 distinct rounds over the course of 10 weeks. Round 1 involved relatively easy negotiations in areas of common interest, Round 2 involved negotiation over wages, and Round 3 was a more complex negotiation containing a range of issues related to wages, hiring procedures and work rules.

A repeated measures design was used, with questionnaires being completed by all participants before and after each round. Questionnaires included an adapted Organizational Trust Inventory (Cummings and Bromiley, 1996) to measure trust in individuals. A single item measuring team trust was also created (based on this scale). In addition, a composite team trust score was also derived by averaging all of the team trust scores for each opposing team members into a single score.

Results showed that team trust levels were indeed lower than the average level of trust in individual team members. Moreover, the collective ratings of team trustworthiness were not significantly different from that of the least trusted team member. The impact of differing trust levels on negotiation outcomes was also explored. This showed limited support for the role of team trustworthiness on negotiation outcomes, as more trusted team had few impasses in Round 2, but not in Round 3 of the negotiations.

This research presents fairly compelling evidence that jumping from the individual level to the team level can change how trust judgements are made. It would be interesting to see whether these results could be applicable to a broader interorganizational domain. However, it is important to note that the authors caution against assuming that these team results would transfer beyond the team context, as having very divergent objectives in play could hinder trust development processes. Similarly, higher levels of cohesion within a broader setting could also change the nature of the trust dynamics, and introducing elements of both trust and distrust could complicate the picture even further.

## 2.22 Panteli & Sockalingam (2005)

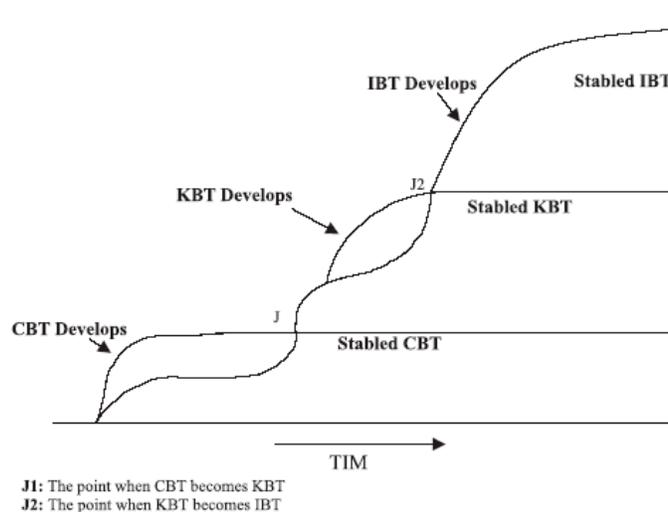
PANTELI, N. & SOCKALINGAM, S. (2005). Trust and conflict within virtual inter-organizational alliances: A framework for facilitating knowledge sharing. *Decision Support Systems*, 599-617.

Panteli and Sockalingam (2005) attempted to integrate the literatures on trust and conflict as applied to virtual interorganizational alliances. Virtual interorganizational alliances were defined as “a network organization consisting of independent enterprises (organizations, groups, individuals) that come together to explore a business and/or market opportunity” (p. 600). Trust has been shown to be positively related to success in such alliances, likely because of the risks related to opportunistic behaviour.

Panteli and Sockalingam (2005) viewed conflict as something that can either increase or decrease interorganizational trust and productivity. If conflict is well managed, it can provide a mechanism

for idea transfer and trust building. On the other hand, if conflict is poorly managed (or unduly avoided) this can stop hinder the development of trust and/or erode trust and increase rigidity, in turn decreasing productivity. Thus, the main view of the authors was that knowledge sharing is positively related to interorganizational productivity as long as adequate and appropriate levels of trust are present and conflict can be effectively managed.

Panteli and Sockalingam (2005) argue that trust is a dynamic rather than a static concept. Following on from Lewicki and Bunker (1995), they argue that there are three main types of trust (Calculus-Based Trust (CBT), Knowledge-Based Trust (KBT), and Identification-Based Trust (IBT)) that can develop. These forms of trust are shown in Figure 30.



**Figure 30. The stages of trust development (Panteli & Sockalingam, 2006, p. 602)<sup>10</sup>**

CBT is based on an analysis of the costs and benefits involved in trusting versus not trusting (e.g., financial rewards of being in the partnership). CBT is conditional and fragile. KBT relies on information about the trustee, and is based on the ability to predict the trustee's actions. KBT is stronger than CBT. IBT occurs when the trustor and trustee develop a shared identity (involving shared needs, preferences, thoughts, and behaviour patterns) which create a strong interrelationship. This is the strongest kind of trust. Note that development of trust somewhat depends on the nature of the relationship, and if a greater amount of trust or a different form of trust will not benefit the relationship, that form of trust may never develop.

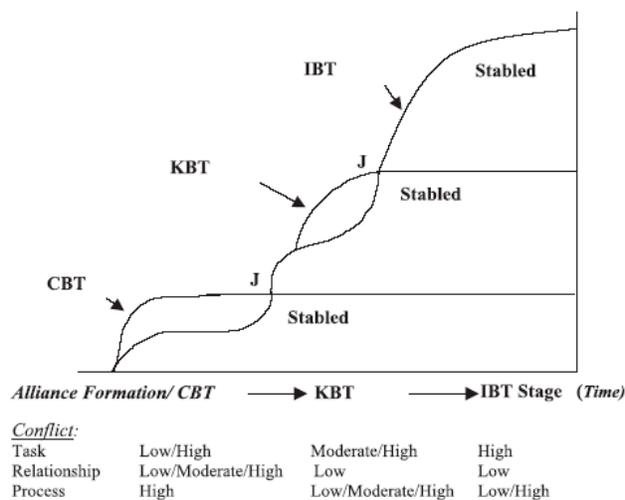
Panteli and Sockalingam (2006) defined conflict as “an expressed struggle between at least two interdependent parties who perceive incompatible goals, scarce rewards, and interference from the other party in achieving their goals” (p. 603). Conflict was viewed as inevitable in the context of complex interorganizational ventures, but it could be functional or dysfunctional depending on how it is managed.

Three types of conflict were described and contrasted: relationship, task, and process conflict. Relationship conflict tends to be emotional and focussed on the personal; this type of conflict tends to erode trust and reduce productivity. Task conflict is task oriented and involves disagreements

<sup>10</sup> Note that the X axis should read "TIME".

about the best solutions to problems. Background diversity is often the source of task conflict; if properly managed, task conflict can increase trust, creativity, and productivity. Process conflict involves disagreements about how tasks will be performed, and may result from different interpretations of roles, responsibilities, schedules, and resource requirements. This type of conflict tends to decrease productivity and job satisfaction. However, they argue that successful alliances should only have process conflict at the early stages but more agreement during the life of the alliance. Although the three forms of conflict are theoretically distinct, they tend to overlap and interrelate (e.g., task conflict can be taken personally, resulting in relationship conflict).

Panteli and Socklingam (2006) proposed a model for how conflict and trust develop in virtual interorganizational relationships over time, as shown in Figure 31.



**Figure 31. A generic framework for conflict propensity and trust development in virtual alliances (Panteli & Socklingam, 2006, p. 606)**

It includes the following phases:

- Initially, trust will tend to be calculus-based, propensity for relationship conflict will likely be low (partners will be cautious as to how they present themselves), process conflict will tend to be high as this stage of the relationship is primarily concerned with establishing roles and responsibilities etc. The degree of task conflict will depend on the nature of the core tasks (especially if they are structured versus unstructured). How these types of conflict are managed will determine whether trust is eroded or develops further.
- Trust may evolve from calculus to knowledge-based; if this occurs, relationship conflict will tend to be low, task conflict will tend to be moderate or high depending on the nature of the tasks, and process conflict will be dependent on the nature of the alliance (especially the need for fundamental change).
- Trust may evolve from knowledge to identity-based, especially in relationships which require a high degree of classified and tacit knowledge which must be shared; relationship conflict should be low, process conflict will tend to be low unless fundamental changes are required, and task conflict is likely to be high as alliances which perform unstructured tasks are the only ones where IBT is likely to be developed. Panteli and Socklingam (2006)

note that IBT is actually not likely to develop very often, as this level of trust is seldom required for a successful alliance.

Panteli and Socklingam (2006) proposed that their model of conflict and trust development would likely be instantiated differently in different types of virtual alliances. They proposed that there are three main types of virtual interorganizational alliances:

1. Star-alliance – one dominant player collaborates with other peripheral organizations
2. Value-alliance – a core organization and others that deliver interrelated products and services
3. Co-alliance – a collective of organizations make equal contributions of resources, competencies, and knowledge. These alliances are generally temporary and perform specific projects and are then disbanded

The relationship between trust and conflict in the three types of virtual alliances is also likely to vary, as shown in Figure 32.

	Star-alliance	Value-alliance	Co-alliance
Nature	Single dominant party for task allocation	Single dominant party for process coordination	All parties share equal status/responsibility
Dominant Knowledge Type Transferred	Explicit	Explicit	Tacit and Explicit
Trust Development	CBT to KBT	CBT to KBT	CBT to KBT to IBT
Trust and Conflict: Dynamics and Development			
-CBT	Low-Task Conflict Low Relationship Conflict (but has potential to escalate to Moderate/High)	Low-Task Conflict Low Relationship Conflict (but has potential to escalate to Moderate/High)	High-Task Conflict Low Relationship Conflict (but has potential to escalate to Moderate/High)
-KBT	High Process Conflict Moderate Task Conflict Low Relationship Conflict	High Process Conflict Moderate Task Conflict Low Relationship Conflict	High Process Conflict High-Task Conflict Low Relationship Conflict
-IBT	Low/Moderate Process Conflict	Low/Moderate Process Conflict	Low/High Process Conflict
	N/A	N/A	High-Task Conflict
	N/A	N/A	Low RC
	N/A	N/A	Low/High Process Conflict

**Figure 32. Trust and conflict in the three types of virtual alliances (Panteli & Socklingam, 2006, p. 609)**

According to Panteli and Socklingam (2006), it is important to consider which type of alliance is present when predicting which sources of conflict are likely to be the most important, and what stages of trust are likely to be required for effective cooperation in the alliance. It is also important to note that process conflict is proposed to be a source of conflict in all three types of alliance, and must be dealt with effectively. If process conflict is dealt with appropriately, trust will grow, and understanding, acceptance and allegiance will also increase.

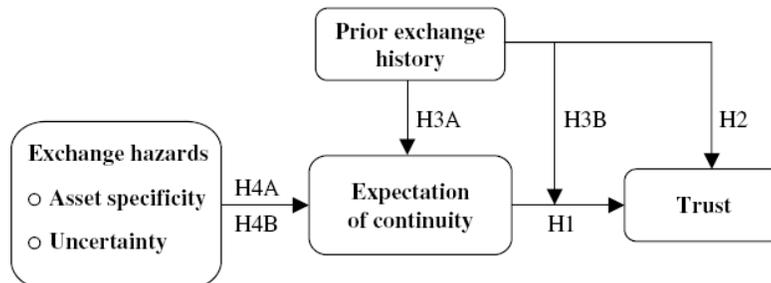
In summary, this article presents a generic framework for understanding the dynamics of trust *and* conflict in the context of virtual interorganizational alliances. The authors also describe three different structural varieties of virtual alliances, along with generic strategies for developing trust and minimizing harmful conflicts.

## 2.23 Poppo, Zhou, & Ryu (2008)

POPPO, L., ZHOU, K. Z., & RYU, S. (2008). Alternative origins to interorganizational trust: An interdependence perspective on the shadow of the past and the shadow of the future. *Organization Science*, 19, 39-55.

Poppo, Zhou, and Ryu (2008) explored an alternate account of the origins of interorganizational trust. On one hand, trust is commonly construed as developing over time, as the product of interaction and of accumulating knowledge about another party. Once trust comes into being, it is sustained and strengthened by bonds of goodwill and reciprocity. The central motivation here is to belong and to create a shared social identity. This is labelled as the “past” perspective. On the other hand, trust is also construed as related to the “shadow of the future” (Poppo et al., 2008). Trust in this context is based on expectations of future rewards and benefits, sometimes based on cost-benefit analyses, and the past does not play into these expectations, because trust is based on economic principles of profit and loss.

Poppo et al. (2008) argued that there is surprisingly little empirical confirmation of these proposed origins of trust, and trust formation within interorganizational contexts may have a somewhat different quality. More specifically, they argued that the past and the future are actually interdependent, and that the past only influences perceptions of trust indirectly through the shadow of the future. They argue that “expectations of continuity may account for the relationship between prior experience and trust” (Poppo et al., 2008, p. 40). Their conceptual model is shown in Figure 33.



**Figure 33. Alternative origins of trust (Poppo et al., 2008, p. 40)**

Starting on the left side of the model, Poppo et al. (2008) argued that two specific exchange hazards influence expectations of continuity. These include asset specificity and uncertainty. Asset specificity refers to “transaction-specific assets that are not redeployable to alternative uses” (Williamson, 1985; cited in Poppo et al., 2008, p. 46). Poppo et al. operationalized asset specificity as dependence in the relationship and changing partners, measured by capturing the perceptions of both parties. Uncertainty is the “unanticipated changes in circumstances surrounding the product exchange in the marketplace” (Poppo et al., 2008, p. 46). Uncertainty was measured using Noordewier, George and Nevin (1990) assessment of perceptions of uncertainty regarding the supply market (cited in Poppo et al., 2008).

This model argues that in addition to the direct impacts of the past and future, the impact of the past on trust is mediated by the expectation of continuity or the shadow of the future (H3A and H1). This occurs because organizations use the past as a guide as they learn, and combine these with their cost-benefit analyses. Moreover, they argue that the past and future also combine to moderate perceptions of trust (H3B). This path has a strong impact on trust because long-term exchanges combined with social norms are likely to be powerful influences. Expectations of continuity, then, underlie the “shadow of the future” aspect of trust in interorganizational contexts.

Companies cooperate (e.g., sharing information) because they believe there will be a longer window of exchange within which to benefit in the future.

These ideas were tested in a study exploring 137 purchasing relationships between manufacturers and their major suppliers in a range of domains (e.g., electronics industry, textiles), and relied on the heads of purchasing departments as key informants. After pretesting of measures, questionnaires were mailed out to about 680 managers. Questionnaires related to measures of prior history (how many years the manufacturer had worked with the supplier), future expectations (i.e., expectations of continuity from Heide and Miner, 1992), interorganizational trust (using the 5-item measure from Zaheer, McEvily & Perrone, 1998), as well as less relevant measures of exchange hazards (cited in Poppo et al., 2008). Items used a 7-point Likert agreement scale. Poppo et al. (2008) also included controls such as exchange performance, exchange turnover, firm size and industry.

A combination of structural equation modelling and regression techniques was used to test their hypotheses. First, exploring the typical account, analyzes first focused on whether past history on its own directly affected trust (H2), and it did not. Results showed that expectation of continuity strongly promoted interorganizational trust (H1). Prior history also moderated the relationship between expectations of continuity and trust (H3B). Specifically, when prior history is long, expectation of continuity more strongly promotes trust than when prior history is short. They argue that this occurs because when partners also have a long history together, they develop sets of processes and practices that promote trust. These buffer the impact of any violations, and continue to combine with expectations of continuity to keep trust intact. Additional analyses, however, also showed an interesting but unexpected finding. More specifically, prior history was directly negatively related to trust when the mediating path of continuity was included in the model. A further analysis helped to clarify this effect and showed that when continuity expectations are weak, relationships with a longer history will also show lower levels of trust. This effect, they speculate, may be because of overembedded ties among the partners, as relationships can remain in a deteriorated state for a prolonged period without either party being willing to defect.

Considering the exchange hazards, while specialized assets increased expectations of continuity, uncertainty lowered these expectations. Results showed that the control variables also had an impact on interorganizational trust. Poor performance (i.e., late delivery and defect rate) was negatively related to trust, whereas exchange turnover and firm size is positively related to trust. Poppo et al. (2008) hypothesized that larger firms promote trust because they have more stable systems with consistent demands which enable the firm to have long-lasting relationships.

Thus, findings showed that expectations of continuity may play a critical role in interorganizational trust because this expectation accounts for the positive relationship between prior history and trust. Furthermore, prior history can indirectly influence trust by strengthening the effect between trust and the expectation of continuity. In conclusion, the shadow of the future can help explain how the past influences trust.

## 2.24 Stephens, Fulk, & Monge (2009)

STEPHENS, K. J., FULK, J., & MONGE, P. R. (2009). Constrained choices in alliance formations: Cupids and organizational marriages. *Human Relations*, 62, 501-536.

Stephens, Fulk, and Monge (2009) note that the rate at which organizations are entering into alliances has “substantially increased because of globalization, expanding technological capabilities, and other industry changes affecting the basis of competition” (p. 502). And though there has been significant research into the dynamics of voluntary alliances (i.e., relationships

mutually acceptable to all parties), there has been significantly less examining non-voluntary or “cupid” alliances, which usually involve “coercion, pressure, or less than acceptable relations for at least one of the parties” (Oliver, 1990; cited in Stephens et al., 2009, p. 503). A “cupid” alliance is formed between at least three parties: two “target” organizations become tied to one another at the instigation of a third—the “cupid” organization—which benefits from the relationship “by allying with the other two while keeping them apart, thus controlling the flow of resources between them” (p. 503). According to Stephens et al., risks in interorganizational alliances fall into two major categories, including opportunism or failure to deliver on commitments.

There are three main choices that organizations must make with respect to alliances:

- Whether they should enter into an alliance
- How they should choose their alliance partner
- How they should behave during the formation and execution of the alliance

Stephens et al. (2009) were interested in examining “the development of embedded and unembedded relationships in the presence of an external cupid organization” (p. 528). Interpersonal embeddedness (extent of interpersonal ties between individuals outside of the current alliance negotiations), can be thought of as the functional component of inter-organizational embeddedness, which works to frame the interpersonal negotiations about the terms and conditions of the alliance. Generally, business exchanges happen at the individual level within social relationships that have developed over time, and that act to encourage cooperation and other positive behaviours. However, sometimes the aim of cupid alliances is to get organizations to cooperate who have had no previous experience with one another, which tends to create a high-risk situation, as the parties have limited knowledge about the other’s competence, integrity, etc. This is in contrast to the norm for voluntary alliances, where familiar organizations are most often chosen as allies. The authors suggest that this difference is fundamental and engenders a new constellation of interorganizational trust dynamics, noting previous research which has shown that mandated relationships tend to produce tension and lower levels of cooperation.

Stephens et al. (2009) pointed out that there are two key factors which differentiate cupid and voluntary alliances. First, the targets are typically dependent on the resources of the cupid organization; this creates a power asymmetry in the relationships, as the required resources are not available from the actual partner, but only from the cupid. Second, embeddedness may play a less important role in cupid alliances, as there is usually less of a relationship between the two partnering organizations than typical of most alliances, which can decrease trust and provide fewer opportunities to build trust. As a result, cupid alliances often require strong governance mechanisms to create trust based on structures such as contracts. There is usually no previously-established trust, so trust must be developed during the negotiation of these contracts or through other governance mechanisms. Because all of the organizations have different (and perhaps somewhat competing) goals, this is often a difficult process. Two other complications may arise while attempting to build trust. Namely, alliance members may not be very motivated to make the alliance work, and the benefits of the alliance are often external to the alliance itself, both of which can impair trust development.

Overall, many of the authors’ (2009) findings are in line with the previous literature. For instance, higher levels of trust exist between parties with a shared relationship history; in the absence of a pre-existing relationship parties tend to rely more heavily on formal contracts to govern actions; and, that some alliances form as a result of resource dependant relationships. The authors also suggest that the three decisions companies must make prior to entering an alliance (i.e., whether to

ally, with whom to partner, and what governance to employ; p.529) may not “always be progressive or independent of one another,” and that due to the nature of cupid relationship these decisions might be “pre-empted by external conditions influencing their sequence, interdependence and intentionality” (p. 529). Furthermore, they suggest that rather than allying to satisfy commonly held motivations (e.g., opportunity for learning, risk reduction, access to new markets), target companies often enter into an alliance to satisfy the cupid organization—and the company’s future—with significantly less concern for interorganizational trust, as compared to voluntary alliances. By introducing a constrained-choice model of cupid alliances—where each partner benefits primarily from the cupid and not from each other—this study draws attention to an increasingly common type of alliance, and provides a new way of thinking about the dynamics of “unbalanced multi-party alliances” (p.531).

## 2.25 Stephenson (2005)

STEPHENSON, M. JR. (2005). Making humanitarian relief networks more effective: Operational coordination, trust and sensemaking. *Disasters*, 29, 337-350.

Stephenson (2005) made the argument that humanitarian assistance coordination is best understood as a social network and should be treated as such when attempting to improve interorganizational cooperation. To facilitate interorganizational cooperation, Stephenson investigated the forms of trust which might be used to improve coordination in such situations.

According to Stephenson (2005), humanitarian relief is undermined by a lack of coordination among agencies; these problems are the result of several factors including competition for resources, media attention, the presence of a wide variety of organizations, and a desire for perceived neutrality. One attempt to increase coordination was the creation of the Office for the Coordination of Humanitarian Affairs (OCHA) by the UN; however, this organization does not have actual authority over all UN organizations, let alone other organizations outside of the UN.

Information gathering and sharing is a coordination tool that is often used to promote collaboration. Dividing tasks appropriately is a challenge, and the situation is usually urgent with high time pressure. Stakes are high, situations complex and often difficult to understand. Turnover among organizations is high, and there are many part-time or contractual workers. Various incentives for cooperation are listed in Figure 34.

Organisation type	Roles	Revenues and incentives
United Nations	<ul style="list-style-type: none"> <li>• Single year contracts with INGOs and NGOs awarded by specific UN entities—UNHCR, UNICEF etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordination responsibility via OCHA, including accountability claims.</li> <li>• Information sharing.</li> <li>• Shared mission claims.</li> <li>• Resource mobilisation and alignment.</li> </ul>
Donor governments	<ul style="list-style-type: none"> <li>• Fiscal year donations.</li> <li>• Emergency donations to all other network participants.</li> </ul>	<ul style="list-style-type: none"> <li>• Accountability claims.</li> <li>• Shared mission claims.</li> </ul>
INGOs	<ul style="list-style-type: none"> <li>• Donor-derived revenues.</li> <li>• Shared mission claims.</li> </ul>	<ul style="list-style-type: none"> <li>• Contracts with UN and donor governments.</li> <li>• Information sharing.</li> <li>• Resource mobilisation and alignment.</li> </ul>
NGOs	<ul style="list-style-type: none"> <li>• Donor-derived revenues.</li> <li>• Shared mission claims.</li> </ul>	<ul style="list-style-type: none"> <li>• Contracts with host governments and INGOs.</li> <li>• Information sharing.</li> </ul>
Host governments	<ul style="list-style-type: none"> <li>• Own source revenues and donor-derived revenues.</li> <li>• Shared mission claims.</li> </ul>	<ul style="list-style-type: none"> <li>• Unique knowledge of political and social landscape.</li> <li>• Information sharing.</li> </ul>

**Figure 34. Humanitarian relief network actors, revenue types, and incentives to cooperate (Stephenson, 2005, p. 343)**

Stephenson (2005) described three types of networks that are relevant to interorganizational relationships. These are:

- Social networks – based primarily on personal and interpersonal exchange
- Bureaucratic networks – based on formal agreements and formally identified roles and coordination mechanisms
- Proprietary networks – relatively formal and based on financial or intellectual property rights

According to Stephenson (2005), a “typical” humanitarian relief environment includes a weak bureaucratic network and a social network (of varying strength). Proprietary networks seldom play a role. These networks must be used to bridge institutional boundaries if coordination is to take place. Stephenson argued that trust is essential for this bridging to take place. Thus, the role of a coordinator changes to a role which is responsible for developing conditions in which trust can be created and developed, rather than gaining authority over different organizations. Different types of trust which Stephenson argues could be useful in humanitarian relief coordination are listed in Figure 35.

Trust type	Description
Companion	The trust that an organisation boundary spanner (those individuals actively interacting with members of another organisation) places in a counterpart in a network organisation that is based on judgments of goodwill or friendship.
Competence	Trust that is extended based on the perceived ability of the other to carry out needed tasks.
Commitment	Describes a setting in which parties will trust one another as long as each behaves in a fashion consonant with contractual agreements between the parties.
Swift	Trust that is based on the reality that it is easier to extend trust than it is not to do so in conditions when individuals and organisations will work together only for short periods. Based on contextual cues rather than inter-personal ties.

**Figure 35. Types of trust (Stephenson, 2005, p. 345)**

Stephenson (2005) argued that it is essential for organizations involved in humanitarian relief to work on their own organizations' culture and encourage the development of a culture in which the exchange of information, cooperation, and trust are encouraged. Because of the lack of central organization, it is critical to create situations in which trust can flourish and used to promote cooperation. This would be a much more useful strategy than trying to create order in a top-down manner by creating additional organizations or attempting to create formal mechanisms to impose cooperation. Stephenson notes that this is expected to be a lengthy process, but it is likely the only one with a reasonable chance of success in this context.

## 2.26 Stephenson & Schnitzer (2006)

STEPHENSON, M. JR. & SCHNITZER, M. H. (2006). Interorganizational trust, boundary spanning, and humanitarian relief coordination. *Nonprofit Management & Leadership*, 17, 211-233.

Stephenson and Schnitzer (2006) investigated interorganizational trust in the context of humanitarian aid delivery. Stephenson and Schnitzer (2006) noted that there is a prevailing belief held by some scholars, aid professionals, funders, and UN representatives that a more harmonized and coordinated interorganizational cooperation effort would yield better outcomes. However, the authors argue, that given the complex conditions characterizing the delivery of aid, centralized hierarchical coordination structures are not an ideal way to coordinate its delivery, instead, they suggest, as a network structure built on shared relationships and trust. The authors argued that the mechanism by which humanitarian relief is typically delivered is as a network of loosely-coupled, semi-autonomous organizations rather than a single organizational structure. The inappropriateness of a central hierarchy in this context is largely because humanitarian relief efforts are undertaken by many sub-organizations within the United Nations (e.g., UN High Commissioner for Refugees (UNHCR); UN Children's Education Fund; World Health Organization; World Food Program) as well as by other organizations from other countries, and no one group or organization has the authority to play a command and control role. Even the UN Office for the Coordination of Humanitarian Affairs does not actually have any authority over other UN organizations. As a network of organizations, it is likely that humanitarian relief efforts would be well served by any

change that encourages cooperation, communication, and coordination across these organizational boundaries; trust is proposed as one such factor.

To explore these ideas, they initiated an investigation into the dynamics of developing and maintaining trust across organizational boundaries during a crisis. Their goal was to determine the context of decisions and to understand the role that trust played in decisions to initiate or agree to coordination within a specific humanitarian mission. Data was collected from lengthy, open-ended interviews with 5 experienced international Non-governmental Organization (NGO) relief professionals who took part in aid efforts in Kosovo after the 1999 North Atlantic Treaty Organization (NATO) intervention, each as representatives of a different NGO.<sup>11</sup> Interviewees were asked about inter-institutional trust building, boundary spanning, and coordination.

There were several factors which were proposed to positively influence the development and maintenance of trust in the Kosovo mission. Stephenson and Schnitzer (2006) point out that trust was developed at two levels. One was based on the standing and mission of the organization, and the other was the past personal and professional interaction with individuals. People tended to trust others within their own organization, and these people could act as a means of gathering trust-related information about others with whom one had not personally interacted. Common organizational values as well as complimentary competencies were also reported to be positive factors. Personal relationships and knowledge often trumped the reputation of a specific organization. Common technical background, skill, and discipline help to form relationships between boundary spanners.

Trust was facilitated by an understanding of many of the institutions involved, their area of expertise, and their typical level of performance (e.g., Doctors Without Borders, CARE (Cooperative for Assistance and Relief Everywhere, Worldvision). Veteran relief workers facilitated trust through interpersonal networks that they had with staff of other organizations developed as a result of previous shared experiences. Trust in the UN was reported to have been based on their role in providing funding. Information sharing was used as a basis for coordination but also acted as a mechanism for building and maintaining trust, as it facilitated knowledge of the progress of other organizations and provided a means for personal contact with members of other organizations. As well, subsequent to the Kosovo mission, individual organizations have acted to create minimum standards in effort to improve their reputation and therefore their perceived trustworthiness.

These interviews also revealed factors that limited or undermined the development of interorganizational trust and/or coordination. Obviously, as the number of organizations increased, the challenge of coordinating their efforts also increased. In fact, the authors argue that widespread coordination should not be expected if there are a large number of organizations involved, and

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<sup>11</sup> It should be noted that the Kosovo situation may not be typical of a situation involving humanitarian aid. One of the characteristics of the Kosovo aid mission was that humanitarian aid was not seen as a positive thing by many of the combatants. Because this was a conflict over territory largely based along ethnic lines, starvation and violence were used in attempts to drive others from territory. Thus, the delivery of aid to groups of other ethnicities to enable them to remain in contested territory was seen as an act of aggression by humanitarian organizations. Because of the prevalence of this crisis in the media, funding became available and it has been estimated that at one time there were over 500 organizations attempting to provide some sort of humanitarian relief in Kosovo. UNHCR oversaw the aid effort for the UN; sector-specific meetings were held to aid coordination (e.g., health, water and sanitation, education, housing, etc.). Immediately following the NATO intervention there was no local government in place, and no local NGO organization that was responsible for coordination.

further research is required to determine when there are “too many” for effective coordination. Organizational competition for resources can reduce trust and coordination. Crisis situations often result in information changing; this lack of predictability undermines trust in an organization that is attempting to act to provide oversight.

Overall, then, Stephenson and Schnitzer’s (2006) identified a number of themes arising from the interviews and a number of levels in play when thinking about trust within an interorganizational context. These include the strategic, organizational, and individual level, as shown in Figure 36.

Contextual Factors					
Operative Levels of Trust	Interpersonal Contacts / Reputation	Funding	Inter-organizational Competition	Media Saliency	Stress of Relief Work
Strategic	Pre-existing network paths; common cast of actors	High funding levels supporting many actors not as conducive to coordination at later stages	For-profit aid contractors less likely to coordinate	Media attention influences amount of available funding and may lead to large level of service organization deployment in short time frames	Capacity to coordinate beyond purview of any one organization
	Character and capacity of leadership of relevant UN, INGO, governmental, and local actors	Number of organizations related to funding availability	Funding creates a large pool of actors vying for available contracts	Harmonization possible at early stages with world attention	Reduced stress and urgency promotes interorganizational coordination
	Many actors skeptical of centralized coordination	Funding restrictions mediate against capacity building among service recipients	Ability to coordinate related to number of actors or entities involved		
	Strong foundation of shared values and standards required for trust and boundary spanning	Too much funding within a short time frame at early stages can interfere with effective aid delivery and coordination	Response of UN: whether and how		
Organizational	Complementary competencies between organizations	Potential mechanism for cooperation; incentive (threat of loss of funding)			
	Knowledge of service delivery in particular sectors; standing and capacity for carrying out mission	Resources available at national and international levels	Pay structure of international aid organizations competes with UN or USAID for the best staff		
	"Untested" actors may be excluded		Local capacity; stability of government and its will and ability to respond		
	Shared service and professional standards improve aid delivery				
Individual	Past personal and professional interaction; role equivalence	Funding alone not sufficient to ensure that individual actors will span organizational boundaries	Staff training and core competencies		Inexperienced staff on the ground
	Perceptions of individual's experience with organization in prior crises				

Legend:  Elements that promote trust and boundary spanning

**Figure 36. Contextual factors and coordination potential (Stephenson & Schnitzer, 2006, p. 227)**

Within these levels, issues such as interpersonal contacts, funding, interorganizational competition, media saliency and the stress of relief work all influence coordination among diverse agencies. In

conclusion, Stephenson and Schnitzer (2006) argued that trust is significant in at least 2 ways. First, it helps to establish shared organizational norms which encourage cooperation. Second, it may encourage individuals to work and coordinate with individuals in other organizations. The goal of providing aid should serve as a binding force or value between organizations; this can serve as an antecedent of trust; however, it is possible that trust must be created anew amid each new situation. The goal should probably be to devise social networks of action which can be effective without central control or direction. Trust alone is unlikely to be enough.

## 2.27 Steppänen, Blomqvist, & Sundqvist (2007)

STEPÄNEN, R., BLOMQVIST, K., & SUNDQVIST, S. (2007). Measuring inter-organizational trust – a critical review of the empirical research in 1990-2003. *Industrial Marketing Management*, 36, 249-265.

This article was intended to evaluate empirical research on interorganizational trust, particularly the theoretical approaches taken and how interorganizational trust has been measured. Based on the authors' criteria (actually studying interorganizational, rather than interpersonal trust; real-world rather than laboratory-based research; and using only work published between 1990 and 2003) they collected 15 studies to evaluate. Table 2 is part of a table in Steppänen, Blomqvist, and Sundqvist (2007) which describes the articles reviewed, including the conceptualization of trust, the dimensions considered as part of trust, and how those definitions were operationalized by the researchers.

**Table 2. Conceptualization, dimensions, and operationalization of interorganizational trust (adapted from Steppänen et al., 2007, p. 252)**

Author	Conceptualization of Trust	Dimensions of Trust	Operationalization of Trust Dimensions
Ganesan (1994)	"Trust is the willingness to rely on an exchange partner in whom one has confidence".	Credibility and benevolence	The vendor's credibility was measured on seven, and benevolence on five items. The retailer's credibility was measured on four, and benevolence on three items. Other factors were tested in a total of 24 items.
Aulakh et al. (1996)	"Degree of confidence the individual partners have in the reliability and integrity of each other".	Confidence, reliability and integrity	Four items for measuring continuity expectations, three for flexibility, two for information exchange, four for output control, four for process control, three for social control, and three for trust. All items were measured on a scale of 1– 5 (strongly disagree–strongly agree).
Chow & Holden (1997)	"The level of expectation or degree of certainty in the reliability and truth/honesty of a person or thing".	Reliability, Truth/honesty	Three items measuring trust in the salesperson. For example: "Anyone who trusts him/her is asking for trouble." And three items measuring trust in the company. For example: "This company is basically honest". A five-point Likert scale was used in the evaluation.
Doney & Cannon (1997)	"Perceived credibility and benevolence of a target of	Credibility and benevolence	Trust of the supplier firm was measured on eight items, and trust of the salesperson on seven

Author	Conceptualization of Trust	Dimensions of Trust	Operationalization of Trust Dimensions
	trust".		items. Antecedents of trust were tested on a total of 41 items.
Nooteboom et al. (1997)	"Trust as a significant source of cooperation, along with coercion and self-interest".	Institutionalization and habitualization	Institutionalization was measured on two, and habitualization on three items. One item was used to capture a combined view of both dimensions.
Smith & Barclay (1997)	"Trust as the critical factor differentiating effective from ineffective selling-partner relationships".	Honesty/integrity, Reliability/dependability, Responsibility, Likeability, Judgment	Twenty-three items were used to measure trustworthiness, and 27 to measure trusting behaviours. Each factor of organizational difference was measured, and a total of 15 items were used.
Sako & Helper (1998)	"An expectation held by an agent that its trading partner will behave in a mutually acceptable manner".	Goodwill trust, Contract trust, Competence trust	One item measured contractual trust, one measured competence, and two measured goodwill trust. A five-point Likert scale was used. Conceptualized conditions were tested on a total of 11 items, and three calculated items. Several dummy variables were also used in the evaluation.
Zaheer et al. (1998)	"Expectation that an actor can be relied on to fulfil obligations will behave in a predictable manner, and will act fairly when the possibility for opportunism is present".	Reliability, Predictability, Fairness	Three measures of trust were used: (1) "The focal carrier and our agency have a high level of mutual trust", (2) "The focal carrier is well known for fair dealing", and (3) "The focal carrier stands by its word". A seven-point Likert scale was used in the evaluation.
Plank et al. (1999)	"Trust is a global belief on the part of the buyer that the salesperson, product, and company will fulfil their obligations as understood by the buyer".	Not defined	Each dimension of trust was measured on five items, and evaluated on a five-point Likert scale. Getting information was measured on four items, and giving information on one item.
Young-Ybarra & Wiersema (1999)	"Trust is based on three components: dependability (expectation that the partner will act in the alliance's best interests), predictability (consistency of actions), and faith (partner will not act opportunistically)".	Dependability, Predictability, Faith	Trust was measured on four items, using a seven-point scale. Sources of trust were measured on a total of 16 items. E.g., "We have found that our partner company is unusually dependable".
Dyer & Chu (2000)	". . . trust as one party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities"	Reliability, Fairness, Goodwill	Five hypotheses examining the determinants of trust (i.e., which factors influence supplier trust across all countries, and which are country-specific). The model consists of measures of "Length of the relationship", "face-to-face

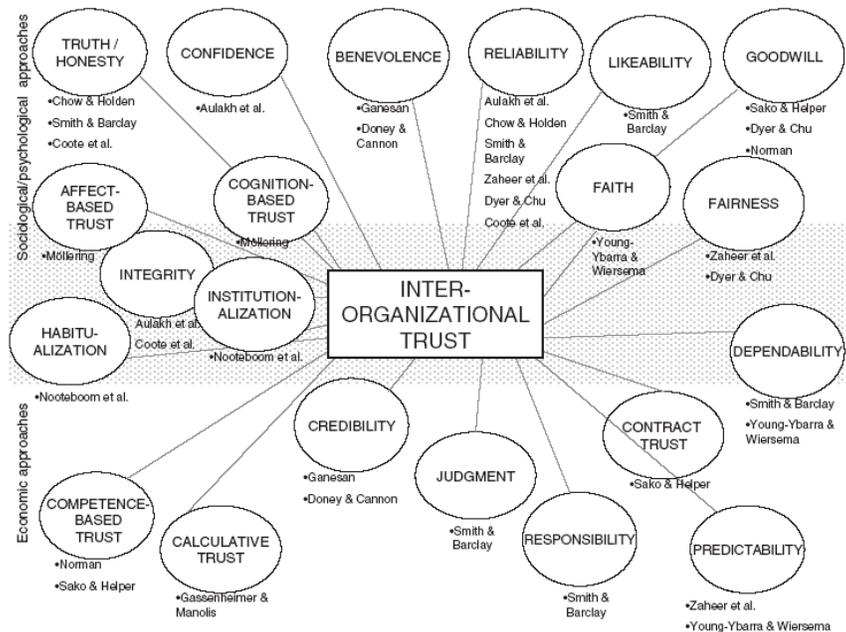
Author	Conceptualization of Trust	Dimensions of Trust	Operationalization of Trust Dimensions
			communication", "continuity of the relationship", "automaker assistance to the supplier", and "stock ownership".
Gassenheimer & Manolis (2001)	". . .governance mechanism for assessing dependence and as a mediator of the effects that dependence has on anticipated future purchases.	Calculative trust (The authors name salesperson and organizational trust as the two dimensions)	Salesperson trust was measured on seven items, organizational trust on four items (e.g., "I trust this supplier to do things my firm is not equipped to do"). The measures were adapted from "previous inter-organizational research".
Möllering (2002)	Not defined	Types of trust (worthiness): Cognition-based, Affect-based	Six items for the cognitive side of trustworthiness, and five items for the affective side, and a control item ("we trust this supplier").
Norman (2002)	"Willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action that is important to the trustor, irrespective of the ability to monitor or control the other party"	Types of trust: competence based trust and goodwill trust	Items for trust: (1) "We can rely on our partner to abide by the alliance agreement", (2) There is a high level of trust in the working relationship with our partner, (3) We trust that our partner's decisions will be beneficial to the alliance, (4) We trust that our partner's decisions will be beneficial to our firm".
Coote, Forrest, & Tam (2003)	". . .trust exists when one party has confidence in the honesty, reliability, and integrity of their partner".	Trust consists of honesty, integrity and reliability.	Trust was one of five measured dimensions. Four trust items: "My supplier is honest and truthful"; "Promises made by my supplier are reliable"; "My supplier is open in dealing with me"; "I have great confidence in my supplier"; and "My supplier has a high degree of integrity".

The authors noted several characteristics of the studies reviewed. They found that the studies represented several different types of relationships, including retail buyer/vendor, buyer-seller, selling partnerships, and industrial marketing relationships. A difference worthy of note is that some of these interorganizational relationships were vertical (e.g., buyer-seller) and some were horizontal (e.g., selling partnerships); this is a difference that might affect the trust relationship (i.e., whether the relationship is between equals or a subordinate-superior relationship). Studies also differed by industry, which included information technology, retail, and various types of manufacturing including automaking and electronics.

Cross-cultural differences in interorganizational trust were found. For example, Sako and Helper (1998; cited in Steppänen et al., 2007) reported that the conceptualization of trust was more complex in Japanese as compared to U.S. firms, and factors investigated influenced trust somewhat differently. For example, the duration of written contracts had no significant impact on opportunism in Japan; this might have been due to the fact that contracts are typically renewed annually in Japan. Contract duration did have a significant impact on opportunism in the U.S., with

longer contracts resulting in higher opportunism. Although there is evidence that there are cultural effects on trust, most of the 15 studies examined by Steppänen et al. did not examine trust across cultures.

Both the similarities and differences between the conceptualization of interpersonal trust dimensions (e.g., benevolence, integrity, competence; Mayer, Davis, & Schoorman, 1995) and the way that studies conceptualized the dimensions of interorganizational trust should be pointed out. Some factors typically conceptualized as interpersonal factors were carried over into the representation of interorganizational trust (e.g., benevolence, integrity, and ability or competence are all evident the studies reviewed, although not all in the same study), and several more factors emerged. In general, new factors appear to be slight modifications of the interpersonal trust dimensions. New dimensions mentioned include dimensions framed at a broader organizational level that seem to relate to benevolence (e.g., institutionalization [expectations that mutual benefit is sought rather than self-interest], goodwill); to integrity (e.g., credibility, truth/honesty, responsibility, fairness, and faith [that the partner will not act opportunistically]); to competence (e.g., judgment); and to predictability (reliability and dependability). There are several additional trust dimensions that appear which are less closely related to interpersonal trust factors. These include contract (how much of the relationship is detailed in a contract), habituation (past experience in the relationship), calculative decision-making (the relationship lowers risk), likability, cognition-based, and affect-based trust. An overview of the dimensions of trust evident in the research reviewed is shown in Figure 37.

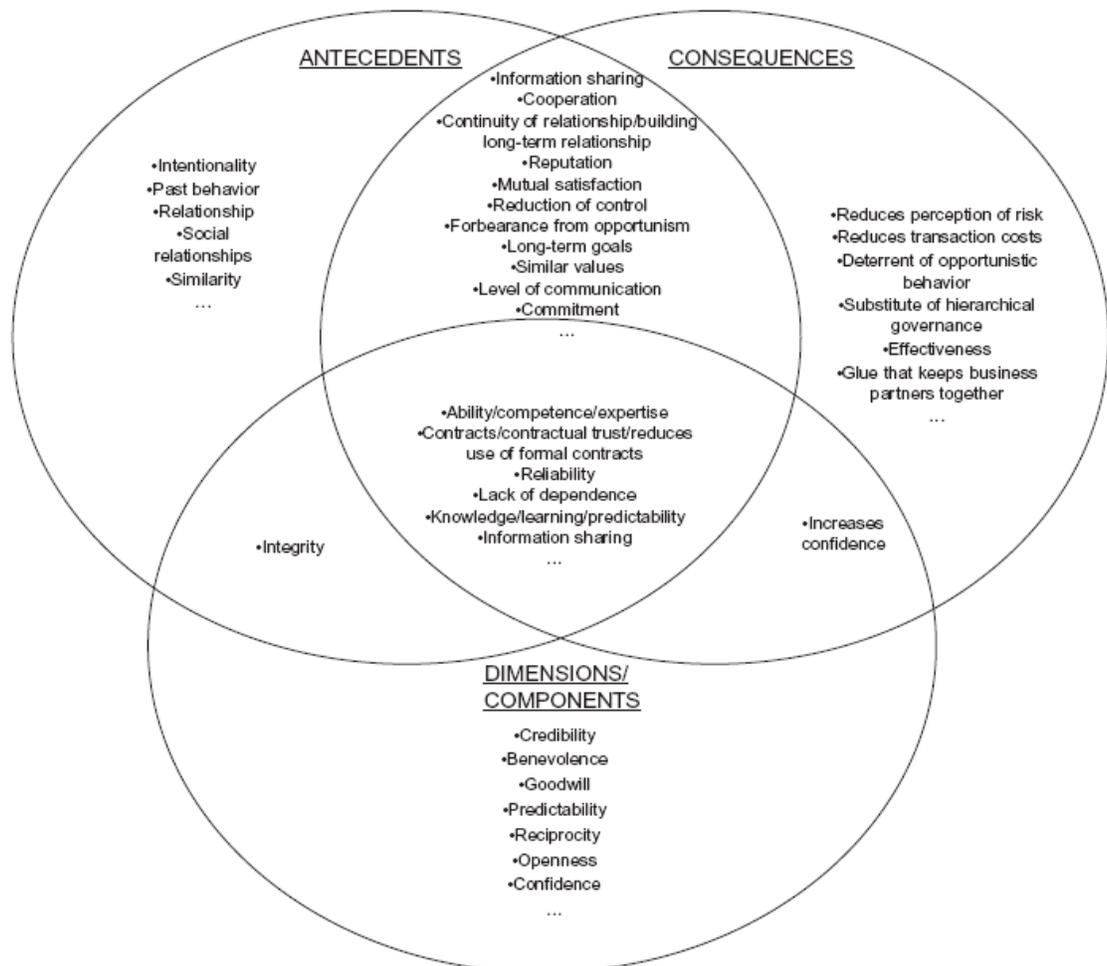


**Figure 37. Dimensions of trust based on the major theoretical approaches (Steppänen et al., 2007, p. 255)**

Although there was a great deal of overlap in the trust dimensions examined in the 15 articles, there is also considerable diversity and very few authors use the same dimensions, or even the same number of dimensions (the number of dimensions used ranges from zero to five). It should be noted that even when authors do appear to be using the same dimensions, the extent to which the authors hold a similar definition of the dimension is unknown. Steppänen et al. (2007) noted that

understanding exactly what is being examined under the umbrella of interorganizational trust is often difficult: “This blurred, overlapping, and even controversial use of vocabulary makes the assessment of trust-measurement efforts difficult” (Steppänen et al., p. 256).

Within the literature reviewed, there was also a range of perspectives on the antecedents, dimensions/components, and consequences of trust, as shown in Figure 38.



**Figure 38. Antecedents, dimensions/components, and consequences of trust as seen by various authors (Steppänen et al., 2007, p. 256)**

Steppänen et al. (2007) concluded that there is a great need for theoretical research and consistency in the area of interorganizational trust research which they argue is lacking, making it extremely difficult to compare findings across studies and obtain a clear picture of the current state of the domain.

## 2.28 Sydow (1998)<sup>12</sup>

SYDOW, J. (1998). Understanding the constitution of interorganizational trust. In: Lane, C., & Bachmann, R. (Eds.). (1998). *Trust Within and Between Organizations* (p. 31-63). Oxford, UK: Oxford University Press.

There are many ways to conceptualize organizational trust. For example, Sydow (1998) emphasized the dimensions of competence, benevolence, and integrity as critical to inter-organizational trust, but only when these are representative of the organization and not a specific person. Sydow (1998) argued that inter-organizational trust is really *system trust*, which is comprised of distinct structures that maintain coherence despite the fact that individuals within that system change over time. From this point of view, trust is predicated not on specific individuals within that social structure, but is also bestowed on a set of social structures and principles that enable trust. As such, institutionally-based trust is at the core of intra- and inter-organizational trust, because it extends beyond interpersonal exchanges, and emerges out of an organization's identification with particular social practices, such as traditions, professions, and certifications. Organizational trust is more than the accumulation of trust within specific circumscribed relationships. Trust within an organizational context is influenced by relationships among people as well as by the structures and control mechanisms that shape their behaviour.

Among organizations, Sydow (1998) held that inter-organizational trust is reconstituted and reaffirmed through personal relationships with boundary spanners, who embody the social structure and principles through their activities in their interactions with people outside of the organization. He bases his argument regarding the development of inter-organizational trust on Anthony Giddens' (1984; cited in Sydow, 1998) theory of structuration, in which the interaction between structure and action are intertwined. This theory argues that social structures both enable and limit social action, just as social action simultaneously refers to and sanctions social structure. Similarly, Sydow (1998) argued that inter-organizational trust emerges from action between network partners which occurs within the confines of a specific structure. At the same time, however, this structure adds meaning and legitimacy to these actions. In acting with other members of the network, then, individuals are argued to use "interpretive schemes, norms, and facilities" (p. 36). These social structures then become more institutionalized and sanctioned, until the action becomes a "taken for granted" assumption with general expectations and norms surrounding it (Sydow, 1998). However, Sydow (1998) held that the development of inter-organizational trust requires *a policy of small steps*, in which resources are minimized and carefully expressed action (e.g. meeting deadlines, etc.) adds meaning and legitimacy to the existing structures. Boundary spanners, therefore, act recursively toward the accepted rules of signification and meaning, confirming the expectations of others (Sydow, 1998). In this way, system trust is slowly transformed into personal trust through interactions among members of partnering organizations.

Sydow (1998) explained that an *inter-organizational network* can be understood as a long term relationship among organizations that, although distinct, are nevertheless related. He went on to describe the network relationship as typically complex, reciprocal, relatively stable, and cooperative. Some inter-organizational partnerships might be a consequence of organizations' attempts to diversify their functions within a specific environment.

Dissimilarity may derive from national and cultural differences (Sydow, 1998). These structural properties, Sydow (1998) argued, can only generate inter-organizational trust if individuals adopt

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<sup>12</sup> This article was reviewed in a previous report (Adams, Brown, Thomson and Sartori, 2007).

interactions which communicate and sanction acceptable or necessary behaviour through interpretive schemes, norms, etc. These properties are not unlike those required for intra-organizational trust.

Sydow (1998) argued that there are economic advantages to interorganizational trust, particularly as trust can act as an alternate control mechanism in interorganizational relations. Interorganizational trust is also important for marketing and information exchange. Factors which are thought to be important for the development of interorganizational trust include: the frequency and openness of interorganizational communication (which should result in a norm of openness), network relationships which are multifaceted (organizational boundary spanners interact with each other for multiple reasons and in multiple contexts), an open-ended relationship (i.e., the relationship is not scheduled to be terminated at a set point in time), balanced autonomy and dependence in the relationship, a relatively small number of boundary spanners who have low turnover, and a context of a field (for the interorganizational relationship) which is narrow and bounded, such that organizations that interact now are likely to interact in the future.

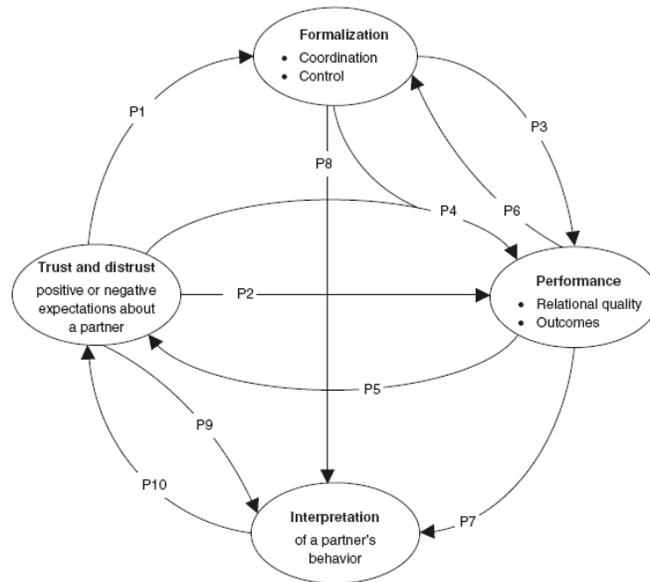
This depiction of inter-organizational trust is particularly important as it emphasizes the relationship between trust itself and the structures that support and sanction trust.

## 2.29 Vlaar, Van den Bosch, & Volberda (2007)

VLAAR, P. W. L., VAN DEN BOSCH, F. A. J., & VOLBERDA, H. W. (2007). On the evolution of trust, distrust, and formal coordination and control in interorganizational relationships: Toward an integrative framework. *Group Organization Management*, 32, 407-429.

Vlaar, Van den Bosch, and Volberda (2007) examined how trust evolves in interorganizational relationships, with an emphasis on how initial levels of trust and distrust influence the evolution of trust in that relationship. Vlaar et al. (2007) defined trust in accordance with a definition previously used by Mayer, Davis, & Schoorman (1995; cited in Vlaar et al.), namely, as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Vlaar et al., 2007, p. 410). The authors go on to define interorganizational trust as “the extent of trust placed in the partner organization by the members of a focal organization” (Vlaar et al., p. 410). These researchers also argue that trust and distrust are separate constructs. Distrust, rather than being viewed as simply a lack of trust, is assessed separately and defined as confident negative expectations regarding another’s conduct, which can manifest as fear, vigilance, or suspicion.

According to these authors, their contribution to the interorganizational trust literature is an emphasis on how interagency collaboration is strongly and permanently affected by trust in the early stages. That is, levels of trust achieved early will either promote trust or contaminate the relationship in a way that is difficult to change. The authors argued that this is because initial levels of trust have strong impacts on three important relationship parameters, which work to define the relationship early on, namely, formal coordination and control, interorganizational performance, and, partner attributions. Vlaar et al. (2007) presented a conceptual model that explores the many interrelationships between trust and distrust, formalization, interpretation, and performance, as shown in Figure 39.



**Figure 39. The evolution of trust, distrust, and formalization in interorganizational relationships (Vlaar, Van den Bosch, & Volberda, 2007, p. 412)**

To begin, initially elevated levels of trust *and* distrust make it necessary for higher levels of formal coordination and control—such as the use of legal contracts and other formal documents—to guide each party’s future behaviour. Next, to the extent that mutually agreed upon formal arrangements have been made, the allied relationship is perceived to entail lower interorganizational performance risks than if the other party’s future actions and commitments had not been explicitly defined. Finally, initial evaluations of a partner’s trustworthiness will have a more significant effect on overall perceptions of the relationship than will subsequent evaluations of trustworthiness. At the same time, the ease with which a partner’s behaviour is interpreted is increased to the extent that the relationship has been formalized.

The authors argued that a confirmation bias plays a role in the maintenance and escalation of trust and distrust. In other words, many actions of a partner organization are inherently ambiguous; these ambiguities are interpreted in a negative or positive light based on expectations which in turn are largely based on the levels of trust and distrust which exists in the partnership. This is why early levels of trust have a large impact on the way trust develops in a relationship.

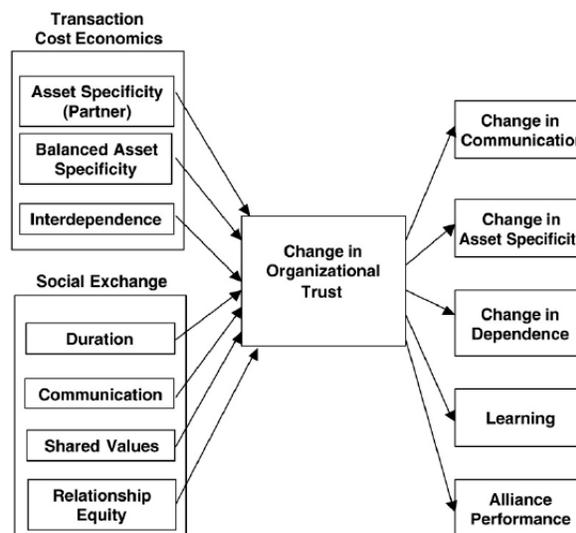
This article was primarily devoted to developing a conceptual framework for interorganizational trust; this paper contains evidence from other research supporting their propositions, but does not include additional data in support of their theory (the model is yet to be tested). While the authors propose that initial levels of trust can have long-term consequences on interorganizational relationships, they did not propose a way of breaking out of a negative cycle brought about by low initial levels of trust; this could be an important contribution and would facilitate interorganizational relationships. Their main assertion was that trust appears to develop in a trajectory consistent with early levels of trust (i.e., trusting relationships develop more trust, and distrusting relationships become even more distrustful). Vlaar et al. propose that the impact on early stages of trust on later stages is due to combinations of the impact of trust on control, performance, and behavioural attribution.

### 2.30 Ybarra & Turk (2009)

YBARRA, C. E. & TURK, T. A. (2009). The evolution of trust in information technology alliances. *Journal of High Technology Management Research*, 20, 62-74.

Ybarra and Turk (2009) investigated interorganizational trust in order to determine how trust can be created—and eroded—in strategic alliances. Trust between alliance partners is thought to be a major determinant of the success of such alliances, meaning that understanding how trust is formed and how it can evolve over time is of high importance. Ybarra and Turk used structural equation modelling to longitudinally examine what causes changes in the level of trust between partners (as measured over an average period of 2 years) and what impact such changes can have on various trust-related outcomes.

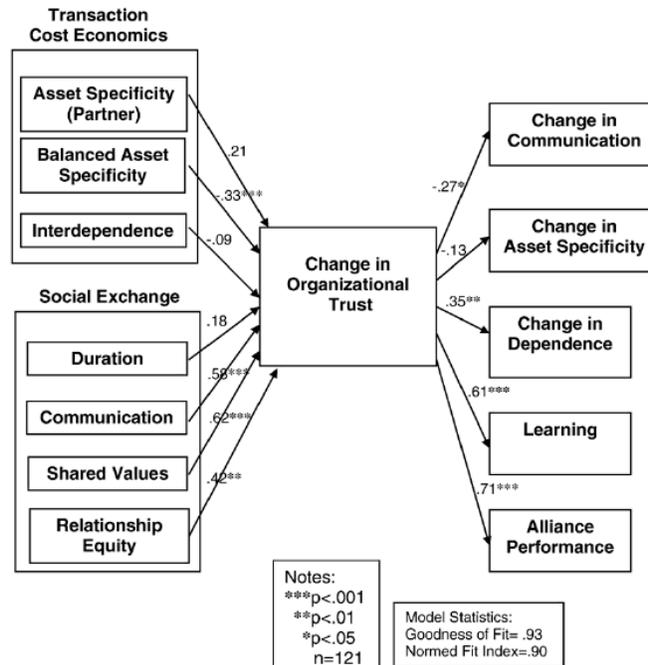
Trust was conceptualized by the authors as consisting of three components: dependability (expectations that the partner will act in the alliance’s best interest); predictability (consistency of actions by the partner); and faith (the belief that the partner will not act opportunistically). As illustrated in Figure 40, the model hypothesizes plausible antecedents grounded in two different theoretical perspectives.



**Figure 40. Antecedents and outcomes of changes in organizational trust (Ybarra & Turk, 2009, p. 65)**

According to transaction cost economics, trust can be developed and enhanced in an alliance by “requiring the partner to invest in specialized assets” (asset specificity & balanced asset) and by promoting interdependence in the relationship (p. 65). In contrast, social exchange theory holds that the cultivation of trust between two partners is facilitated by continued interaction (duration), quantity and quality of communication, the extent to which values are shared, and perceived relationship equity (fairness and ability to influence decisions). Possible consequences of a change in the level of organizational trust included changes in communication quantity and quality, asset specificity, and dependence. Learning and overall alliance performance was also assessed.

To test the hypotheses implied by their model, Ybarra and Turk (2009) collected data related to 121 information technology alliances and used a two-stage longitudinal survey design. Structural equation modelling was then used to test the fit of the data to the proposed model. The structural parameters of the proposed relationships are presented in Figure 41.



**Figure 41. Structural parameters of proposed relationships (Ybarra & Turk, 2009, p. 71)**

When the effects of antecedents of organizational trust change were examined, most of the social exchange factors (communication, shared values, and relationship equity) positively related to increases in organizational trust; however, economic factors appeared to influence trust very little (only balanced asset specificity was significantly negatively related).

When the consequences of organizational trust change were examined, there was a positive relationship between trust and several outcomes including alliance performance, learning, and change in dependence. Interestingly, the authors proposed that higher trust would result in a higher quality and quantity of communication; the opposite was found. This is particularly interesting, as communication quality and quantity appear to be a significant antecedent of trust. Though, the authors point out that these results may reflect a contrary view, one that posits the associative costs of communication (as when used as a means of controlling the others behaviour) would lessen as trust developed. Thus partners may be willing to forgo communication as the relationship becomes stronger, and/or increasingly routinized.

This study makes several contributions. By utilizing a longitudinal survey design to examine the antecedents and outcomes of trust formation between strategic alliance partners, this study addressed a previous shortcoming in strategic alliance research, which has relied heavily on cross-sectional survey design research. In addition, the study's results suggest that the development of trust is not a function of an organization's formal incentive systems. Ybarra and Turk suggest that "factors from social exchange theory – communication, shared values, and relationship equity – provide a more thorough explanation of what contributes to the development of higher levels of organizational trust." (p. 62). Lastly, this study provides evidence that as trust between the partners of an alliance increases, mutual dependence, partner learning, and performance increase.

## 3. Emerging Themes

In this chapter, we review some of the limitations of this review. Next, we explore some of the themes which emerged that might be relevant to future work within the interagency context. The models that did emerge have some important information relevant to trust within the interagency domain.

### 3.1 Limitations

This review is limited in several important ways. The most critical limitation of the trust literature summarized in this review involves the quantity and quality of the literature relevant to issues of interorganizational trust. The goal of this project was to compile and review models of interorganizational trust, particularly those relevant to the JIMP context. Unfortunately, the literature related to models of interorganizational trust seems particularly underdeveloped.

Although we employed as exhaustive a search strategy as possible, there were relatively few models that emerged from our search. Although several models of interorganizational trust were found, there is a lack of extensive empirical testing of any of these proposed models. The models that did emerge have not been subject to more than a single validation effort. This makes it impossible to compare across multiple studies and to determine whether a finding is replicable. Moreover many of the models were purely conceptual. For example, models presented by Eberl (2004), Janowicz-Panjaitan & Krishnan (2009), Laaksonen et al. (2008), Li (2008), Nielsen (2004), and Vlaar et al. (2007) present models of interorganizational trust but provide no evidence to support their proposed models. As well, sometimes the evidence presented is only seemingly of an anecdotal nature (e.g., Daellenbach & Davenport, 2004). This observation is indicative of a broader observation made repeatedly throughout our view of the very inconsistent quality of the literature within this domain. We attempted to review many more articles than the 30 contained in this review. In the end, however, many of the articles that we attempted to review were of very poor quality once more careful scrutiny of their ideas and methodologies was possible. Obviously, even the articles that remain within this report vary in their quality. In the end, and based on earlier discussions with the Scientific Authority, we have attempted to provide the best possible “snapshot” of the literature available within this area, despite the flaws a lack of coherence in some of the articles reviewed.

Another obvious limitation of the literature reviewed in this report is that its applicability to the primary domain of interest (i.e., the interagency JIMP domain, where military systems must work with other governmental and non-governmental agencies) is unclear. Most of the literature accessed for this report derives from the business/organizational domain. This means that some of the antecedents of organizational trust (e.g., transaction costs) as well as for the performance indicators (e.g., the financial success of a joint venture) that are used to understand interorganizational trust dynamics may not be relevant to the domain of interest.

Moreover, there is a potential for key differences that are product of a unique context (and not trust itself) to impact on how collaborative efforts evolve. For example, in business contexts, interorganizational alliances are typically voluntary, but within the interagency/JIMP context that is the target of this review, alliances may be more forced than chosen, as occurs when a government adopts a WoG strategy and mandates that personnel in the key departments collaborate in this manner, as opposed to the government departments embracing the approach as providing them

with resources necessary to accomplish valued tasks that they would not otherwise be able to complete. Similarly, other studies of interorganizational trust examined interorganizational relationships in the context of vertical relationships (e.g., buyer-seller) and some were examined in the context of horizontal relationships (e.g., selling partnerships; Steppänen et al., 2007). This is a difference that might affect the trust relationship (i.e., whether the relationship is between equals or a subordinate-superior relationship), as other researchers have argued that power differentials and how that power is used can affect trust (e.g., Daellenbach & Davenport, 2004). Such differences may make it difficult to know how well the existing literature (derived primarily from the business domain) could be generalized to collaborative efforts within the interagency context. Given that the articles reviewed in this report appear to provide the best available information, there is still valuable information that can be gleaned from existing research that is an imperfect match to the domain of interest. The next section examines some of the emergent themes in the literature reviewed.

## 3.2 Findings and Lessons Learned

Despite these challenges, a number of themes did emerge from our review that might be relevant to the interagency JIMP domain.

### 3.2.1 Levels of analysis within the interorganizational trust domain

The levels of analysis that are emphasized when thinking about interorganizational trust vary among theorists and researchers. However, there is some convergence in the literature about the most important levels, with most theorists and researchers giving attention to multiple levels, including interpersonal, organizational and interorganizational. For example, Child et al. (2005) argued that at least three levels of trustors and trustees are relevant within an interorganizational context: trust between partner companies, trust between groups within those companies (e.g., managers), and trust between individuals. When companies work together, often subgroups of those companies work closely enough together (even in the same physical location) that they form what Fang et al. (2008) called “co-entities”. Other forms of interorganizational trust which emerge within co-entities include agency trust (trust between an organization and its representatives within the co-entity) and intra-entity trust (the degree of trust which exists within the co-entity; Fang et al., 2008)

It is also evident in the literature that interpersonal trust issues can impact on trust at a broader level. For example, some researchers have noted that there may be certain individuals who have a disproportionate effect on interorganizational trust. For example, Sydow (1998) and Janowicz-Panjaitan and Krishnan (2009) argued that boundary spanners (those individuals who have contact with members of the partnering organization) are particularly important in the process of developing and maintaining interorganizational trust. Janowicz and Noorderhaven (2006) argued that there are also important differences in trust based on the position of the trustee/trustor within the organizations. For example, there are differences in trust within operational versus strategic levels, where strategic levels determine which alliances will be built and operational levels actually implement the alliance. Thus, it seems too simple to say that interpersonal trust is part of interorganizational trust, as interpersonal relationships have serious impacts on this form of trust.

### 3.2.2 Components of interorganizational trust

Given the differences in how interorganizational trust is understood, it is perhaps not surprising that there is little agreement on the core components of interorganizational trust (e.g., Steppänen et al., 2007). Within the broader organizational literature, dimensions such as competence, benevolence and integrity are consistently prominent, and these dimensions also appeared in the research reviewed for this report. However, some researchers have argued that benevolent, non-egoistic motives are not necessarily critical for the creation or maintenance of interorganizational trust. Rather, they argue that competence and integrity are the major drivers of trust in interorganizational alliances, because it is assumed that each company is actually motivated to protect its own financial interests (Janowicz-Panjaitan & Krishnan, 2009). On the other hand, other researchers have also described trust as requiring benevolence and even some form of affect or emotional bonding among players. As a whole, then, there is no clear agreement on the core dimensions of interorganizational trust.

### 3.2.3 Trust as a process

One common theme in the literature is that the emergence of trust is developmental and progresses over the course of time. For example, Daellenbach and Davenport (2004) explored the formation of trust, and examined how antecedents of trust differ when organizations are searching for another organization with which to partner versus when they are negotiating with a potential ally. Child et al. (2005) argued that for understanding trust within cooperative relationships, it is important to depict trust and cooperation as mutually reinforcing. Moreover, they argue that the development of trust and cooperative relationships can stop, advance, or regress. Panteli and Sockalingam (2005) argued that trust is dynamic, and the level of trust present is constantly affected by how effectively conflict is managed. Thus, a proper understanding of trust appears to be incomplete if trust is considered to be static.

Theorists and researchers have also posited that distinct forms of trust come into play as relationships and partnerships develop. Panteli and Sockalingam (2005) argued that there are at least three main types of trust which develop in turn, building upon one another: Calculus-Based Trust (CBT), Knowledge-Based Trust (KBT), and Identification-Based Trust (IBT). Similarly, Child et al. (2005) argued that there are distinct forms of trust, including those based on calculation, understanding, and personal identification. Laaksonen et al. (2008) conceptualize trust as having a contractual basis, and being based on competence and goodwill. All of these explanations of trust posit a progression from transactional or instrumental interactions (e.g., cost/benefit) to more personal and relational forms of trust.

A notable linkage in the interorganizational trust literature is made between the emergence of trust and the progressive development of collaborative alliances. Two of the articles reviewed looked at how trust developed in accordance with the cycle of alliance development (e.g., Child et al., 2005 and Nielson, 2004). As noted earlier, Child et al. (2005) argue that at the alliance formation stage, calculative trust is required. As the alliance progresses to the implementation stage, mutual understanding and getting to know the other partner is necessary. As the alliance evolves further, bonding and identification is required to build trust. Although this mapping is somewhat undifferentiated given the complex nature of trust (and alliances), understanding how trust evolves as collaborative relationships are formed is particularly germane to the future program of research.

### 3.2.4 Antecedents of interorganizational trust

The literature shows attention to many different antecedents of trust within the interorganizational domain, representing both the interpersonal and the organizational aspects. At the interpersonal level, factors such as similarity, proximity and prior history are all common antecedents. Good communication is another variable noted in several articles reviewed for this report. Factors such as fairness were framed in terms of both the individual level as well as at the organizational level in terms of procedural and distributive justice. One interesting factor noted in the literature that does not seem to have received attention in other trust domains is the expectation of continuity (Poppo et al., 2008, p. 40). Research showed that expectations of continuity may play a critical role in interorganizational trust because this expectation promotes the positive relationship between prior history and trust. The issue of power and how power is used in relationships also emerged (e.g., Davenport et al., 2004). The literature reviewed also showed that trust can be based on both direct and personal experience, as well as being accorded presumptively. It is also possible to trust another person or organization based purely on its long established reputation of dealing fairly and with integrity with other partners. The roles of direct and personal experience and category-based expectations are both evident in the interorganizational trust literature, and both are given key roles in the emergence of trust.

### 3.2.5 Trust and performance

Of course, optimized performance is often argued to be one of the reasons that trust within any context is critical. However, a number of theorists and researchers in the reports reviewed did point out that the assumption that high levels of trust will inevitably lead to high levels of performance is not definitively or consistently established. While there is evidence that interorganizational trust generally has positive impacts on the performance of an organizational alliance (e.g., Nielsen, 2004), there is also evidence that it is not essential. Janowicz-Panjaitan and Krishnan (2009) argued that alliances can continue productively even after trust has been violated and cannot be repaired by the use of legalistic measures which decrease the likelihood of future violations. Krishnan et al. (2006) found that the positive relationship between interorganizational trust and alliance performance was lost when the environment was very unpredictable. These findings suggest that although there is a common assumption that trust will significantly aid collaborative relationships, this is not necessarily the case. The boundary conditions of this effect will need to be more clearly elaborated within this domain.

### 3.2.6 Trust violations and repair

Within the articles reviewed for this report, there is considerable evidence of interest in managing trust violations and trust repair. This theme is indicated in articles by Dirks, Lewicki and Zaheer, (2007) and Janowicz-Panjaitan and Krishnan (2009). Both of these articles address repair efforts at both the interpersonal and broader systemic levels when trust violations occur. Dirks et al. (2007) emphasize that different processes will be necessary depending on the nature of the violation. For example, at the more social level, transgressions of trust require alterations of one's attributions and working to restore social equilibrium through apologies or penance. Violations at the broader systems level require more structural approaches to trust repair, including legalistic remedies and the introduction of control mechanisms. These themes are also addressed in the Janowicz-Panjaitan and Krishnan (2009) with additional factors such as the level at which the violation occurred (i.e., operating or strategic) also considered. These researchers argue that when legalistic remedies are the only option, trust simply cannot necessarily be repaired in most cases. Given the nature of

collaboration, better understanding how trust at the interorganizational level can be affected by perceived violations, this will hopefully be an area of further elaboration and development in the future.

### **3.2.7 Measures and methodologies**

Unfortunately, our review suggests few novel approaches to measuring trust at the interorganizational level. The measures that were available in the reports represented a mixture of interpersonal and organizational trust measures, often using measures derived from previous research (e.g., Bruneel et al., 2007). Unfortunately, there was little evidence of concerted effort to validate any of the measures used in the research reviewed. There are also criticisms in the literature of measurement efforts in this domain. Janowicz and Noorderhaven (2006) noted that there are inconsistencies within some research when the actual operationalizations of trust do not match the concepts being advanced.

Our review also showed a number of different methodologies used to investigate interorganizational trust. The most common approach was the case study, and these studies tended to combine interviews with key informants with questionnaire measures of trust dynamics within these contexts. A particularly notable methodological approach by Faem et al. (2008) involved a detailed exploration of trust both between alliance partners and using multiple perspectives from within the organizations. This approach (and particularly the mapping of the progression of the alliance from a trust perspective) provided compelling examples of how alliances can break down once trust starts to wane.

### **3.2.8 Conclusion**

On one hand, the lack of well-developed models of interorganizational trust in the literature is somewhat discouraging. On the other hand, this area of research is clearly being given a good amount of attention, and there is very good potential for a motivated researcher with a systematic approach to model development and validation to make a significant contribution to this area. To this point, much of the attention has been given by researchers and theorists from business/management domains. This, of course, was initially the case for research about other forms of trust. However, as the interpersonal trust research area has matured, a broader range of researchers have begun to use more strictly controlled experimental designs to better understand trust dynamics within that domain (e.g., Stouten, De Cremer, van Dijk, 2006). Hopefully, the same migration is underway for interorganizational trust research as well.



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(U) The Canadian government has sought a coherent strategy and policy for missions that rely on the integration and coordination of multiple government agencies so that national goals in international operations can be effectively achieved. Likewise, the recent Canadian Forces (CF) Joint Doctrine Manual (2009) explicitly called for a whole-of-government approach to operations. To this end, DRDC Toronto has recently begun an Applied Research Program (ARP) exploring the psychological dynamics of trust in the interagency domain, with the intent to develop a conceptual model. This report is in support of these efforts.

This report reviewed current interorganizational trust models, in particular those that would be relevant in a Joint, Interagency, Multinational, and Public (JIMP) context. Effort was made to find articles which were relevant to the Canadian military context; however, these articles were scarce, with most research performed in a business context. Approximately 30 primary articles identified in the search were selected and reviewed in detail.

Challenges uncovered in this review included a lack of relevant research and models related to interorganizational trust, lack of empirical testing of models and the varying quality of the research that could be retrieved. Emerging themes including the importance of the level of analysis, the components, process and antecedents are discussed. The relationship between trust and performance, and the growing attention to trust violations and repair as well as measures of interorganizational trust are also explored.

(U) Le gouvernement du Canada a demandé que l'on élabore une stratégie et une politique cohérentes pour toute mission qui nécessite l'intégration et la coordination de multiples ministères et organismes du gouvernement, afin que l'on puisse accomplir efficacement les objectifs nationaux dans les opérations internationales. Dans le même ordre d'idées, le récent Manuel de doctrine interarmées des Forces canadiennes (2009) a explicitement demandé que l'on utilise une approche pangouvernementale pour les opérations. À cette fin, RDDC Toronto a récemment commencé un programme de recherche appliquée (PRA) qui étudie la dynamique psychologique de la confiance dans le domaine interorganisationnel, dans le but d'élaborer un modèle conceptuel. Le présent rapport appuie ces travaux de recherche.

Le rapport passe en revue les modèles actuels de confiance interorganisationnels, plus particulièrement ceux qui pourraient être utiles dans le cadre interarmées, interorganisationnel, multinational et public (IIMP). On s'est efforcé de trouver des articles pertinents au contexte des Forces canadiennes (FC); cependant, de tels articles sont rares, car la plupart des recherches ont été effectuées dans un contexte commercial. Environ 30 des principaux articles déterminés par les recherches ont été choisis et examinés en profondeur. Cet examen a permis de relever un certain nombre de difficultés, notamment le manque de recherches et de modèles pertinents sur la confiance interorganisationnelle, le manque de vérifications empiriques des modèles et la qualité variable des recherches que l'on pourrait utiliser. Le rapport relève aussi les thèmes prédominants, notamment l'importance du niveau d'analyse, les composantes, le processus et les antécédents. Il aborde en outre les relations entre la confiance et le rendement, ainsi que l'attention croissante accordée à l'abus et à la restauration de la confiance ainsi qu'aux critères de mesure de la confiance interorganisationnelle.

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(U) trust; interagency; JIMP; Canadian Forces; trust violations; trust repair;  
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