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Relationship Atmosphere: Behind the smoke-screen

ABSTRACT

Supplier-Customer relationships, considered as veritable sites of investment by the marketing firm, evolve over time to condition the position of the firm in its market, providing its strategic identity. This evolution is strongly influenced by less tangible elements intrinsically linked to exchanges taking place over time: the relationship "atmosphere", often discussed in the literature relative to its constituent elements conceptualised using such constructs as trust, cooperation/conflict, power/dependency etc.

The "atmosphere" dimension of the relationship is considered as essential in both understanding and, ultimately, managing relationships effectively.

A first paper examined some of the underlying concepts relative to relationship atmosphere, evaluating the validity of the atmosphere scale using confirmatory factor analysis techniques, thus attempting first of all to answer some preliminary questions as to its real nature.

To do so, it made use of a data base comprising characteristics of over a hundred international supplier-customer relationships across five national boundaries. The data base, the result of the IMP2 project performed in the 1990's, included on the one hand a section of attitude statements relative to perceptions by respondents – both suppliers and customers - of relationship atmosphere, and on the other hand sections investigating both the profiles of the supplier and customer firms in interaction, and the exchange processes between them.

Preliminary findings suggested the existence of, rather than the model expected, one composed of six first-order factors, four of which combined to generate a second-order factor which we labelled relationship "Transparency".

This paper builds on the previous work, in particular with the use of an expanded data base, comprising a total of more than 300 interviews, including interviews from the Asia-Pacific region. Focus of analysis is on confirming and refining previous findings, and at the same time exploring the data base from a cultural similarity/difference perspective.

Authors :

Gilles ROEHRICH,

Marketing Department, ESA, University Pierre Mendès France, Grenoble, FRANCE

Robert SPENCER,

Department of Marketing, Groupe ESC Dijon Bourgogne, FRANCE

1. Marketing, Relationships and Atmosphere

Previous work by the authors of this paper discussed the progressive shift of research focus from debate on the relevance and importance of relationships in marketing, to the effective management of them, and to associated value issues. Central to this research is the idea of “good” and “bad” relationships, the identification and management of which [1], with a view to generating value, represent a veritable optimisation of marketing investments by the firm. These questions have not remained totally without answers. Work by various authors on such issues as customer portfolio management [2], Key customer account management [3] [4], supplier-customer relationship handling management and relationship “risk” management [5] have led to guidelines and in some cases management methods derived from the body of developing theory.

This shift includes consideration of one of the major dimensions of relationships: relationship atmosphere, which, though less “tangible” than other dimensions, is considered to be critical to optimisation of potential.

1.1 Conceptualisation and Influence of Relationship Atmosphere

The Interaction approach proposed by the IMP Group, upon which this paper is focussed, using data generated in one of the major IMP research projects, presents originally a model [6] comprising the actors in interaction (supplier and customer), short term exchange episodes (product /service, information, economic, social etc.), a long-term relationship dimension, a relationship atmosphere element, and an element “environment of the relationship”. The various base elements to the model are seen as interdependent variables, each conditioning the others, and thus conditioning at the same time the overall outcome of relationship development, or the “shape” the relationship takes over time. Thus the type and frequency of product exchange will condition the atmosphere of the relationship, which will in turn condition the development of the relationship (patterns of future exchanges of different kinds), which will in turn, for example, condition (and be conditioned by) strategies of the actors in interaction.

Central to the debate here are underlying concepts such as power /dependency, trust, co-operation etc. all tied in with the “ Atmosphere ” element in the model. Several authors stress the necessity for a better understanding of relationship atmosphere. Some work focuses on the very nature of the atmosphere and the relationship between underlying relationship atmosphere concepts. Other work, more rare [7], adopts more specifically a “ So what ? ” attitude. In other words, what correlation if any between relationship atmosphere dimensions and relationship development and value? And what consequences from a managerial point of view ?

1.2 Relationship atmosphere and management and performance issues.

The study of relationship atmosphere and its component parts takes on a particular interest from a managerial perspective when associated with factors relative to the performance of the firm, and the firm’s position in the market in general.

Fundamentals would have it that relationship atmosphere strongly conditions the future of the relationship, that co-operation is a key issue in developing “ good ” relationships, and that good relationships are synonymous with greater economic exchange and higher profitability for both supplier and customer. Likewise, for example, trust is projected as being a necessity for full relationship potential to be achieved, and power/dependency issues will play a primary role in relationship development processes. More specifically power can be seen as being more or less equally shared or “ balanced ” between trading partners, or else in a state of imbalance. In the former case favourable relationship development would occur more smoothly between the two parties, each being able to influence the process ; The latter case can have productive or non-productive consequences in terms of relationship

development, depending on each party's willingness to accept or exploit their position. Fruits of relationship development will likewise be distributed accordingly.

Performance of the firm is not limited, however, to short term economic considerations alone. Thus the benefits to be had from "good" as compared to "bad" relationships extend to include better information and knowledge acquisition, access to leading-edge product or process technology, resource pooling and risk sharing, access to other markets, market reference value of certain customers or suppliers, and so on. One question, then, lies in the debate as to the extent to which each of these performance dimensions are perceived in fact as being important, and the extent to which relationships, and here more specifically, relationship atmosphere, impacts on these performance factors.

More specifically in this area several authors have made noteworthy contributions. In particular Holm and Johanson [8] and Holm, Eriksson and Johanson [9]. Although focusing ultimately on "network connection" issues (associated business relationships and their effects on a given focal relationship), they postulate that network connections affect levels of commitment in relationships, and that commitment directly affects relationship profitability. Their basic hypotheses suggest that through interaction over time a learning process occurs, commitments are made by the firm, and a subsequent understanding regarding co-ordination of activities [10] develops, and trust [11] is established (or not) along with strong commitment to the continuity of the relationship. At the same time - assuming a positive evolution of the relationship - co-operation creates interdependence, whilst creating additional value from joint productivity [12], joint product development etc.

Holm, Eriksson and Johanson [9] (p.3) emphasise, however, that the development process is "by no means deterministic; the dyadic relationship is only developed if both parties consider it profitable or otherwise worthwhile to engage in future exchange". They also highlight the informal nature of business relationships and the fact that "uncertainty and possible opportunism are better handled through mutual understanding that is (itself) based on past experience of interaction and expectation of future change [9] (p.3), and Axelrod, [13].

At the heart of this co-operative vision of supplier-customer relationships is the idea of "mutual understanding in co-ordinating exchange activities in the relationship (Holm, Eriksson and Johanson [9] (p 5). This is contrasted with "trust", seen as a central construct reflecting the affective dimension of the supplier-customer relationship [14].

1.3 Relationship atmosphere: a Universal Concept?

Perhaps surprisingly - especially in these times of rampant globalisation and cross-cultural exchange - precious little direct attention, and certainly not analysis of a quantitative nature, would seem to have been paid to the universality or otherwise of the relationship atmosphere concept and its component constructs. At best, work seems to focus - at a qualitative and conceptual level essentially - on the broad issue of cultural differences, and specificities of certain country or regional cultural characteristics [15, 16] This work often also remains rather generic in nature, and does not deal specifically with the relationship atmosphere issue.

And yet the potential consequences of non-universality are obviously tremendous in terms of the management and development of international inter-firm relationships.

The IMP2 research programme and resultant data base comprises a strong international orientation, explicitly examining supplier-customer relationships across international boundaries (see method and data base description below). It would seem appropriate then to attempt integrate into this analysis an inter-cultural dimension. Given the relatively limited size of individual "country" data sets, the decision was made to group together data of "European" origin on the one hand, and "Asian" on the other, to enable more meaningful statistical analysis to be performed, whilst at the same time, of course, being aware of the

possible risks involved in assuming that Asian and European data sub-sets can be “grouped together” .

1.4 Follow-up to promising preliminary analysis

A first paper examined some of the underlying concepts relative to relationship atmosphere, evaluating the validity of the atmosphere scale using confirmatory factor analysis techniques, thus attempting first of all to answer some preliminary questions as to its real nature.

To do so , it made use of a data base comprising characteristics of over a hundred international supplier-customer relationships across five national boundaries. The data base, the result of the IMP2 project performed in the 1990's, included on the one hand a section of attitude statements relative to perceptions by respondents – both suppliers and customers - of relationship atmosphere, and on the other hand sections investigating both the profiles of the supplier and customer firms in interaction, and the exchange processes between them.

1.5 Method and conceptual framework

The empirical data used in this survey is extracted from the data base resulting from the IMP2 research programme used in the preliminary analysis mentioned earlier .The initial data base comprised interviews with knowledgeable managers concerning relationships between suppliers-customer couples in and between various different countries (France, United Kingdom, Italy, Germany, Holland, and Sweden). In all a total of 230 relationships are involved, and each questionnaire comprises several sections: general information on the companies in interaction, the context of exchange processes taking place, then “network” context, and one specific section composed of attitude statements, intended to measure dimensions of relationship atmosphere.

The dimensions of atmosphere identified à priori, in line with the literature and with the IMP model in particular are:

1. Power/dependency (Power balance)
2. Co-operation/competitiveness
3. Trust/opportunism
4. Commitment/non-commitment
5. Understanding/misunderstanding
6. Closeness/distance

with each of the above dimensions lying along a continuum.

This original data base has been completed with a second file of data provided by the IMP2 Asia study ¹.

Preliminary findings suggested the existence of, rather than the model expected, one composed of six first-order factors, four of which combined to generate a second-order factor which we labelled relationship “Transparency”. A summary of results is provided in Appendices 1 and 2.

¹ The IMP Asia study, run by Ian Wilkinson, University of NSW, and Louise Young, UTS, Australia, used identical method as the IMP2 project to collect complementary data in the Asia Pacific area. It is thanks to this data and the academics concerned that this paper is possible.

This paper takes the process a stage further. It focuses on the issues relative to the conceptualisation of relationship atmosphere, on the one hand, and the cultural issues. This is seen as a pre-requisite upon which to base further work which will use other categories of data from the data base regarding relationship development, potential and value.

2. RESULTS

Our first objective was that of checking,, on the Asian data, the model obtained with the European data. If this did not validate, the full set of data would be run again, with a view to identifying a structure which was relatively stable across the entire database (Europe plus Asia).

2.1. Preparation of the “ Asia ” file

So as to be able to compare the data, the same treatment was performed as on the European data : elimination of one question which demonstrated missing data for Europe, and standardisation of the variables per country.

The Asia File finally used comprised 200 cases : 100 Chinese and 100 Thai questionnaires. The subsequent analyses were performed using this file.

2.2. Test of the European model on the Asian data

As the approach used here is confirmatory, confirmatory factor analysis was applied directly to obtain the results. Table 1 shows the indices for fit of the European model on the Asian data.

Coefficient	Value	Minimum	Maximum
RMSEA	.0738 (.0313)*	.0511 (.00)	.0964 (.0609)
Γ	.943 (.994)	.966 (.976)	.983 (1.0)
Γ fit.	.886 (.987)	.932 (.952)	.967 (1.0)
GFI	.936 (.96)	-	-
AGFI	.873 (.93)	-	-
$\chi^2 = 83.43$ with 39 df , $p < .000$ (46.63 with 39 df, $p < .187$)			-

* Indications in brackets refer to the European results

Table 1 : Goodness of fit “ European model ”

The above indices are very good and a good fit of the model with the data can be concluded. However, it must be noted that the indices for the European data are better than those for the Asian data. The Asian indices are sufficiently good, however, to proceed to check that the structure per dimension, and the relationships between the factors, are also stable. Table 2 shows the internal structure of each dimension of the scale. Analysis of the table highlights the fact that the Asian structure is not as good as the European structure. Indeed, out of 10 items making up the scale six demonstrated loadings below 0.7 suggesting low convergent validity with the concept. To check that the differences observed were not due merely to

chance, we tested a model where the parameters were equal to the European ones. The goodness of fit indices indicated a clear deterioration in the fit of the data to the theoretical model, showing that the “Asian” loadings are not equal to the “European” ones.

Finally, calculation of the indices of internal coherence per dimension gives fairly weak results : $\rho_{\text{cooperation}} = .31$, $\rho_{\text{trust}} = .46$, $\rho_{\text{understanding}} = .27$, $\rho_{\text{commitment}} = .59$, $\rho_{\text{lack of understanding}} = .48$, $\rho_{\text{problems}} = .65$

	F1	F2	F3	F4	F5	F6
Necessary technical or commercial information is easily obtainable from this customer	.44 (.71)					
We cooperate closely with this customer	.65 (.75)					
We feel we can trust this customer completely		.79 (.81)				
We have full confidence in the information provided to us from this customer		.55 (.70)				
Misunderstandings between our two companies are quite rare			.37 (.76)			
The customer’s motives are generally clear to us			.63 (.71)			
This customer is committed to a long term relationship with us				.70 (.75)		
We are strongly committed to this customer				.83 (.76)		
It is often difficult to understand the customer’s behavior and way of thinking					.31 (.73)	
It is difficult to understand the customer way of doing business					.93 (.62)	
Lack of cooperation has caused problems in our relationship						1.0 (.88)
Unsatisfactory performance (e.g. late deliveries, delayed payment) has caused problems in our relationship						.553 (.56)

* Indications in brackets refer to the European results

Table 2:Factorial Structure of the scale

Lastly, table 3 shows the structure of the correlations obtained between the various dimensions of the scale.

	Cooperation	Trust	Understanding	Commitment	Distance
Cooperation	1				
Trust	.77 (.72)*	1			
Understanding	1.0 (.57)	.84 (.67)	1		
Commitment	.64 (.67)	.34 (.38)	.59 (.28)	1	
Distance	-.01 (-.70)	-.37 (-.74)	-.38 (-.74)	-.17 (-.43)	1
Competition	.14 (-.41)	.03 (-.42)	-.01 (-.60)	.06 (-.04)	.30 (.53)

* Values in brackets refer to the European results

Table 3: Correlations between the dimensions of the scale

Considerable distortions quite clearly appear between the European and Asian data. Certain correlation coefficients demonstrate quite different values from one sample to the other (“distance – trust” for example) ; others are simply opposite in value (“competition - cooperation”, for example). The overall set of results shows quite clearly that the structure obtained with the European data did not suit the Asian data. Consequently the full analysis was performed again from scratch with a view to finding a universal structure which suits the data from both continents. The results obtained are presented below.

2.3. Search for a common structure

The objective here is to attempt to find an internal structure of the relationship atmosphere scale capable of being observed both on the European data and the Asian data. To meet this objective, the following procedure was adopted : firstly, all observations were used, both European and Asian, in the search for an optimal “world” structure. The structure was subsequently tested on each of the two sub samples : Asia and Europe. Successive iterations were then performed ² so as to obtain the most stable structure possible over the three files : world, Asia and Europe. From a statistical viewpoint, two stages were involved : ‘(1) exploratory principal component analysis, intended to suggest an initial structure, and (2) confirmatory factor analysis enabling the purest structure to be obtained.

² The EQS software (Bentler 1998) performs these operations automatically. As this was not available at the time of the analysis, this was done using the SEPATH software (Steiger, 1997) from the STATISTICA programme.

2.3.1. Goodness of fit of the models

Table 4 shows the goodness of fit indices obtained for the three files. The set of parameters displayed shows that the three models are highly compatible with the data. It can be noted that the Asian model is not quite as good as the other two, but it nonetheless remains excellent.

Coefficient	World	Europe	Asia
RMSEA	.035 (.044 - .052)*	.039 (.022 - .054)	.062 (.049 - .076)
Γ	.973 (.962 - .983)	.978 (.960 - .993)	.947 (.926 - .966)
Γ fit.	.959 (.943 - .974)	.967 (.940 - .990)	.920 (.889 - .948)
GFI	.940	.913	.886
AGFI	.909	.869	.828

* Indications in brackets refer to the minimum and maximum values of the index

Table 4 : Main goodness of fit indices

2.3.2. Presentation of the structure

The final factorial structure is given in table 5. It can be immediately seen that most of the loadings are way below 0.70. Indeed, the choice made was that of identifying a stable factorial structure, without necessarily looking for the quality of a measurement scale. All items displaying loadings different to 0 were thus selected.

	World	Europe	Asia
Easy relation			
24. We like dealing with this customer	597	638	550
25. We are satisfied with the level of attention we receive from this customer	599	492*	697*
27. It is easy to agree about how to handle the various issues that arise in this relationship	710	693	726
28. Misunderstandings between our two companies are quite rare	618	643	601
31. Agreements on contracts terms are usually reached easily	589	574	620
Dependence			
01. Considering everything, we actually have no alternatives to this relationship	616	593	745
10. It would be very difficult for us to find a replacement for this customer	700	696	604
Power			
04. We are more important to this customer than he is for us	880	656	870
06. We have the upper hand in this relationship	501	698	488
Distance			
38. It is often difficult to understand the customer's behaviour and ways of thinking	726	705	657
41. It is difficult to make friends with purchasers and technicians in this firm	538	439*	717*
Commitment			
45. This customer is committed to a long term relationship with us	714	585*	796*
46. We are strongly committed to this customer	811	981*	734*
Problems			
11. Lack of cooperation has caused problems in our relationship	840	801	850
12. Unsatisfactory performance (eg late deliveries, delayed payment) has caused problems in our relationship	625	621	651
Social relationship			
34. We usually make an effort to establish personal contacts with people in the customer's company	579	427*	673*
35. We have excellent personal relations on a social level with people from the customer	785	845	813
Trust			
19. We have full confidence in the information provided to us from this customer	687	649	790
22. We are convinced that this customer can handle confidential information from us	585	581	540
Mutual interest			
47. We would not supply an other customer at the expense of this current customer	576	487	644
48. We consider the exchange of this product to be a part of a wider relationship with this customer	505	434	574

* Coefficients statistically different from one another

Table 5 : Cross cultural factorial structure of the relationship atmosphere scale.

This structure comprises nine factors, for 21 items. Each of the factors identified corresponds to a dimension, conceptualized by the IMP2 researchers, and the items making up each factor belong to those initially designed to measure each dimension in question. Empirical validation of the initial conceptual approach is thus obtained. Whilst the factorial structure is stable overall from one continent to the other, however, the weight of each item can vary, and often by a substantial amount. A series of multi-group models was used so as to test for equal weight of each item. For each model the loadings of an item were assumed to be equal. The goodness of fit of the model was then compared to that of a completely free model. If the difference in χ^2 was statistically significant, with 1 degree of freedom, the coefficients can be considered as being different. As shown in table 5, coefficients are different for only five items out of 21

- three of these, items 25, 41 and 34, refer to inter-individual relationships. In each case, the weight of the item is greater for Asia than for Europe.

- the two other items, items 45 and 46, former the "commitment" dimension. For Asia, the weight is greater for item 45 (strong commitment by the customer), whilst for Europe the weight of item 46 is greater (strong commitment by the supplier). The above elements thus argue for the fact that Europeans and Asians have a perception of relationship atmosphere which is more or less equivalent. This general statement, however, must be nuanced by noting the greater attention paid by Asians to inter-personal relationships and the relative weight they allow to commitment by the customer in the relationship..

2.3.2. Analysis of the structure of inter- factorial correlations

Table 6 provides the correlations observed, between dimensions of relationship atmosphere, For the European and for the Asian data. To test the quality of the correlations a series of models were tested each stipulating the equality of the coefficients of a cell. The difference in χ^2 values for each of these models with that of χ^2 for the free model allows the quality of the coefficients concerned to be tested.

Of the 36 pairs of coefficients presented, only seven are made up of coefficients different to each other. In five cases out of seven (easy relation – trust, trust - mutual interest, distance – trust, easy relation – distance) the correlations have the same sign, positive or negative, but very different values. Correlations have opposite values in only three cases : easy relation – problems, problems – trust, easy relation – dependence.

The first group of coefficients is made up of positive coefficients for European and Asians alike. It comprises two sub groups : (1) the relationships between the variables such as "easy relation", "trust", "mutual interest", "commitment", "social relation" and "dependence". There are only slight differences between the Europeans and the Asians on these correlations. (2) The relationships between variables such as "distance", "problems" "power". Here again, the coefficients are quite close between Europeans and Asians.

Relationship	Europe	Asia	Relationship	Europe	Asia
Easy relation - Trust	.86*	.37*	Distance - Trust	-.92*	-.44*
Trust - Mutual interest	.76*	.26*	Easy relation - Distance	-.83*	-.35*
Commitment – Mutual interest	.52	.72	Distance - Commitment	-.31	-.31
Social relation - Mutual interest	.50	.60	Distance - Social relations	-.26	-.28
Easy relation - Mutual interest	.41	.37	Distance - Mutual interest	-.26	-.21
Commitment – Confidence	.38	.33			
Commitment – Social relations	.24	.47	Problems – Mutual interest	NS	-.22
Easy relation - Social relations	.22	.33	Dependence - Problems	.30	NS
Social relation - Trust	.30	.29			
Easy relation - Commitment	(.16)	.33	Easy relation - Power	NS	(-.11)
Dependence - Mutual inter.	.55	.54	Dependence - Power	NS	NS
Dependence - Commitment	.28	.43	Dependence - Distance	NS	NS
Dependence - Social rel.	.21	.27	Power - Commitment	NS	NS
Dependence - Trust	(.16)	.39	Power - Social relations	NS	NS
			Power - Trust	NS	NS
Distance - Problems	.56	.35	Power - Mutual interest	NS	NS
Power - Problems	(.16)	.39	Commitment – Problems	NS	NS
Power - Distance	(.13)	.21	Problems – Social relations	NS	NS
Easy relation - Problems	-.66*	.29*			
Problems – Trust	-.34*	.20*			
Easy relation - Dependence	(-.17)*	.52*			

Values in brackets are not statistically different from 0 at the .05 level but at the .10 level. They are still presented for the purposes of information.

*Coefficients statistically different at the .05 level. For example, correlations between “ Easy relation and Distance ” are different for the European (-.83) and Asian (-.35) samples.

Table 6 : Inter-correlations of relationship atmosphere dimensions

The second set of coefficients assembles those which are both negative. They concern relationships between the “distance” dimension and the “easy relation”, “trust”, “commitment”, “social relations” and “mutual interest” dimensions. It appears, then, that the main obstacle to setting up a good relationship atmosphere is the distance between actors. Note that this distance is often linked to the fact of problems appearing.

Finally, one last group of coefficients, mainly related to the “power” dimension, are not considered to be different to zero. This configuration can be observed on each of the two samples

Discussion

The analysis performed above has enabled a nine-dimensional structure of the notion of relationship atmosphere to be revealed. Whether it be for the sample of Asian, or European, respondents, the structure demonstrates good stability. A few occasional differences can nonetheless be observed, indicating that Asians lend more importance to the fact of obtaining a position of strength in the “supplier- customer” relationship

A study of the inter-dimensional correlations also allows us to note good stability of the coefficients. However, certain differences in correlations bring cultural differences into the balance :

1. Europeans seem to give more weight to the notion of mutual trust than Asians ;
2. Asians seem to consider that relationships are all the more easy if the customer depends on the supplier, or the supplier is in a position of strength in the relationship. This is not the case for Europeans ;
3. Europeans seem to be more sensitive to the negative effects of “distance” than Asians.

All of these results converge to suggest that Asians give great importance to the fact of obtaining a position of strength in the relationship. This condition, for them, is the guarantee of an easy relationship, with effective reciprocal commitment, and thus satisfaction of both parties' interests.

For Europeans, the configuration is somewhat different : the key issue seems to be, for them, the setting up of a trusting relationship, where the two parties jointly attain their objectives.

Limits of the analysis

These results have been obtained by an a priori division of the sample into two sub-samples : European and Asian.

Whilst the fact of this division may be justified by the work of numerous authors relative to the history, the culture, the sociology, and the comparative psychology of these two types of populations, it should really be validated by the data itself. Unfortunately the size of the samples in each country (100 observations for China, 100 for Thailand, 83 for France, and 63 for Germany) is insufficient to allow more serious analysis.

Likewise, analysis of the data has been performed assuming, for example, conceptual equivalence of terms used in the questionnaire, and on the basis of an original model proposed essentially for a “Western” context. Absence of phenomena or constructs specific to the “Asian” context, thus unlikely to be captured here, is also always a possibility.

Nonetheless the results provide food for thought, and a reasonable basis for further research drawing on other data from the IMP2 data base as described earlier.

Appendix 1: Preparation of the “European” data base.

The data available to deal with these questions was collected within the framework of the IMP2 project discussed earlier. The total of 230 firms were questioned on their perception of their relationship with their customers. This survey covered a total of seven countries, with questions on the atmosphere of the relationship being limited to six of these (France, Germany, Holland, Italy, Sweden, and the United Kingdom). The data collection was thus performed in different cultural contexts, and by IMP members from different backgrounds in different institutional settings. Despite maximum precautions taken by the designers of the study and by interviewers, a preliminary preparation of the data was considered necessary to cater for classical problems encountered with this type of survey.³

Firstly, certain respondents not having been subjected to the atmosphere section of the survey were, naturally, excluded from the analysis.

Secondly, certain respondents not able to answer a large number of the questions linked to atmosphere were likewise excluded from the analysis.

One specific question which generated too great a number of non-responses was also excluded from the analysis.

Finally, so as to take into account the cross-cultural nature of the study and the data collection process, responses were centred and reduced **country by country**. Cultural differences were thus smoothed out.

The resulting “European” data base used for analysis purposes thus finally numbered a total of 201 cases.

³ For more insight into some of the issues at hand here, of particular pertinence for the IMP study, see Dawson, Young and Wilkinson “Experiences in the linguistic and cultural translation of a business questionnaire into Chinese” [17]

Appendix 2- Summary of results, previous analysis on European data base, and model.

The correlations obtained between each of the dimensions of the scale were high, suggesting that these dimensions can themselves be grouped into dimensions of a higher order.

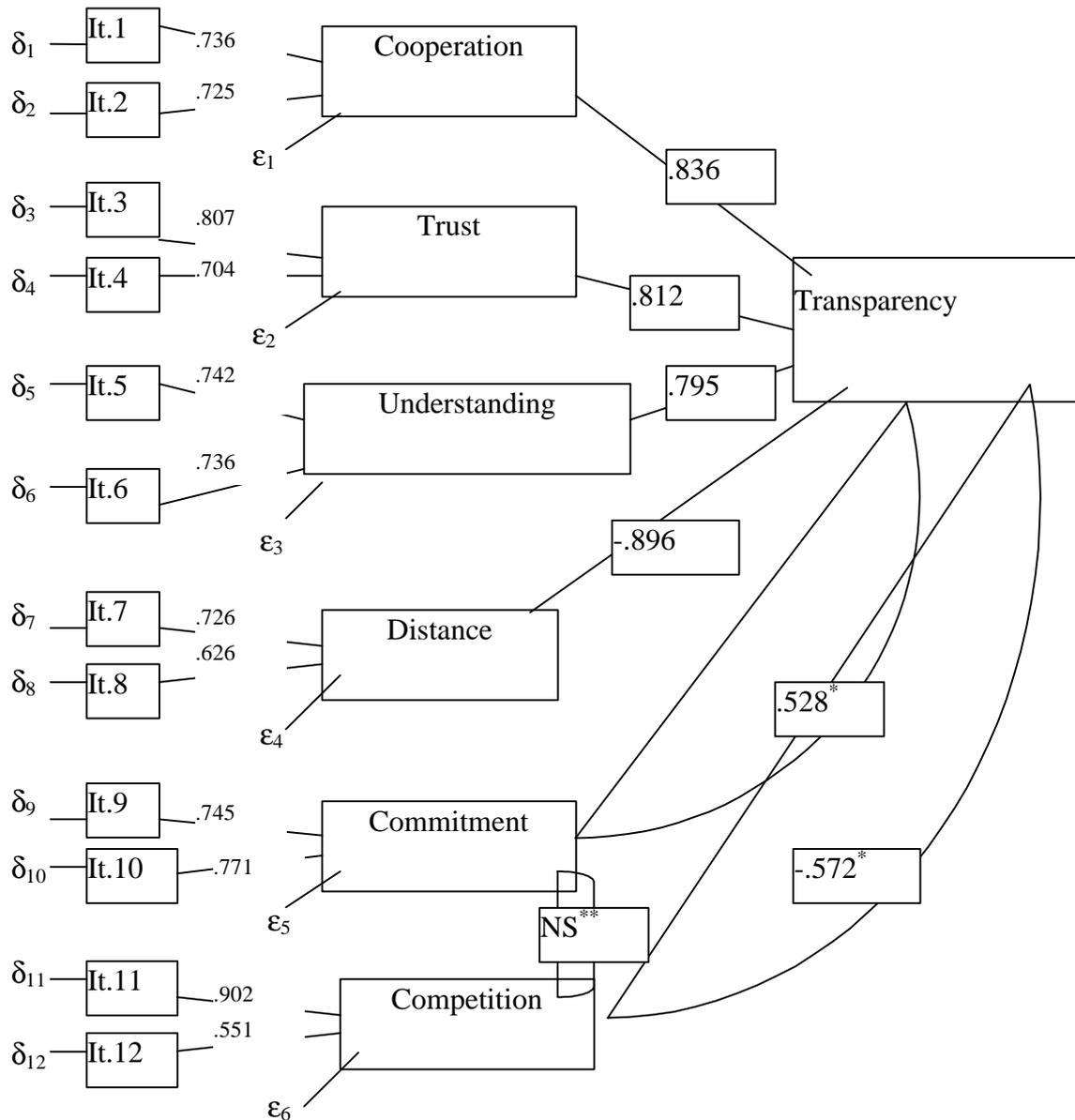
This possibility was explored, carrying out factor analysis of a second order on this structure. The model obtained, presented in fig. 1, demonstrates very good indicators of adjustment (table 5), suggesting good fit between the model and the data.

$\Gamma = .978 \in [.957 ; .994]$	$\Gamma \text{ adjusted} = .964 \in [.929 ; .990]$
GFI = .942	AGFI = .904
RMSEA = .053 \in [.027 ; .076]	$\chi^2 = 71.73$ with 47 df (p<.01)

Table 5: Quality of adjustment of the atmosphere scale's internal structure model

This model shows the following:

1. Of the 6 first order factors, 4 combine to form a second order factor. The factors in question are: COOPERATION, TRUST, UNDERSTANDING and DISTANCE. These factors form a dimension we have labelled here "TRANSPARENCY". It expresses total fluidity in the exchange of information; reciprocal trust, and a high level of closeness.
2. Neither of the two other first order factors converge towards any second order dimension. They display a correlation significantly different to 0 with the "TRANSPARENCY" dimension. This correlation is positive for the "COMMITMENT" factor, and negative for the "COMPETITION" factor.
3. These two first order factors are not correlated together.



* Located on a bilateral arrow, this coefficient is a coefficient of correlation

** Coefficient of correlation not significant

Figure 1: Internal structure of the atmosphere scale

This model suggests then that a “good” relationship atmosphere is characterised by good co-operation between the parties in interaction, associated with a high level of trust, good mutual co-operation, and absence of distance. This “good” atmosphere is linked rather to a high level of reciprocal commitment, and a low tendency towards competition between the interacting parties.

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