

Stress in Business Relationships

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ABSTRACT

Business relationships are constantly in potential change meaning that their strength may vary over time. One of the causes of change comes from incidents that deviate in a positive or negative way from the expected and normal relationship pattern. In this paper we introduce the concept of stress in business relationships which captures the effect of negative exceptional incidents, and present a technique, the Negative Critical Incident Mapping (NCIM), for measuring this kind of stress in business relationships. Besides exploring aspects constituting and increasing the strength of relationships, investigations should also be made into aspects decreasing their strength. Relationship stress is defined as the perceived cumulative effects of negative experiences in the business relationship. In this study stress is considered as one type of risk factor affecting the strength of the relationship.

In a business relationship the buyer's and the seller's organisations are connected to each other on many levels. There are a number of relationships within the relationship. The technique proposed in this paper can, however, be used to reveal also internal differences in each counterpart's perception of the relationship. Findings from using the NCIM technique in an industrial service and a business service setting are used to measure and illustrate stress in a dyadic manner. The results show that not only were all studied relationships burdened with stress to varying extent but there were also substantial differences in degree and content of stress. This means that relationships can have similar total stress value, but fundamentally different sources of stress. When seller-buyer pairs of stress perceptions were matched on different levels findings showed that operator-level perceptions of stress in the relationships corresponded better than manager-level perceptions. In conclusion the findings indicated that in the buyer's view stress is related to relationship satisfaction, yet the seller did not seem to recognise this.

Key words: business relationships, relationship stress, relationship strength, negative critical incidents, NCIM-technique

INTRODUCTION

This study gives attention to risk factors in a relationship. One such negative force that moderates the strength of a relationship is what we in this study introduce and label stress. In this paper a risk factor and negative force in relationships correspond to risk of a weakening of the relationship. Relationship stress is defined as the perceived cumulative effects of negative experiences in the business relationship. Negative incidents and problems accumulating in the relationship are the source of stress because they cause tension in the relationship and potentially affect its stability. The purposes of the paper are to introduce the relationship stress concept, to present a technique for measuring and analysing it, and to explore its value by applying the technique to two empirical studies.

Focusing on risk factors in relationships, the study hence aims to shed light on relationship dynamics. Justifications for introducing stress in a relationship setting are several. First, significant differences exist between relationships and this needs to be recognised. Relationship strength is one and a significant variable for identifying and distinguishing different relationship structures. Besides exploring aspects constituting and increasing the strength of relationships, investigations should also be made into aspects decreasing their strength. Stress would be one such aspect. Second, the history of the relationship is essential for how a relationship evolves. Insights into relationship history are valuable in order to understand differences in functionality between relationships and relationship future, for example, relationship ending propensity. Third, techniques to measure not only products or service aspects, but also relationships, are needed in research. Management as well calls for concrete and usable relationship information. Focusing on how relationships are burdened with stress can address this academic and managerial need. Fourth, negative aspects in

business life are often neglected in academic studies and company measurement instruments, but can be used to gain valuable insights. A risk factor to the whole relationship that is based on negative experiences and problems creating stress constitutes one such aspect.

The paper has the following structure. First a conceptual understanding of stress in business relationships is developed. For this purpose, earlier studies on relationship structures and negative aspects of relationships will be used, followed by how negative experiences of services and relationships have been investigated. Then an empirical measurement technique for measuring negative experiences in business relationships labelled NCIM (Negative Critical Incident Mapping) is put forward. One feature of this technique is the ability to expose stress in business dyads. Third, findings from using the technique in two empirical studies are used to illustrate stress in business relationships. Finally a discussion on the findings and implications for research and managers conclude the paper.

CAPTURING THE STRENGTH OF RELATIONSHIPS

The reason for introducing stress in a relationship setting is to expose and explore one kind of risk factor in a relationship that impacts its nature and structure. Stress is here seen as a hidden and tacit form of risk to the relationship which is based on experienced and exceptional situations occurring in the relationship. Other relationship concepts and measures such as value, satisfaction and quality do not have this focus but they encompass without separating, in contrast, perceptions of routine and exceptional performance. Relationship stress can thus, in addition to the aforementioned concepts, be seen as a different and partly complementary antecedent to relationship strength.

Relationship strength is often used as a synonym for commitment that is a concept that has been under scrutiny by many researchers investigating long-term relationships (for example, Dwyer et al 1987, Moorman et al 1992, Morgan and Hunt 1994, Young and Denize 1995; Patterson and Smith 2001). Other similar concepts are bonds (e.g. Johanson and Mattsson 1985), structural bonds (Wilson and Jantrania 1995) and closeness together with distance (Young and Wilkinson 1997; Nielson 1998; Homburg 1998). These concepts reflect interdependence between companies, and indicate in addition to the parties' actions and choices their willingness to maintain the relationship. Besides the attitudinal and behavioural dimensions of relational commitment, some have also included an economic dimension (for example Donaldson and O' Toole 2000) and a structural dimension (Ping 1999). Trust, mutuality, and shared goals have typically been found to be main components of relationship strength and its related concepts. Increasing relationship strength, i.e. that companies become committed to each other and create bonds, has typically been attributed to antecedents such as product and technology adaptations, investments, contractual terms, intensive communication, social pressures, and satisfaction. Following from the literature review relationship strength is in this paper regarded as a comprehensive concept which can be operationalised, in line with previous studies, as the degree of reluctance to end a relationship and to which other concepts, such as value, satisfaction, quality, commitment, trust, and bonds can be seen as antecedents (Storbacka et al 1994; Holmlund 1997).

A main impression of the literature review is that there has been a concentration on what increases relationship strength and on a retrospective analysis since most studies have aimed at describing antecedents and content of relationship strength. It is

interesting that there are no studies labelled relationship weakness, although a recent article by Good and Evans (2002) investigating relational turbulence due to decreased valuation of anticipated or existing relationship benefits labelled relationship unrest comes close. Recently studies have, nonetheless, started to call for more understanding of the less pleasant aspects of relationships. Issues investigated in these studies appear to be negative aspects such as conflicts and the handling of these, or unpleasant consequences of being involved in long-term relationships, with a third category of studies concerning negative aspects as criteria in segmenting a relationship portfolio. The conflict studies (for example, Easton and Araujo 1992; Bengtsson and Kock 1999, Welch and Wilkinson forthcoming) highlight that interdependence implies co-operation and conflict, and that therefore conflict development and management need to be included in relationship studies. Conflict is typically defined as perceptual incompatibility and opponent centred. Håkansson and Snehota (1998) in comparison have accented negative relationship aspects from long-term relationship by calling attention to burdens of relationships referring to the result of being involved in a particular relationship which companies do not usually notice until the possibility to make decisions is affected and the degree of freedom is limited. When negative aspects have been brought into relationship portfolio models the aim has usually been to identify key elements distinguishing successful vs. unsuccessful relationships (Fiocca 1982, Olsen and Ellram 1997, Leek et al 2002). Leek, Turnbull, Naudé and Ritter (2002) for example found that degrees of trust and commitment in addition to length were lower in problematic relationships.

There is a recently emerging stream of studies that deals directly with negative aspects of relationships, and thus decreasing relationship strength, by focusing on how and why relationships die and dissolve (review in Tähtinen and Halinen 2002). Within

these studies there appear to be two main groups: those examining antecedents of relationship ending, and those focusing on the actual ending process. Ping (1999) in the former category has for example found that relationship neglect, which means allowing the relationship to deteriorate and reducing social contact, may be an impacting factor. Relationship neglect appears to be directly related to relationship strength as it clearly implies an emotional exit, a weakening of the relationship without intervention by the companies.

Business-relationship ending researchers studying the termination process tend to share the following features. Commitment is typically used as a key characteristic for the nature of the relationship (for example Hocutt 1998). The first sign of a potential ending process is seen to originate in when one of the parties, usually the buyer side in the dyad, experiences dissatisfaction with an event. There is then a desire and a conscious decision to terminate the relationship. Voice (Ping 1999), i.e. complaining and complaint handling, has thus been considered a significant issue. After the unsuccessful handling of the situation a ending process follows in which both companies take part and where social interaction is of significance (for example Tähtinen 2001). Giller and Matear's (2001), and Alajoutsijärvi, Möller and Tähtinen's (2000) studies on relationship termination, for example, share these assumptions. The former study focuses on different termination strategies from a dyadic perspective and relationship characteristics such as social bonds that impact the decision to termination and the termination strategy employed. The latter study takes a communication perspective and describes dyadic termination strategies, especially for achieving 'beautiful exits'.

These studies, describing relationship ending, are the group of studies dealing with relationship-strength influence that directly relate to the present study. Relationship ending researchers have, however, not recognised the potential underlying relationship tension because of cumulative negative experiences as an aspect influencing ending. They focus on the content of an extensive process where the outcome is a deliberate finalised termination. In doing so they can be said to describe not merely the weakening but the collapse of relationship strength.

STRESS AND CRITICAL INCIDENTS IN RELATIONSHIPS

The stress concept has been used to denote the state or condition of strain and especially of intense strain and pressure to which an individual fails to make a satisfactory adaptation, and which causes physiologic tensions that may be a contributory cause of disease (Webster's Third New International Dictionary 2002).

In a business setting there is no established definition of relationship stress available. We define relationship stress as the perceived cumulative effects of negative experiences in the business relationship. In this study stress is considered as one type of risk factor affecting the strength of the relationship. Relationship risk factors would be signals of vulnerability in the relationship that on their own may be relatively harmless, but as they bubble under the surface over time they may accumulate into fatal consequences. Stress is similar to what Good and Evans (2001) suggested as one reason for relationship unrest, namely process malfunctions or ineffective flows by relationship partners. Other issues causing tension and insecurity in a relationship decreasing relationship strength are beyond the scope of the current study, especially the empirical part. Yet, it should be noted that such issues could be for example general current and future business uncertainty, strategic decisions in either of the companies, and structural aspects of the relationship. This study does in other words

not attempt to investigate what are the various factors affecting relationship strength but focuses solely on negative experiences and their effect in the relationship.

In Hausman's study (2001) stress is used with a different meaning but is directly linked to relationship strength. With stress she refers to uncertainty and even fear in connection with implementation of new technology and systems between organizations. Business will be better able to survive and grow and this kind of stressful situation better managed, she claims, when the relationship is strong. Proença and de Castro (2002) offer another definition of stress in business relationships. By studying relationship stability and short-term irregularities in a corporate banking setting they found that the causes for volume decline were various factors such as negotiation power, perceived financial risk, individual transactions, turnover of personnel, and economic situation of the customer. By stress (and noise) they refer to irregularities that impact as temporary reductions of the volume of business.

A key concept in this study bringing out a risk factor to relationships is 'critical incidents.' Critical incidents have been studied with a perceptual approach where any episode or aspect in a particular relationship that involved individuals consider to deviate from the normal and are able to recall is labelled critical. Labelling an incident as *critical* stems from when service researchers have aimed to uncover customer delight and customer dissatisfaction with especially positive and negative episodes and interactions with a service company. The encounters that the customers have been able to recall when asked about memorable situations have been labelled critical. As for methodology, a qualitative method, the Critical Incident Technique, originally developed by Flanagan (1954), has been used to study these deviating incidents. The time-perspective when studying critical incidents has recently extended from a

focused episode to a relational view on incidents and their effects (Stauss and Weinlich 1995, Roos and Strandvik 1996, Holmlund 1997, Holmlund and Strandvik 1999a, Stewart 1998, Edvardsson and Strandvik 1999, Roos 1999, Edvardsson and Strandvik 2000). Since some incidents alert perceptual and, often also, behavioural attention they can be assumed to have a larger influence on the relationship than routine incidents which have not stood out (Holmlund and Strandvik 1999a). It is this way of defining what a critical incident is that is used in this study since the focus is on accumulating experiences as the persons directly involved in the relationship recall from the relationship. Focusing on the negative critical incidents, what the present study does is to consider the accumulation of these as sources of stress moderating the strength of the relationship and therefore being directly linked to a potential termination of it.

The Nature of Relationship Stress

Compared to previous relationship dissolution studies that takes the starting point in a terminated relationship and traces processes behind, the present study starts from unexpected and deviating incidents, i.e. critical incidents, incrementally causing stress in the relationship. The relationship stress can be captured with a measure that, a particular point in time, represents previous negative experiences from working together. In a business dyad there are two parties affecting how the dyad develops and, consequently, taking into account both parties' views compared to one party's will produce a more inclusive picture. The current study therefore, in addition to examining buyers' and sellers' views of relationship stress separately, pairs this information dyadically in order to get dyadic-specific insights.

As described earlier, an incident is significant when it triggers perceptual attention or behavioural attention or both. Stress in other words arises when expectations and goals are not met. Psychological research (Taylor 1991; Ahluwalia 2002) has found a so-called negativity effect, i.e. that negative information generally elicits stronger effects than positive information. In addition to releasing stronger feelings, negative information has been found to be given more weight in decision situations, considered more intensely in memory processing, and being stored for a longer period. Backhaus and Bauer (2000) argued along the same line when they examined the relevance of critical incidents in business relationships and studied their impact on the formation of attribute and overall satisfaction. Similar to the current study, they also focused on negative incidents and found that these had a greater impact on overall satisfaction than positive incidents. Their empirically supported assumptions were that the first incident exerts the strongest impact on overall satisfaction, and that there is diminishing sensitivity with every additional incident as, with increasing number of incidents, a single incident loses some of its extraordinary character. They further found that the impact of an incident was greater on satisfaction with an attribute which had closeness to the incident than on overall satisfaction, since overall satisfaction may be compensated with satisfaction with other attributes. Positive incidents appeared to neutralise the effect of low attribute satisfaction on overall satisfaction, while negative incidents strengthened this effect. This meant that a negative incident was seen to be most critical if the satisfaction level was already low. Backhaus and Bauer (2000) also observed that critical incidents may function as a filter which influences and 'colours' perceptions of other issues in the relationship, meaning that individuals can be predisposed to view them negatively; an effect labelled halo-effect in satisfaction research.

Thus, it is natural that negative critical incidents are of significance and that they are more so than positive critical incidents. Following from this, stress in terms of negative experiences can be seen as tension in the relationship causing immediate annoyance. What however makes stress even more significant from a relationship-strength point of view is that it may also directly and incrementally strain the whole relationship as this kind of negative information is memorised by the individuals and used in decision situations, for example concerning upgrading and downgrading of the relationship.

Since stress is a perceptual phenomenon, its magnitude is a relative measure. In other words, that Person A reports significant stress does not necessarily mean the same as Person B reporting the same. Their evaluation reference points vary, and the evaluation depends on at what point in time, with regards to relationship history and future, it was made. How negative the experiences are can vary from non-existent to significant, which means that the stress level likewise varies from none to significant. With regards to relationship strength, it becomes essential to analyse different kinds of negative forces and risk factor in order to understand not only what strengthens but also what weakens and endangers the relationship. In practice, almost all relationships contain some degree of stress in terms of hassle and friction, at least occasionally. Similarly, experiencing conflicts and chaos is not completely uncommon in relationships either.

Stress does not exist as such but arises in the form and to the extent that the parties view the situation. The involved companies can experience stress in different ways, both in terms of content and magnitude. There are numerous illustrations of the significance of perceptions in a relationship-ending context. Already in 1980, Doyle,

Corstjens and Mitchell (1980) empirically found that salient perception differences existed as to why advertising agency-client relationships ended, and that this led to blaming the other party and lacking self-criticism. Grønhaug, Henjesand and Koveland (1999) have reported a situation where a business relationship faded away without one of the parties noticing because of rigid mental model capturing history instead of the present. A finding of Giller and Matear (2001) was that there were differing and even conflicting views in the two companies in the same relationship of why and how ending had occurred. Besides that different stories of the same ending can occur because it is such a sensitive subject or companies deny that certain behaviour takes place, it was highlighted that both companies can genuinely perceive the same ending differently. Studying successful vs. unsuccessful relationships, Leek, Turnbull, Naudé and Ritter (2002) also made remarks that there were inconsistencies between hard data and the managers' perceptions of these. Managers were more likely to continue holding a negative perception than a positive one, and they were more likely to anticipate problems in a smoothly running relationship than to maintain a positive attitude when problems started to occur. Tikkanen and Alajoutsijärvi (2002) have also asserted that (dis)satisfaction in business companies cannot be understood without understanding 'historic path-dependence in inter-organisational relationships', i.e. organisational memory which often preserves historical dissatisfaction and restricts business options.

NEGATIVE CRITICAL INCIDENT MAPPING (NCIM)

This paper proposes a technique, Negative Critical Incident Mapping, for measuring and analysing stress in business relationships. The name of the technique refers to the output of the quantitative phase, where incidents and dyads can be positioned in different grids or maps. The technique draws on ideas developed in Strandvik and

Friman (1998) concerning negative critical incidents in consumer relationships that have been further adapted to a business-to-business setting by Holmlund and Strandvik (1999a, 1999b).

The steps constituting the technique can be grouped into a two-phase procedure in which a qualitative and a quantitative phase are combined, followed by a managerial-action phase. *Step 1) Identification of problematic situations and events in a particular business setting.* This is achieved by gathering documentation, but foremost by interviewing involved persons on both sides of the dyads. The result is a collection of stories about problems of different kinds that have occurred or could have occurred, described in every-day language. *Step 2) Choice and description of typical critical incidents.* This refers to choosing and reducing the number of problems to be included in the quantitative phase from the large number of potential problems from the previous step. The criteria for choosing problems could be those that are considered most frequent or important. For practical reasons the stories have to be condensed to fit the questionnaire format. *Step 3) Construction of questionnaire / Data collection.* Developing scales, background variables and other variables, and planning for the data collection are next. Data can be collected by personal interviews, telephone interviews, mail, or the Internet. Since the focus is on business dyads, representatives from both sides of the dyad should participate in the study. *Step 4) Analysis of collected data.* The collected data can be analysed in different ways, but in this paper the focus is on the issue of stress. *Step 5) Interpretation of the results and decisions about action points based on the findings.* This phase is facilitated as by the fact that the incident descriptions relate to commonly occurring processes in the relationships, and that each relationship is studied separately.

The presentation of the findings from the Negative Critical Incident Mapping study is based on matching and comparing pairs of buyer and seller data and depicting the overall significance of each critical incident. Answering the questionnaire the seller was asked to assess how they think the customer perceives the incidents. Hence, the seller's own opinion about the incidents and their effects was not assessed. Instead the sellers' answers represent their understanding of the buyer's view. The key feature of the NCIM is the mapping of the criticality or problem index of the problem, and this is obtained by asking the respondents to assess each potential problem on three aspects. These represent different dimensions of how a respondent is affected by a problem, and indicate together the stress of the particular incident. One such aspect is recency, referring to when the problem last occurred, for example: never, earlier than the past 12 months, within the past 12 months, or within the past four weeks. The second aspect is frequency, which is how often an incident has occurred, for example: never, very seldom, sometimes, or very often. The third aspect concerns how negative an impact such an incident has on the operation, for example: no impact, very low impact, moderate impact, or very strong impact. Assigning these aspects numerical values, in turn, enables various quantitative analyses and comparisons. Using the above verbal criticality scales for each aspect, a suitable numerical scale could range from 1 to 4 which indicates step-wise increasing stress. This implies that an incident obtaining, for example, values of 4, 4, and 4 is assessed to have occurred very recently, to occur very often, and have a very strong impact. The problem index depicts the stress of single incidents and allows dyadic comparisons between the buyer's and the seller's point of view. This index is calculated as the mean value of the evaluations of frequency, recency, and impact for each incident. Stress can be depicted both as the overall stress perceived by each party, but also more in detail as the stress increment each incident creates.

Two Conducted Empirical Studies with the NCIM technique

In this paper we are using the above-described technique to investigate stress in relationships and refer to two empirical studies that have been conducted using the technique. The studies are summarised in Table 1.

Table 1: Characteristics of the empirical studies on stress in relationships

	Industrial service study	Business service study
<i>Matched dyads and respondents</i>	<p><i>16 dyads</i></p> <p>Seller's side: 30 respondents (account, project and service managers)</p> <p>Buyers' side: 26 respondents (technical and purchasing managers, VPs)</p>	<p><i>29 dyads</i></p> <p>Seller's side: 57 respondents (area and outlet managers)</p> <p>Buyers' side: 51 respondents (key decision makers and buyers)</p>
<i>Potential problems</i>	<p><i>63 potential problems:</i></p> <p>37 interaction-based problems</p> <p>23 seller-based problems</p> <p>8 buyer-based problems</p> <p>5 network-based problems</p>	<p><i>44 potential problems:</i></p> <p>2 basic service-based problems</p> <p>17 special service-based problems</p> <p>25 overall relationship-based problems</p>
<i>Sampling grounds</i>	Aims to cover different customer companies and relationships based on global location and relationship type	Aim to be representative of customer types, based on size, country location, type of customer company
<i>Data gathering</i>	Personal interviews conducted by seller's representatives from Human Resources department	Telephone interviews conducted by market research agency

In the first study, which was conducted in an industrial service setting, 16 dyads were studied, and in the second one that concerned business service 29 dyads. In each dyad several persons in significant strategic and operational functions in the relationship on both the seller's and the buyers' side were interviewed. Since the aim was to get truly relationship-specific and relationship-meaningful information, the objective was first to include all key persons and then assure that responses were obtained from all of them. With a few exceptions and situations where respondents could be replaced with another relationship key person, this was also possible meaning that the response rate was close to 100. In other words, each respondent makes a difference to the results

and is treated accordingly. In the first study 63 different incidents that may occur were evaluated in the quantitative phase, and in the second study 44 incidents were included. What is referred to by incidents are problems in the relationships of the processual or structural character. Since the two studies cover completely different business situations, the incidents and incident categories are different. In both studies the aim was to obtain diversity in relationship types, representing different customer categories, not especially problematic or problem-free relationships. Data gathering was in the industrial service study carried out with interviews by the company's own representatives not involved in daily business with customers but closely located to customer companies, whereas a market research agency was employed to conduct telephone interviews in the business service study.

The findings from these studies will in the following be used to illustrate stress in business relationships. The data can be used in different types of analyses of which several will be shown in the following. Since different organizational levels in the organisations have been included, it is possible to compare stress on these levels.

The problem indexes of individual incidents can be illustrated in a Problem Index Grid, Figure 1, which depicts matched sets of buyer-seller pairs in the same figure. This way of matching two parties' perceptions and depicting the views simultaneously in a so-called configuration map was developed earlier for studying business relationships (Holmlund and Strandvik 1999b).

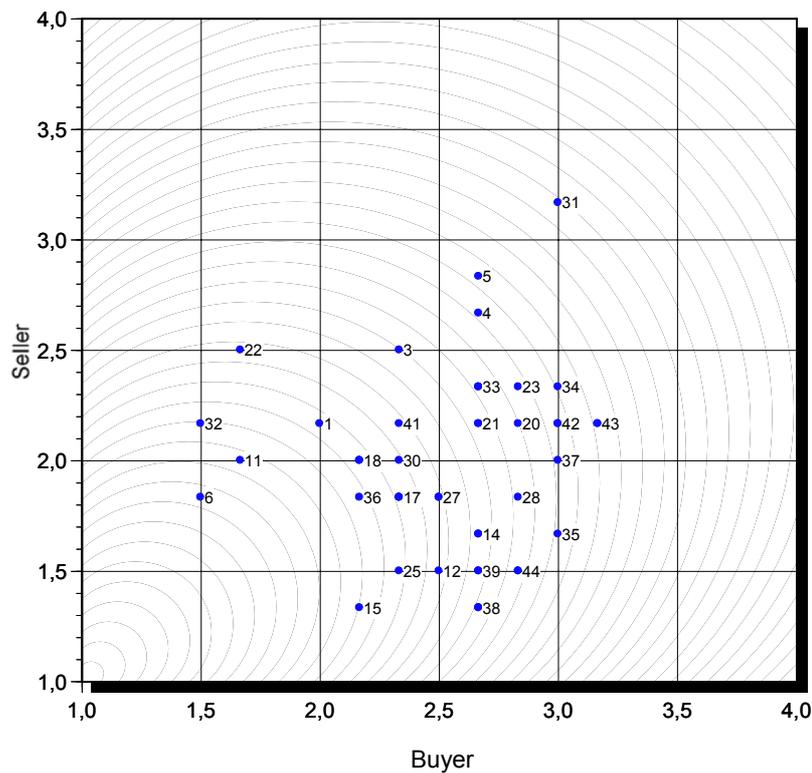


Figure 1. Problem index grid depicting 43 critical incidents in one relationship

The problem index values of the seller are positioned on the grid's y-axis and those of the buyer on the x-axis. This implies that the figure illustrates the problems from a dyadic perspective enabling simultaneous comparison of the two companies. The problem index values of each incident are used to position the incidents in the grid, and the further from the origin the more severe the stress. Figure 1 demonstrates that the incidents had varying problem indexes. In the grid, for example Number 31, the dyadically most problematic critical incident, refers to unsatisfactory service scape. Critical incident Number 43, not fully recognised by the seller as being the most problematic for the buyer, in comparison refers to the seller not regularly keeping in touch. It also shows that the seller's understanding of the buyer perceived stress is incomplete. If the seller had a perfect understanding of the buyer's view all the incidents would lie near the diagonal in the figure. There are several incidents where the seller underestimates the buyer's perceived stress. The incident configuration was

discovered to be different for each relationship pointing to the need to conduct relationship-specific evaluations. In the two conducted studies altogether 45 problem index grids were generated and there were considerable differences when comparing relationships between the incident configurations. Focusing on the incidents over all relationships, in the business service case significant differences in problem indexes between buyers and the seller were found regarding 8 incidents out of 44. In the industrial service case in comparison 17 incidents of 63 were relationship-wise perceived differently.

In the industrial service case the incidents were grouped into four categories: interaction, buyer, seller, and network-related. In all other categories except the network-related group significant differences between the seller's and the buyer's views were found. In the business service case other categories were used but no pattern in significant differences were found. There are in other words both a small number of incidents that systematically generate stress over relationships and relationship-specific stressful incidents. As a consequence it would appear important to produce, besides aggregate results for the whole sample, relationship-specific results. This holds in particular when applying a managerial perspective.

A holistic view on the effect caused by the incidents is given by the relationship stress measure. This measure reflects all problem indexes of all critical incidents in a particular relationship. The relationship stress measure is computed as an average of the problem indexes as a percentage of the theoretical maximum value. This stress measure can be computed for each company in a relationship, different subunits, and even for single persons. In Figure 2 the relationship stress in all studied 45 business relationships are depicted.

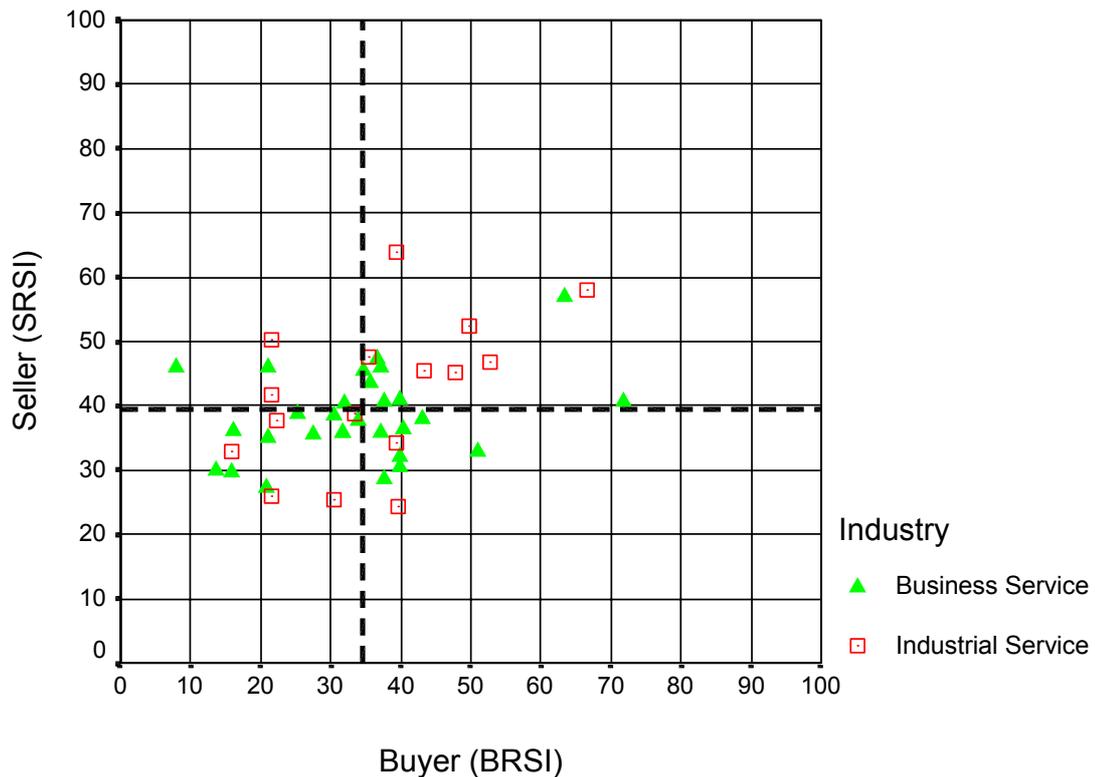


Figure 2. Relationship stress in the two studied industries

BRSI stands for buyer relationship stress index, and SRSI the equivalent measure on the seller's side. It can be observed that there are significant differences in the stress in different relationships. In the industrial service case there were 9 of 16 relationships with significant differences between the buyers' and the seller's stress perception. The corresponding number in the business service case was 20 relationships out of 29. Buyers' perceptions did not match the sellers' perceptions in many cases. The seller commonly appeared to overestimate the stress. Managerially more significant nevertheless are the relationships where the seller underestimates the stress. In the figure the relationships are divided into four groups by the mean stress value for seller and buyer respectively. The majority of the relationships are close to the mean value; still there are some relationships with both higher and lower stress. Despite the fact that several relationships have similar total stress value, they can have fundamentally

different sources of stress as illustrated in the problem index grid shown in Figure 1. It can also be noted that both industries show similar distribution of relationship stress.

In the studies a separate set of questions, inspired by Homburg (1998), measuring service quality, convenience, customer orientation, relationship closeness, and relationship satisfaction was used. It was expected that relationship closeness should be inversely related to relationship stress. There was however no significant correlation in the industrial service case between these two concepts. Buyers' and seller's relationship stress and satisfaction values were correlated but not their closeness values. The buyers' stress was correlated with their relationship satisfaction, indicating that the stress influences customer satisfaction. Surprisingly however there was no correlation between the seller's assessment of critical incidents and the seller's perception of buyer satisfaction. An explanation for this could be that the seller does not believe that the negative incidents affect satisfaction. In the business service case service quality, convenience, communication, customer orientation, and relationship satisfaction were measured. All measures were strongly correlated on the buyers' side. On the seller's side in comparison the stress value was remarkably not correlated with relationship satisfaction which in turn was correlated with all the other measures. This again means that the seller does not recognise the effects for the buyers from critical incidents. This is also reflected in the findings that buyers' and seller's stress values were not correlated. In the industrial case in comparison the findings were different. In this case buyers' and the seller's relationship stress was correlated. Relationship satisfaction would as an aggregate measure be easy to measure but has less diagnostic power than the relationship stress measure, since the relationship stress measure allows further in-depth exploration. In conclusion the findings indicated that in the

buyer's view stress is related to satisfaction, yet the seller did not seem to recognise this.

Figure 3 displays relationship stress on two different levels in the business service study: the manager (Mgr) level and the operator (Opr) level. On the manager level there is a considerable difference in relationship stress between the buyers and the seller. A somewhat higher correspondence can be observed between buyers' operators and the seller's operators.

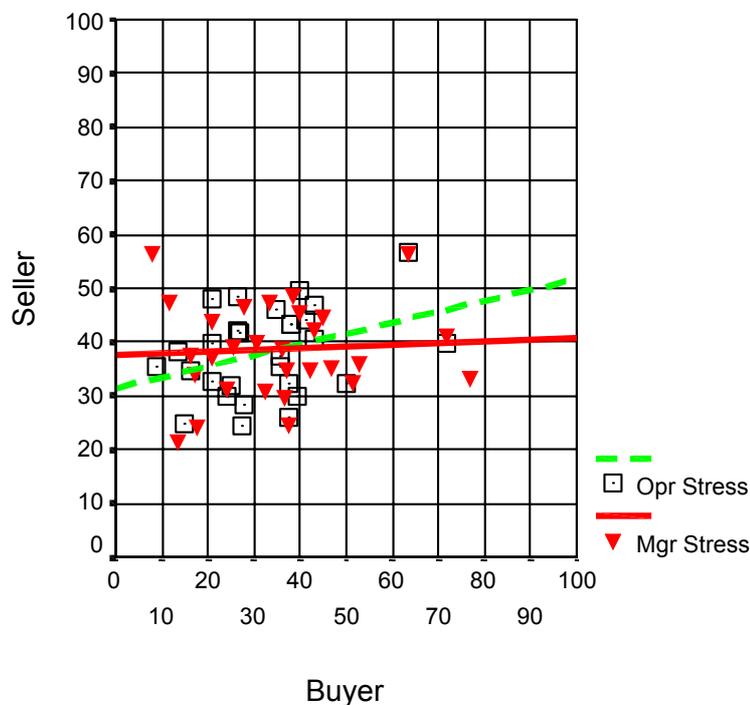


Figure 3. Correspondence of relationship stress between the manager and operator levels in the business service case

It can be noted that on the buyer side, operators' and managers' stress perceptions are significantly correlated. Linear regression lines are included in the figure indicating the overall tendency of correspondence among managers and operators respectively. A complete correspondence would be if stress values were on the diagonal. In view of

the fact that the seller's respondents had been asked to assess how they think that the buyers perceive the incidents, all relationships outside the diagonal indicate incomplete understanding of the buyer. The findings showed a considerable gap between the buyer and the seller in stress perceptions on the manager level. The operators seemed to be somewhat better aware of the occurrence of problems than the managers were.

DISCUSSION AND IMPLICATIONS OF RESULTS

This paper suggests that it is useful to introduce relationship stress as a risk factor to relationships. The new concept would be especially suited for capturing relationship dynamics since it captures the cumulative effects of negative experiences in the relationship in the form and to the degree that the two companies perceive these. To date this kind of relationship risk has not been seen or measured in relationship and therefore a technique needed to be developed which is presented as the NCIM technique. Findings from the two empirical studies indicate that noteworthy differences exist between the seller and the buyer in matched relationships.

In the critical incidents literature it has been shown that single critical incidents do not necessarily lead to visible effects in terms of changed behaviour (Edvardsson and Strandvik 2000). There might, however, be long-term effects based on the accumulation of incidents that represent a hidden weakening of the relationship. Bloemer, Brijs, Swinnen and Vanhoof (2002) presented a similar view when they introduced the idea of latently dissatisfied customers. This kind of customer reports overall satisfaction, but despite this, high probability to defect. Stauss and Neuhaus (1997) suggested similarly that there might be hidden under the satisfaction score five

different types of satisfaction with different patterns of emotions, cognitions, and intentions to end a relationship.

The stress in the relationship is a component in how strong and long the relationship becomes. Stress can also be linked to relationship satisfaction and relationship closeness as was shown in the empirical findings. A mismatch between the seller's and buyer's perception of the stress in the relationship may often be hidden, since the focus is on current ongoing and future interaction and not on the past. The stress may, nevertheless, affect the relationship in situations where evaluations of the relationship and decisions concerning continuation of the relationship are done.

In a business relationship the buyer's and the seller's organisations are connected to each other on many levels. There are a number of relationships within the relationship. The technique proposed in this paper can, however, be used to reveal also internal differences in each counterpart's perception of the relationship. Because perception maps enable dyad-level analyses and illustrations it becomes possible to avoid aggregated averages over relationships. These averages of averages have been criticised of being of little use, especially when the aim is to understand and manage individual relationships (c.f. Tikkanen and Alajoutsijärvi 2002).

The technique is biased towards capturing incidents with at least some degree of regularity. Incidents that are unique and rare will not be covered by the technique. If at all detected in the interviews, these are probably screened out in the phase where the questionnaire for the quantitative phase is constructed. The technique is accumulative in the sense that the time- and resource-consuming qualitative phase can be used to shape a questionnaire that can be used continuously if the situation remains

the same. The questionnaire can be improved when necessary as a separate project. The level of detail can be adjusted to the companies' needs, although there are probably some natural units of processes that will emerge in the respondents' stories.

There are still a number of relationship-specific questions that remains to be solved. For example, is the same list of critical incidents applicable to different levels in the organisation? Do the account manager and personnel involved in daily interactions perceive the same incident types as problematic? How should the perceptions be weighted even if they are the same for all personnel categories? Are all opinions equally worth or should higher-level persons be considered more important? Perception differences between individuals and different levels indicate that different gaps exist which should be examined further in order to understand the nature and structure of relationships. It should be pointed out that stress could be seen as a positive concept, since it may raise the energy level leading to better performance. This is similar to how conflict and co-operation-competition researchers regard their equivalent negative aspects in a relationship setting. Similarly to an optimal stress level for humans, there may exist an optimal stress level in relationships leading to better results than lower and higher stress levels. Distinguishing short-term and long-term effects of stress could be useful to explore these effects.

Stress was not in the presented empirical studies explicitly been linked to dissolution or termination, and it is therefore beyond this study to draw conclusions on this connection. However it was obvious that the studied companies experienced different levels and content of relationship stress, indicating that negative experiences do exist in business settings and that they are recognised and memorised by the individuals and thus may affect their decisions regarding the relationship. That the relationship is

terminated or that it dissolves may directly follow from this. Relationship dissolution and termination research could therefore find this type of information useful to complement their understanding of pre-disposing ending-affecting factors. Similarly relationship-strength researchers may benefit from the relationship stress concept since it can be regarded as a sub-component of relationship strength. The higher the stress level in the relationship is, the higher probability that the strength of the relationship is affected.

For managers, in comparison, information on the relationship portfolio level is valuable in order to detect relationships at potential risk of being terminated or dissolving. Other uses would be to analyse stress in single relationships or to detect fundamental structural problems causing problems for a great number of relationships. Knowing and measuring stress in the relationship portfolio would benefit the relationship management as to which relationships need attention and what specific kind of action and development. If customer relationships are to be seen as assets, the company should know their health and durability as elements of the value of the relationship. Different layers of analysis can be applied to the NCIM data, not only insights on an aggregated relationship-portfolio level, but also for example relationship-specific, organisation-level, incident-specific, and respondent-specific.

Perhaps the most important contribution of this paper is the recognition that a hidden risk factor in a business relationship can be revealed by the stress concept, which builds on accumulative effects of negative experiences. The technique proposed is a first attempt to capture this risk in a manner that has high managerial usability. Following-up the effects of stress on relationship dynamics is obviously a next step in

order to ensure that the technique produces robust predictors of the evolvement of business relationships.

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