Trust as a Mediating Variable in a Complex Model of Channel Member Behaviour

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ABSTRACT
The purpose of this study is to develop and test a model of channel member behaviour that hypothesises a central mediating effect for trust between power constructs and key behavioural and attitudinal relationship outcomes. The model is tested on a large sample in a single channel using a dyadic approach.

INTRODUCTION
In the channels literature, research involving behavioural constructs is extensive. However, there has been a call for more comprehensive models to explain channel phenomena (e.g., Anderson and Narus 1984; Anderson and Narus 1990; Gattorna 1978, Stern and Reve 1980). For instance, Stern and Reve (1980, p. 52) consider that "published studies related to distribution channels present, collectively, a rather disjointed collage." Anderson and Narus (1990, p. 55) argue that "though two or three-construct studies, which characterize much of our knowledge in marketing channels, contribute to our knowledge of marketing channels, many such studies would have to be done to investigate systematically all of the construct interrelationships specified by a more comprehensive model."

In this study the aim was to expand previous research by examining explanatory processes, by model building and by testing the role of critical behavioural constructs in a comprehensive nomological net. Although this research started by an exploratory correlational analysis, a much more powerful methodology—structural equation modelling—was used to obtain more robust information about how constructs interrelate. A major aim was to develop and test a fairly comprehensive model of channel member behaviour, specifically to investigate empirically the relationships among power asymmetry, coercive power, non-coercive power, trust, cooperation, conflict, and satisfaction with the overall channel relationship. The research aims to contribute to an understanding of how trust is created and how it affects critical relationship outcomes (cooperation, conflict, and satisfaction).

In the last decade the channels literature has shown a pervasive and continuing interest in trust. The central role of trust in relationship building and maintenance has been emphasised. As a result, channel researchers have increasingly incorporated trust in models of channel relationships. Although many constructs have been related to trust, power has been neglected. This research covers such a gap. The general hypothesis of our model is that trust acts as a central mediating variable between power constructs (power asymmetry, coercive power, and non-coercive power) and key behavioural outcomes—cooperation, conflict, and satisfaction.

A MODEL OF CHANNEL MEMBER BEHAVIOUR: THEORETICAL RELATIONSHIPS

A fairly comprehensive model of channel member behaviour involving power asymmetry, the use of power (coercively and non-coercively), trust, satisfaction with the overall channel relationship, cooperation and conflict is proposed. Further, trust is proposed as a central mediating variable between power constructs and those of satisfaction, conflict, and cooperation. Figure 1 depicts the proposed model of channel member behaviour.

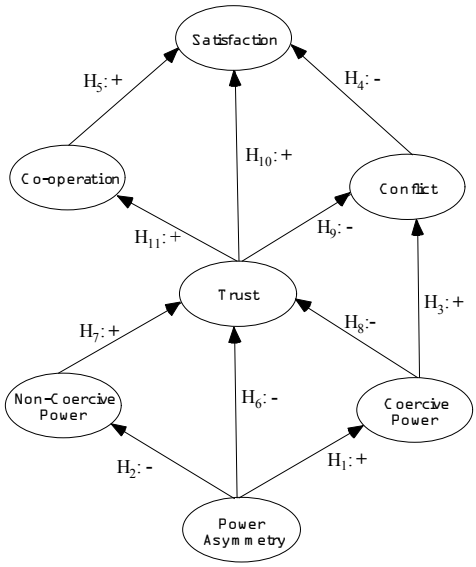

Figure 1 – Model of Marketing Channel Member Behaviour

Power Asymmetry and the Choice of Influence Strategy. Power, in the general use of the concept, means the ability of one individual or group to control or influence the behaviour of another (Hunt and Nevin 1974). Unbalanced or asymmetric power relationships create the potential for exploitation of vulnerable channel partners by powerful firms (Kumar, Scheer, and Steenkamp 1995b), therefore affecting the choice of influence strategies. Marketing channels research has shown that asymmetric possession of power will tend to be exploited through more frequent use of coercion (Hunt and Nevin 1974; Roering 1977; Wilkinson and Kipnis 1978; Dwyer and Walker 1981; Kale 1986; Frazier, Gill, and Kale 1989; Dant and Schul 1992). Hence, it is not surprising that power asymmetry might create in the less powerful channel member *fear* of being exploited (Geyskens and Steenkamp 1995). Further, dominant partners have little incentive to invest in developing specific programs with their dependent partners (Buchanan 1992). Confirming this assertion, empirical research has

shown an inverse relationship between power asymmetry and the use of non-coercive power (Kale 1986). Using the preceding as a basis, the following hypotheses are proposed:

H_1: Power asymmetry in a principal-agent relationship is positively related to the use of coercive power by the more powerful channel member (principal).

H_2: Power asymmetry in a principal-agent relationship is negatively related to the use of non-coercive power by the more powerful channel member (principal).

Channel Member's Attitudinal and Behavioural Response to Coercive and Non-Coercive Power. How power is used can have a profound impact on channel member's attitudes and behavioural responses. Past research suggests coercive and non-coercive power as able to help explain a wide range of phenomena in marketing channels, namely cooperation, conflict, and trust (Busch and Wilson 1976; Frazier, Gill, and Kale 1989; Hunt and Nevin 1974; Lusch 1976b; Lusch 1977; Michie and Sibley 1985; Skinner, Gassenheimer, and Kelley 1992; Wilkinson 1981).

First, past research has analysed extensively how power use affects conflict. A number of studies have found a negative relationship between non-coercive sources of power and conflict (Lusch 1976b; Skinner, Gassenheimer, and Kelley 1992; Wilkinson 1981) and a positive association between coercive sources of power and conflict (Frazier, Gill, and Kale 1989; Lusch 1976b; Skinner, Gassenheimer, and Kelley 1992; Wilkinson 1981). Further, empirical evidence suggests that channel conflict is better explained by coercive than by non-coercive sources of power (Lusch 1976b). Because the use of coercive power causes resentment on the channel partner (Brown and Frazier 1978) and such feelings reflect conflict in the relationship, a direct link between coercive power and conflict is proposed. The proposed model depicts no direct link between non-coercive power and conflict, although non-coercive power affects conflict indirectly via trust.

In earlier channels research the use of power, either coercively or non-coercively, has also been associated with cooperation. Non-coercive sources of power have been consistently positively associated with cooperation (Sibley and Michie 1982; Skinner, Gassenheimer, and Kelley 1992). However, the relationship between coercive sources of power and cooperation is more contentious. Skinner, Gassenheimer, and Kelley 1992) found an inverse relationship, while Sibley and Michie (1982) found no significant relationship. In the present research, it is hypothesised that the effects of non-coercive power on cooperation is mediated by trust. Building trust is central to increase cooperation (Morgan and Hunt 1994), and the use of non-coercive power is critical to achieve such an outcome. Hence, no direct path from non-coercive power to cooperation is proposed. The proposed model also posits the impact of coercive power on cooperation as indirect, via trust.

Based on the previous reasoning, the following hypothesis is suggested:

H_3: The use of coercive power by the principal is positively related to conflict in the channel relationship.

Conflict, Cooperation, and Satisfaction. Conflict, cooperation and satisfaction are key behavioural constructs for channel management. Conflict and cooperation are pervasive in marketing channels due to functional interdependence of channel members. Channel member sentiments and behaviour cannot be accurately explained by either conflict or cooperation in isolation. Satisfaction is a critical output variable in the proposed model. Satisfaction is a sought behavioural outcome, probably because it is considered a close proxy for perceived effectiveness, and also because of its potential to predict the future actions of a channel member (Anderson and Narus 1990).

Satisfaction is an outcome of both conflict and cooperation. First, conflict is often accompanied by strong emotions (e.g., anger and hostility) (Thomas 1990). Emotions may shape cognition and introduce additional motivational forces. Negative emotions, once aroused, feedback on cognition and construe the other partner's behaviour negatively (Kumar 1989). In such circumstances, satisfaction with the overall channel relationship will probably be lower than when emotions are neutral or positive. In line with the previous rationale, previous empirical research consistently show a negative relationship between conflict and satisfaction (e.g., Arndt and Ogaard 1986; Cronin and Baker 1993; Frazier, Gill, and Kale 1989; Shoham, Rose, and Kropp 1997; Skinner, Gassenheimer, and Kelley 1992; Wilkinson 1981). Although there is no consensus concerning the causal ordering of the conflict-satisfaction link (Brown, Lusch, and Smith 1991), most research depicts conflict as an antecedent of satisfaction. The rationale provided by Kumar (1989) also supports conflict as an antecedent of satisfaction.

Second, channel relationships characterised by joint striving towards individual and mutual goals deepens each channel partner's perceptions of compatibility with its partner. Anderson and Narus (1990, p. 46) claim that "this perceived compatibility, as well as the fulfilment associated with attaining desired outcomes, affords a strong feeling of "chemistry" and results in satisfaction with the partnership." Past research consistently supports a positive relationship between cooperation and satisfaction (Dwyer 1980; Johnson and Raven 1996; Skinner, Gassenheimer and Kelley 1992). Two more hypotheses are suggested:

H_4: Channel conflict is negatively related to the satisfaction of the agent with the overall channel relationship.

H_5: Cooperation between channel partners is positively related to the satisfaction of the agent with the channel relationship.

Trust As a Mediating Variable Between Power Structure and Power Use, and Critical Outputs. *Trust exists when one believes its partner is honest and benevolent (e.g., Larzelere and Huston 1980). In the social psychology literature claims are made that trust in one's partner's honesty and benevolence contributes to a perceived supportive climate (e.g., Gibb 1964), reduces uncertainty (e.g., Ellison and Firestone 1974), and promotes a feeling of security (Rempel and Holmes 1986). These positive feelings associated with relationships characterised by trust are likely to be conducive to beneficial outputs with the individuals involved. As a result, parties involved in a trusting relationship strongly desire to maintain the relationship (e.g., Granovetter 1985).*

In the marketing channels literature several studies have highlighted trust as a central construct in understanding relationship building and maintenance (e.g., Dwyer, Schurr, and

Oh 1987; Geyskens, Steenkamp, and Kumar 1998; Morgan and Hunt 1994). Empirical evidence has consistently shown that trust promotes the satisfaction of channel members with the relationship (e.g., Andaleeb 1991), fosters cooperation among members (e.g., Morgan and Hunt 1994), reduces conflict (e.g., Anderson and Narus 1990), and increases commitment to the relationship (e.g., Morgan and Hunt 1994),

Researchers have also attempted to explain why channel members trust their partners. For instance, the model of relationship marketing proposed by Morgan and Hunt (1994) considered shared values, communication, and opportunistic behaviour as antecedents of trust, but ignored power. Morgan and Hunt claim that their model "does not deny the importance of understanding power. Just as medical science should understand both sickness and health, marketing science should understand both functional and dysfunctional relationships" (p. 33). Rather surprisingly, these authors claim that "the term *power* implies, or at least strongly connotes, coercion, that is "do it or else!" (p. 33) and their rationale rests entirely on the use of coercive power, while ignoring the impact of using non-coercive power.

Channels research on trust has neglected power. However, power asymmetric channel relationships appear to be more prevalent than balanced ones (Dwyer and Walker 1981). Particularly in such settings, power structure and how power is used affects trust and other critical channel members' attitudes and behaviour. Geyskens et al (1998) concluded from their meta-analytic study on trust that more studies on the effects of channel decision influence patterns on trust were needed. This research addresses this call by investigating the impact of coercive and non-coercive power on trust. Further, power structure, specifically power asymmetry, will also be analysed.

Antecedents of Trust: Power Structure and Power Influence Strategies. Power structure and power influence strategies are important antecedents of trust. Empirical research in marketing channels has investigated the impact of power asymmetry and the use of coercive and non-coercive power on trust. Anderson and Weitz (1989) have shown that in power asymmetric relationships trust, tends to deteriorate.

Geyskens and Steenkamp (1995, p. 359) provided a rationale for a weak channel member to trust the intentions of its relatively powerful partner arguing that "first, the relatively dependent channel member may perceive that the dominant partner uses its power constructively to promote joint interests and collective goals (Dwyer, Schurr, and Oh 1987, Scanzoni 1979), and to improve channel performance and satisfaction (Bucklin 1973; El-Ansary and Robicheaux 1974; Robicheaux and El-Ansary 1975) Second, when the relatively powerful firm refrains from using its structural power advantage, the relatively dependent channel member may interpret this as a signal that its dominant partner intends to work together to promote joint goals over the long run (Anderson and Weitz 1989; Lawler 1992; Molm 1981)." Both ways are claimed to reduce the less powerful channel member's fear of exploitation.

On the other hand, if a channel member uses coercive power, its channel partner tends to view that behaviour as exploitative rather than accommodative (Frazier and Summers 1986), and it will experience lower trust.

In empirical research trust has been related positively to non-coercive power and negatively to coercive power (e.g. Simpson and Mayo 1997). Anderson and Weitz (1989) have also

shown that "support by channel partner" is positively associated with trust. This construct is similar to conceptualisations of non-coercive power in some other studies.

Three further hypotheses are proposed:

H_6: Power asymmetry is negatively related to an agent's trust in the principal.

H_7: The use of non-coercive power by the principal is positively related to the agent's trust in the principal.

H_8: The use of coercive power by the principal is negatively related to the agent's trust in the principal.

Consequences of Trust. Geyskens and Steenkamp (1995) argue that for the relatively dependent channel member, trust reduces the uncertainty that is created by the potential to be exploited. If the relatively dependent channel member trusts its partner, it ascribes co-operative and sincere intentions to its partner (Geyskens and Steenkamp 1995). In accordance with this rationale, the present model proposes that trust positively affects satisfaction and cooperation, while mitigating channel conflict.

Empirical research consistently reports cooperation and trust as positively related. However, the causal ordering of trust and cooperation is a controversial issue. Whereas some studies argue that cooperation is an antecedent of trust (e.g., Anderson and Narus 1990), other posit cooperation as a consequence (e.g., Andaleeb 1995; Morgan and Hunt 1994). Deutch's (1960) empirical results suggest that for cooperation to be initiated, trust is required. In line with this rationale, the present research proposes cooperation to be a consequence of trust.

Empirical studies in marketing channels have consistently shown a positive relationship between trust and satisfaction (e.g., Andaleeb 1991; Anderson and Narus 1990; John and Reve 1982). The causal ordering for the trust-satisfaction link has been subject to debate. However, the preponderance of conceptual and empirical evidence favours the inclusion of satisfaction as a consequence of trust.

There is consensus for the negative relationship between trust and conflict (e.g., Anderson and Narus 1990). Geyskens, Steenkamp, and Kumar's (1998) meta-analytic study provides evidence to postulate conflict as a consequence of (mis)trust.

Thus, the following further hypotheses can be proposed:

H_9: Agent trust in the principal is negatively related to conflict in the channel relationship.

H_{10}: Agent trust in the principal is positively related to agent satisfaction with the overall channel relationship.

H_{11}: Agent trust in the principal is positively related to cooperation.

Trust as a Mediating Variable. The argument presented here is not that trust accounts for the total effect of power structure and power use on key behavioural constructs (cooperation, satisfaction, and conflict), but simply that trust is an important mediator. For instance, in the

proposed model the impact of coercive power use on conflict is not only through trust, but a direct effect is also hypothesised.

By using information from a recent meta-analytic study on trust (Geyskens, Steenkamp, and Kumar 1998) and other past channel studies, the strength of the paths linking power constructs to trust can be anticipated. Power asymmetry is likely to affect strongly the use of power (coercive and non-coercive), but the direct effect on trust is likely to be low. Non-coercive power is likely to affect trust more deeply than coercive power. Further, it can be anticipated that most of the impact of power asymmetry on trust will be indirect via coercive power and non-coercive power.

METHOD

Research Setting

This research was undertaken in one large marketing channel distributing financial services. The marketing channel is similar in form to many franchises and agencies. In terms of power the context is asymmetrical. The agent has a high, but variable level of dependency upon the principal. The agents are owners-managers of small businesses in which they are dominant decision makers.

Sample and Data Collection

A sample of 2,400 agencies was obtained. The data were collected in two separate mail surveys. The first survey was mailed to the agent in each outlet. Non-respondents were followed-up. Of the 2,400 in the original sample 981 usable replies were received, representing an overall response rate of 40.9 %. The area manager for each of the outlets for which a return was received was sent a mirror image questionnaire (the same questions about the relationship, but rephrased to be relevant to the principal). Non-respondents were followed-up as before. A total of 633 usable responses were received in the two waves. Because dyadic data were required to test the hypotheses and the proposed model, only cases with both questionnaires were considered. It was also decided to use only cases that provided complete data; 497 cases represent the sample used in this study.

Measure Development and Validation

The questionnaire was designed to measure a number of constructs. These were: overall satisfaction (economic and non-economic) of the sub-postmaster—the agent—with the channel relationship; the balance of power in their relationship with the principal (power asymmetry); whether they were using power coercively or non-coercively; cooperation; trust (using two measure, honesty and benevolence), and conflict (direct and affective). Conflict is a dyadic measure.

Because the number of observed variables in empirical research is frequently quite large, sometimes it is impractical to include all items as individual measures (Baumgartner and Homburg 1996). Following Bagozzi and Heatherton (1994), in this research constructs were represented at two levels of abstraction: total aggregation and partial aggregation. At the level of total aggregation, constructs are represented by a composite formed by the sum (or average) of scores of all items in a scale. The partial aggregation method treats separate dimensions of a construct as indicators of a single latent variable. When the total aggregation method was used, a measure of reliability was computed (coefficient alpha), and this estimated reliability was incorporated into the analysis by fixing the error variance of the indicator to (1-reliability) times the variance of the indicator. This procedure has the

advantage that "the specification of the model is quite simple and that, compared to the true single-indicator case, unreliability of measurement can be taken into account in a limited way" (Baumgartner and Homburg 1996, p. 143). In the present research, the partial aggregation procedure has been used for constructs involving more than one dimension (i.e., trust, satisfaction, and conflict) and the total aggregation procedure for the remaining constructs.

Due to paucity of space issues related to measure development and validation are not covered in this paper. Two measures were estimated using two composite items each: satisfaction with economic and non-economic satisfaction and conflict with affective and direct conflict. The measures were derived from the literature and their reliability and validity was assessed. Five key dimensions of validity were analysed: (1) face validity; (2) content validity; (3) convergent validity; (4) discriminant validity; and (5) nomological validity. The internal consistency of the multiple-item scales used in the behavioural model was estimated through Cronbach alpha reliability coefficients, single construct confirmatory factor analysis, and composite reliability.

RESULTS

Correlational Analysis

Summary descriptive statistics and the correlation matrix of constructs involved in the behavioural model appear in Table 1 The nomological validity of power asymmetry, coercive and non-coercive power, trust, cooperation, conflict, and satisfaction can be explored by observing the correlations between constructs. Specifically, the direction of all relationships hypothesised in the behavioural model was supported, providing strong evidence of nomological validity.

Table 1 - Descriptive Statistics and Correlation Matrix for the Theoretical Constructs

Construct		Mean	S.D.	1	2	3	4	5	6	7
Power Asymmetry	(1)	5.31	1.28	**.77**						
Coercive Power	(2)	4.15	1.20	.646	**.72**					
Non-Coercive Power	(3)	3.94	1.31	-.430	-.355	**.86**				
Trust	(4)	3.93	1.28	-.517	-.469	.838	**.92**			
Cooperation	(5)	3.79	1.44	-.526	-.415	.684	.727	**.91**		
Conflict	(6)	2.28	.98	.501	.489	-.531	-.589	-.573	**.83**	
Satisfaction	(7)	5.04	1.16	-.323	-.348	.628	.659	.609	-.521	**.78**

The mean and standard deviation of each construct are reported in the first two columns. Diagonal entries are Cronbach's alpha coefficients; all others are correlation coefficients. All correlation coefficients are significant at the 0.01 level (1 tailed test).

Model Testing

This research followed the two-step approach recommended by Anderson and Gerbing (1988). The first step involves the use of confirmatory factor analysis to develop an acceptable measurement model. The test of a measurement model allows the researcher to assess whether observed variables are really measuring the underlying theoretical constructs, and whether the measurement model provides evidence of an acceptable fit to the sample data. In this research, confirmatory factor analysis and model testing were performed using the AMOS 4 (Arbuckle and Wothke 1999) software package.

Measurement Model. The first step to test the measurement model was the examination of indices of fit. Given the controversy about measures of overall fit, the recommendation of Bollen and Long (1993) not to rely entirely either on the Chi-Square statistic or on any other single fit index was followed. Next, standardised residuals and modification indices were reviewed with the intent to pinpoint potential areas of model misspecification. Finally, the statistical significance of each factor loading is assessed.

The Chi-Square statistic for the confirmatory factor analysis was statistically significant ($\chi^2_{(18)} = 31.35$, $p = .03$), thereby suggesting that the model is not entirely adequate. An accepted rule of thumb is that the *p*-value should be greater than .05 for the model to be accepted. However, in practice the statistic is very sensitive to sample size and provides little guidance in determining the extent to which the model does not fit. For instance, in large samples (as in the case of this research where $N = 497$) even trivial deviations from a true model can lead to the rejection of the hypothesised model using the Chi-Square statistic and in very small samples large deviations may go undetected (Bagozzi and Foxall 1996). Other fit measures have proven to be more useful. In contrast to the Chi-Square statistic, the Relative Chi-Square (χ^2 / *df*) = 1.74, the Goodness-of-Fit Index (GFI = .987), the Adjusted Goodness-of-Fit Index (AGFI = .962), the Normed Fit Index (NFI = .990), the Comparative Fit Index (CFI = .995), and the Root-Mean-Square Error of Approximation (RMSEA = .039) are all within the range of values considered to provide evidence of good model fit, being all far better than the proposed cut-off points (cut-off points: < 2 for the Relative Chi-Square (χ^2 / *df*); > .90 for the GFI, the AGFI, the NFI, and the CFI; and < .08 for the RMSEA). Consistent with these results, the analysis of the standardised residual matrix for the measurement model revealed no statistically significant residual (values greater than 1.960 are significant at $p < .05$).

The next step was to assess the statistical significance of each factor loading. All indicators loaded significantly on their hypothesised factor. The critical ratio ranged from 13.8 to 28.6, thus all were significant at $p < .001$.

Structural Model: A Priori Behavioural Model. In the previous section the measurement model was developed and tested to assure that the latent variables were measured by valid and reliable observed variables. In this section the structural model is specified to allow for the hypothesised relationships among latent variables. Model testing will give an indication of the overall model fit and the extent to which the *a priori* hypothesised relationships are supported by the sample data. This model was estimated using the maximum likelihood method.

Selected goodness-of-fit indices related to the hypothesised behavioural model are reported in Table 2. The *a priori* behavioural model yielded a significant χ^2 ($\chi^2_{(28)} = 73.911$ p=.000). However, given the well known limitations of the χ^2 statistic, it is recommended to rely on a battery of other indices, such as the Goodness-of-Fit Index (GFI = .970), the Adjusted Goodness-of-Fit Index (AGFI = .943), the Normed Fit Index (NFI = .975), the Comparative Fit Index (CFI = .984), which in this case provide evidence of a well-fitting model (all well above the cut-off point of .90). The Root-Mean-Square Error of Approximation value (RMSEA = .057) is also well within the recommended range of acceptability (< .05 to .08; values less than .05 indicate good fit, and values as high as .08 show reasonable errors of approximation in the population). On the basis of these results, it is possible to conclude that the sample data seems to be well described by the proposed behavioural model.

In reviewing the structural parameter estimates, two were identified as non-significant; these were the path from power asymmetry to trust (-.058; Critical Ratio = -.626) and the path from coercive power to trust (-.152; Critical Ratio = -1.709). In the interest of parsimony these paths are candidates for deletion. All other paths were statistically significant (i.e., critical ratio exceeded 1.96), with critical ratios ranging from 3.112 to 24.568.

Structural Model: Model Re-specification. Following the approach to model modification recommended by Long (1983), only one parameter would be added or deleted at a time, because each modification may reduce or eliminate the need to add or delete a second parameter. The next step was to modify the initial *a priori* structural model. In the interest of parsimony, the non-significant parameter for the structural path from power asymmetry to trust was deleted from the model.

Final Re-specified Structural Model. The deletion of one originally specified path (power asymmetry $\rightarrow$ trust) resulted in a more parsimonious model that fitted the data similarly well (GFI = .971; AGFI = .944; NFI = .975; CFI = .975; CFI = .985; RMSEA = .056; Hoelter's CN (α = .05) = 285).

In reviewing the structural parameter estimates for the re-specified behavioural model, all parameters were found to be significant, including the path from coercive power to trust that was non-significant in the initial behavioural model.

The dangers of post-hoc model fitting were considered. Because the re-specifications suggested by the modification indices lacked full theoretical support it was considered that any further modifications could not be justified as it could be difficult to replicate the model structure should a future validation study be considered. The final re-specified behavioural model is depicted in Figure 2 and Table 2 reports parameters estimates and measures of fit for both the a priori and the final re-specified behavioural model.

Hypotheses Testing. The behavioural model involved a set of eleven hypotheses. All but one of the proposed hypotheses were supported by the sample data. The proposed relationship between power asymmetry and trust (H6) was not supported. The relationship was negative as predicted, but was not statistically significant (-.058, t = -626).

Table 2 - Standardised Parameter Estimates and Fit Indices for the A Priori *and the Final Re-Specified Structural Models*

Parameter or Fit Index			***A Priori* Model**		**Re-specified Model**	
			Estimate	T-Value	Estimate	T-Value
Causal Path (Regression Weight)						
Non-Coercive Power	←	Power Asymmetry	-.527	-10.679	-.529	-10.750
Coercive Power	←	Power Asymmetry	.873	17.909	.876	18.021
Trust	←	Power Asymmetry	-.058	-.626	-	-
Trust	←	Non-Coercive Power	.863	24.568	.870	26.218
Trust	←	Coercive Power	-.152	-1.709	-.204	-6.443
Cooperation	←	Trust	.827	23.701	.827	23.678
Conflict	←	Coercive Power	.312	5.654	.313	5.684
Conflict	←	Trust	-.507	-9.749	-.505	-9.695
Satisfaction	←	Trust	.512	5.879	.515	5.938
Satisfaction	←	Cooperation	.246	3.112	.245	3.108
Satisfaction	←	Conflict	-.185	-3.080	-.184	-3.058
Squared Multiple Correlation (R^2) for Endogenous Latent Variable						
Coercive Power			.762		.767	
Non-Coercive Power			.278		.280	
Trust			.960		.963	
Conflict			.544		.545	
Cooperation			.685		.684	
Satisfaction			.750		.751	
Fit Indices						
Chi-square			$\chi^2_{(28)} = 73.911$ p=.000		$\chi^2_{(29)} = 74.294$ p=.000	
Relative Chi-square (χ^2 / df)			2.640		2.562	
Goodness-of-Fit Index (GFI)			.971		.971	
Adjusted Goodness-of-Fit Index (AGFI)			.943		.944	
Normed Fit Index (NFI)			.975		.975	
Comparative Fit Index (CFI)			.984		.985	
Root-Mean-Square Error (RMSEA)			.057		.056	
Hoelter's Critical N (α = .05)			278		285	
Hoelter's Critical N (α = .001)			324		332	

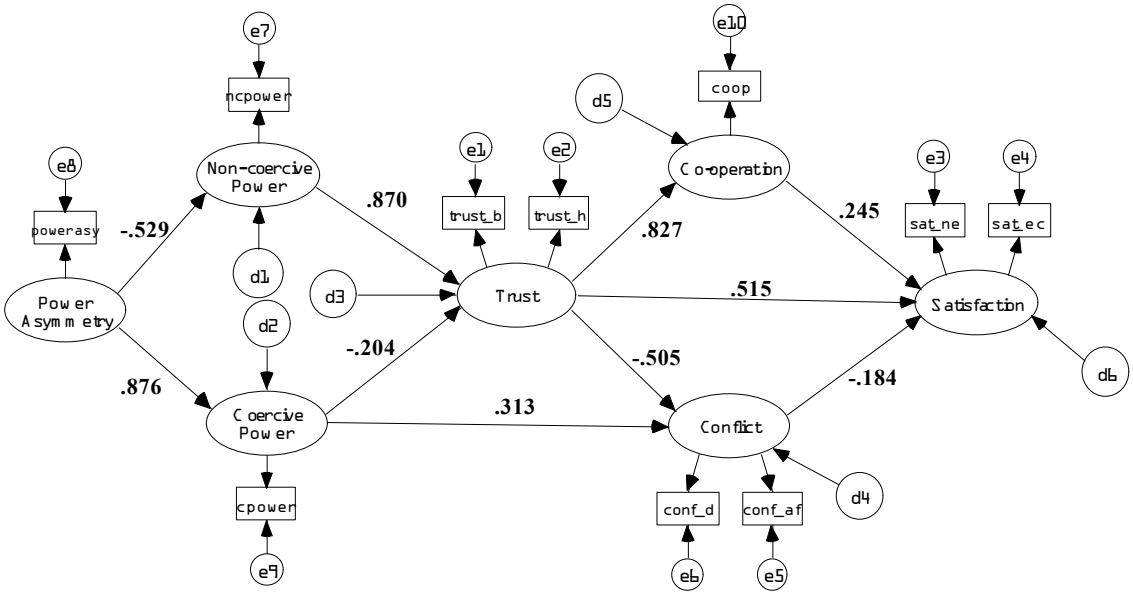

Figure 2 - Final Re-specified Structural Behavioural Model: Standardised Parameter Estimates

Decomposition of Structural Effects. In structural equation modelling, total effects are the sum of all direct effects and indirect effects of one variable on another. Structural direct effects are represented in path diagrams as single arrowheads that flow from one latent variable to another. Indirect or mediator effects "involve one or more intervening variables that transmit some of the causal effect of prior variables onto subsequent variables" (Kline 1998, p. 52). The direct, indirect, and total standardised effects among the constructs in the final re-specified behavioural model are reported in Table 3. Although in the *a priori* behavioural model the direct effect of power asymmetry on trust was not statistically significant, it is interesting to observe that power asymmetry has a strong indirect effect on trust (-.639) via coercive and non-coercive power. Power asymmetry has also a strong indirect effect on conflict (.597), satisfaction (-.568), and cooperation (-.528).

Non-coercive power has a strong indirect effect on several behavioural constructs, namely cooperation (.719), satisfaction (.705), and conflict (-.439).

The highest total standardised effect on satisfaction derives from trust (.811), being the direct effect .515 and the indirect effect (through conflict and cooperation) .296. The strongest indirect effect on satisfaction stems from the use of non-coercive power by the principal (.705) and from power asymmetry (-.568). Surprisingly, the use of coercive power has a much smaller indirect impact on satisfaction (-.223).

DISCUSSION AND CONTRIBUTION

Discussion. The behavioural model involved a set of eleven hypotheses. Except for the hypothesised negative effect of power asymmetry on trust, all hypotheses were supported. After deleting this non-significant path, the overall re-specified model fitted the data well.

Therefore, the results suggest that the behavioural model is a good representation of the sample data. Further, as predicted, the results show that although trust does not account for the total effects of power antecedents on relationship consequences, trust does act as an important mediator. Specifically, trust does not account for all the effects of the use of coercive power by the principal on conflict. Coercive power directly affected not only trust but also conflict. This direct effect of coercive power on conflict (and not exclusively via trust) had been anticipated on the basis of the resentment the use of coercive power creates in the agent, and because such feelings reflect conflict in the relationship. On the other hand, trust did account for all the effects attributed to the use of non-coercive power on cooperation. After accounting for the impact of non-coercive power on trust, the path from non-coercive power to cooperation is non-significant, confirming trust as a full mediator variable between non-coercive power and cooperation.

In summary, perhaps the most significant contribution of the behavioural model is the mediating role of trust between power (power structure and power use) and critical behavioural outcomes. To the relatively more powerful channel member the benefits of building trust are evident in terms of higher satisfaction of its partners, and a relationship characterised by more cooperation and less conflict. These outcomes are likely to contribute to a network of motivated partners. As trust is a key determinant of sought after outcomes, how to foster trust is a key issue for managers. This research provides evidence that the provision of assistances valued by the more dependent channel member and a more restrained use of coercive power are critical determinants of trust. Further, the results of this study suggest that behavioural and attitudinal responses of channel members are strongly affected by power asymmetry, a structural constraint of the channel relationship. In relationships asymmetric in power the more powerful partner tends to use more coercive power and less non-coercive power, which in turn negatively affects trust. From these results one should not infer that channel members are prisoners of the power structure of their relationship. If enhancing the long-term relationship with the channel network is a priority of the dominant channel member, a formal and committed strategy towards building trust is essential. To build trust might be complex and take time, but the implications in terms of conflict, cooperation and satisfaction may be critically important for the principal organisation.

Contribution. The behavioural model provides a number of unique contributions to the literature on channel relationships. First, the relatively comprehensive behavioural model involves a number of critical constructs—power asymmetry, coercive power, non-coercive power, trust, cooperation, conflict, and satisfaction—that have not been empirically tested simultaneously in previous channels research. This study expands previous research by analysing in-depth integrated explanatory processes of channel behaviour.

Second, the decomposition of structural effects into direct and indirect effects, rarely analysed in the channels literature, provides more robust and in-depth information about how constructs interrelate. The use of structural equation modelling makes this possible, although such analysis is rarely made.

Finally, this model adds to the streams of research on power and trust. Past research on trust has emphasised the investigation of antecedents other than power structure and power use. The present study has extended the knowledge of the impact of power on critical behavioural outcomes (cooperation, conflict, and satisfaction) by showing that trust is an important mediating variable.

Table 3 - Decomposition of Standardised Structural Effects for the Final Re-Specified Behavioural Model

Effect of	***Effect on***								
	Coercive Power			**Non-Coercive Power**			**Trust**		
	Direct	**Indirect**	**Total**	**Direct**	**Indirect**	**Total**	**Direct**	**Indirect**	**Total**
Power Asymmetry	.876	-	.876	-.529	-	-.529	-	-.639	-.639
Coercive Power	-	-	-	-	-	-	-.204	-	-.204
Non-Coercive Power	-	-	-	-	-	-	.870	-	.870
Trust	-	-	-	-	-	-	-	-	-
Cooperation	-	-	-	-	-	-	-	-	-
Conflict	-	-	-	-	-	-	-	-	-

Effect of	***Effect on***								
	Cooperation			**Conflict**			**Satisfaction**		
	Direct	**Indirect**	**Total**	**Direct**	**Indirect**	**Total**	**Direct**	**Indirect**	**Total**
Power Asymmetry	-	-.528	-.528	-	.597	.597	-	-.568	-.568
Coercive Power	-	-.169	-.169	.313	.103	.416	-	-.223	-.223
Non-Coercive Power	-	.719	.719	-	-.439	-.439	-	.705	.705
Trust	.827	-	.827	-.505	-	-.505	.515	.296	.811
Cooperation	-	-	-	-	-	-	.245	-	.245
Conflict	-	-	-	-	-	-	-.184	-	-.184

REFERENCES

Andaleeb, Syed Saad (1991), "Trust and Dependence in Channel Relationships: Implications for Satisfaction and Perceived Stability," in *AMA Summer Educators Conference Proceedings*, Chicago: American Marketing Association, 249-250.

Andaleeb, Syed S. (1995), "Dependence Relations and the Moderating Role of Trust: Implications for Behavioral Intentions in Marketing Channels," *International Journal of Research in Marketing*, 12, 157-172.

Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103 (3), 411-23.

Anderson, James C. and James A. Narus (1984), "A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships," *Journal of Marketing*, 48 (Fall), 62-74.

Anderson, James C. and James A. Narus (1990), "A Model of Distributor Firm and Manufacturer Firm Working Partnerships," *Journal of Marketing*, 54 (January), 42-58.

Anderson, Erin and Barton Weitz (1989), "Determinants of Continuity in Conventional Industrial Channel Dyads" *Marketing Science*, 8 (4) (Fall), 310-323.

Arbuckle, James L. and Werner Wothke (1999), *Amos 4.0 User's Guide*, Chicago, IL: SmallWaters Corporation.

Arndt, Johan and Torvald Ogaard (1986), "A Comparative Study of Channel Conflict: Preliminary Findings," in AMA Educators' Conference Proceedings, Terence A. Shimp et al., eds., Chicago: *American Marketing Association*, 191-194.

Bagozzi, Richard P. and Todd F. Heatherton (1994), "A General Approach for Representing Multifaceted Personality Constructs: Application to State Self-Esteem," *Structural Equation Modelling*, 1 (1), 35-67.

Baumgartner, Hans and Christian Homburg (1996), "Applications of Structural Equation Modeling in Marketing and Consumer Research: A Review," *International Journal of Research in Marketing*, 13 (2), April, 139-161.

Brown, James R. and Gary L. Frazier (1978), "The Application of Channel Power: Its Effects and Connotations," in *AMA Educators´ Conference Proceedings*, Subhash C. Jain, ed., Chicago: American Marketing Association, 266-270.

Brown, James R., Robert F. Lusch, and Laurie P. Smith (1991), "Conflict and Satisfaction in an Industrial Channel of Distribution," *International Journal of Physical Distribution & Logistics Management*, 21 (6), 15-25.

Buchanan, Lauranne (1992), "Vertical Trade Relationships: The Role of Dependence and Symmetry in Attaining Organizational Goals," *Journal of Marketing Research*, 29 (February), 65-75.

Busch, Paul and David T. Wilson (1976), "An Experimental Analysis of a Salesman's Expert and Referent Bases of Social Power in the Buyer-Seller Dyad," *Journal of Marketing Research*, 13 (February), 3-11.

Cronin, J. Joseph and Thomas Baker (1993), "The Effects of a Distributor's Attribution of Manufacturer Influence on the Distributor's Perceptions of Conflict Performance and Satisfaction," *Journal of Marketing Channels*, 3 (2), 83-110.

Dant, Rajiv P. and Patrick L. Schul (1992), "Conflict Resolution Processes in Contractual Channels of Distribution," *Journal of Marketing*, 56 (January), 38-54.

Deutsch, Morton (1958), "Trust and Suspicion," *Journal of Conflict Resolution*, 2 (4), 265-79.

Dwyer, F. Robert (1980), "Channel-Member Satisfaction: Laboratory Insights," *Journal of Retailing*, 56 (2) (Summer), 45-65.

Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh (1987), "Developing Buyer-Seller Relationships" *Journal of Marketing*, 51 (April), 11-27.

Dwyer, F. Robert and Orville C. Walker (1981), "Bargaining in an Asymmetrical Power Structure," Jo*urnal of Marketing*, 45 (Winter), 104-115.

Ellison, Craig W. and Ira J. Firestone (1974), "Development of Interpersonal Trust as a Function of Self-Esteem, Target Status, and Target Style," *Journal of Personality and Social Psychology*, 29 (5), 655-663.

Frazier, Gary L., James D. Gill, and Sudhir H. Kale (1989), "Dealer Dependence Levels and Reciprocal Actions in a Channel of Distribution in a Developing Country," *Journal of Marketing*, 53 (January), 50-69.

Frazier, Gary L. and John O. Summers (1984), "Interfirm Influence Strategies and Their Application within Distribution Channels," *Journal of Marketing*, 48 (Summer), 43-55.

Gattorna, John (1978), "Channels of Distribution Conceptualisations: A State of the Art Review," *European Journal of Marketing*, 12 (7), 471-512.

Geyskens, Inge and Jan-Benedict E. M. Steenkamp (1995), "An Investigation into the Joint Effects of Trust and Interdependence on Relationship Commitment," in *Proceedings of the 24th Annual Conference of the European Marketing Academy*, 351-371.

Geyskens, Inge, Jan-Benedict E. M. Steenkamp, Nirmalya Kumar (1998), "Generalizations About Trust in Marketing Channel Relationships Using Meta-Analysis," *International Journal of Research in Marketing*, 15, 223-248.

Gibb, J. R. (1964), “Climate for Trust Formation,” in *T-Group and Theory and Laboratory Method: Innovations in Re-education,* L. P. Bradford, J. R. Gibb, and K. D. Bennett, eds., New York: John Wiley.

Granovetter, M. S. (1985), “Economic Action and Social Structure: The Problem of Embeddedness,” *American Journal of Sociology*, 91 (November), 481-510.

Hunt, Shelby D. and John R. Nevin (1974), "Power in a Channel of Distribution: Sources and Consequences," *Journal of Marketing Research*, 11 (May), 186-193.

John, George and Torger Reve (1992), “The Reliability and Validity of Key Informant Data from Dyadic Relationships in Marketing Channels, *Journal of Marketing Research*, 19 (November), 517-524.

Johnson, Jean L. and Peter V. Raven (1996), "Relationship Quality, Satisfaction and Performance in Export Marketing Channels," *Journal of Marketing Channels*, 5 (3/4), 19-48.

Larzelere, Robert E, and Ted L. Huston (1980), “The Dyadic Trust Scale: Toward Understanding Interpersonal Trust in Close Relationships,” *Journal of Marriage and the Family*, 42, August, 595-604.

Kale, Sudhir H. (1986), "Dealer Perceptions of Manufacturer Power and Influence Strategies in a Developing Country," *Journal of Marketing Research*, 23 (November), 387-393.

Kumar, Rajesh (1989), “Affect, Cognition, and Decision Making in Negotiation: A Conceptual Integration,” in *Managing Conflict: An Integrative Approach*, M. Afzalur Radim, ed., New York: Praeger, 185-194.

Lusch, Robert F. (1976b), "Sources of Power: Their Impact on Intrachannel Conflict," *Journal of Marketing Research*, 13 (November), 382-90.

Lusch, Robert F. (1977), "Franchisee Satisfaction: Causes and Consequences," *International Journal of Physical Distribution*, 7 (Feb), 128-140.

Michie, Donald A. and Stanley D. Sibley (1985), "Channel Member Satisfaction: Controversy Resolved," *Journal of the Academy of Marketing Science*, 13 (2), 188-205.

Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (July), 20-38.

Rempel, John K. and John G. Holmes (1986), "How Do I Trust Thee?," *Psychology Today*, (February), 28-34.

Roering, Kenneth J. (1977), "Bargaining in Distribution Channels," *Journal of Business Research*, 4 (March), 15-26.

Shoham, Aviv, Gregory M. Rose, and Frederic Kropp (1997), "Conflict in International Channels of Distribution," *Journal of Global Marketing*, 11 (2), 5-22.

Sibley, Stanley D. and Donald A. Michie (1982), "An Exploratory Investigation of Cooperation in a Franchise Channel," *Journal of Retailing*, 58 (4), 23-45.

Simpson, James T. and Donna T. Mayo (1997), "Relationship Management: A Call for Fewer Influence Attempts?" *Journal of Business Research*, 39, 209-218.

Skinner, Steven J., Jule B. Gassenheimer, and Scott W. Kelley (1992), "Cooperation in Supplier-Dealer Relations," *Journal of Retailing*, 68 (2), 174-192.

Stern, Louis W. and Torger Reve (1980), "Distribution Channels as Political Economies: A Framework For Comparative Analysis," *Journal of Marketing*, 44 (3), 52-64.

Thomas, Kenneth W. (1990), "Conflict and Negotiation Processes in Organizations," in *Handbook of Industrial and Organizational Psychology*, 2nd ed., Marvin D. Dunnette ed., Chicago: Rand McNally, 651-717.

Wilkinson, Ian and David Kipnis (1978), "Interfirm Use of Power," *Journal of Applied Psychology*, 63 (3), 315-320.

Wilkinson, Ian (1981), "Power, Conflict, and Satisfaction in Distribution Channels-An Empirical Study," *International Journal of Physical Distribution and Materials Management*, 11 (7), 20-30.