

SEARCHING FOR GENERALIZATIONS IN BUSINESS MARKETING NEGOTIATIONS

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In this paper we investigate how to make empirical generalizations in marketing. We argue that for substantive empirical generalizations to exist in an area, there should be a sufficient body of *relevant* research about recurring phenomena. We outline criteria and a procedure to search for and identify such generalizations, and we apply the procedure to the area of business marketing negotiations. We find that, in spite of a sizable literature on business marketing negotiations, there appears to be little overlap between what researchers have studied to date and many characteristics of real-world bargaining situations. We do identify one significant generalization: that bargainers who are problem solvers settle disputes more efficiently than those who take adversarial positions. However, we note that a significant theory-practice gap exists that must be bridged before more substantive generalizations can be identified in the area of business marketing negotiations. More broadly, we suggest that issues such as the sampling or selection of research studies and the match of reported research with real phenomena are serious concerns in our search for empirical generalizations in marketing and that it is not apparent that such generalizations exist in *all* marketing domains.

(Bargaining; Business Markets; Empirical Generalizations; Negotiations)

1. Introduction

This special issue of *Marketing Science* is devoted to the subject of developing empirical generalizations in marketing. While it is difficult to quibble with this volume's goal, it is important to have both a systematic process for searching for those generalizations and at least a rough mechanism for checking if we have found any. Are there, indeed, readily discoverable generalizations in all areas of marketing? The answer is not apparent; consider the following perspectives:

There are no universal generalizations in marketing . . . there is a great deal of empirical research, but very little is generalizable (Leone and Schultz 1980, p. 12).

We examined nine marketing textbooks, published since 1927, to see if they contained useful marketing principles. Four doctoral students found 566 normative statements about pricing, product, place, or promotion in these texts. *None* [emphasis added] of these statements was supported by empirical evidence (Armstrong and Schultz 1993, p. 253).

Because marketing science is concerned primarily with transactions between buyers and sellers, whatever truths exist are going to be embedded in a social world. Marketing is a social science; consequently, marketing generalizations are not going to be stable over time (Zinkham and Hirschheim 1992, p. 83).

We believe that there are, indeed, empirical generalizations, properly defined, in some marketing contexts. Those generalizations should be repeatable, reasonably stable over time, and apply generally over similar situations. However, as we discuss below, we are not sure that *all* marketing phenomena lend themselves to such generalizations.

In this paper we proceed as follows. First, we comment briefly on the search and identification of empirical generalizations in marketing. We then sketch a procedure, consistent with that search and identification process, to determine if sufficient relevant research exists to support empirical generalizations in an area and to identify such generalizations if they do, indeed, exist. We describe an empirical application of this procedure to one area of marketing science: business marketing negotiations. We then conclude with some observations about generalizations in business marketing negotiations specifically and about our suggested approach in general.

2. The Search for Generalizations in Marketing

The search for generalizations raises one of the most vexing questions in the philosophy of science: the problem of induction. The idea that scientific investigations can produce indisputable generalizations that correspond to reality has been continually challenged in the hardest of the hard sciences (e.g., Laudan 1981). The battle over valid induction by Hume and others has left few philosophers neutral (see Dilman 1973, and Chalmers 1982 for good discussions of the key issues). Indeed, Dilman interprets Wittgenstein as pointing out that while it can never be “proved” that inductive reasoning can provide us with valid generalizations, our way of life is intimately entwined with the making of such inductive inferences. Thus, while it may be nonsense to demand certainty when attempting to develop inductive generalizations, we must use common sense and the norms of the day to determine which inductive inferences are better than others.

Kaplan (1964) points out that it is important to search for what he calls descriptive or experimental laws as a bridge to theoretical laws. He asserts that theoretical laws (like Ehrenberg’s 1994 empirical-then-theoretical approach) evolve from these descriptive generalizations as their ability to explain and predict evolves. And, as exceptions to our (always simplified) generalizations exist, Kaplan notes that “. . . in behavioral sciences, our knowledge is virtually all in the form of quasi-laws at best” (p. 114).

Thus, in the end, we must search for “good” or plausible generalizations, providing sufficient safeguards and appropriate methodological steps so that our inductive generalizations are worthy candidates for entry into the knowledge base of our time. We will never be able to provide a proof of any generalization (as none can exist, Dilman 1973); however, we should at least appeal to standards that are recognized by the scientific culture of our time.

We proceed then to suggest a process of search and a rough way of checking for the appropriateness of our discovery of inductive empirical generalizations. Our domain of interest is marketing phenomena: these are events, often spanning multiple dimensions, that are observable within the realm of marketing. Some marketing phenomena (e.g., retail price promotions for packaged goods, new ad campaigns for consumer services) recur over time and across markets in quite similar form. Others may, like the market response to the introduction of the hula hoop or the pet rock, have certain *critical* characteristics that appear unique to that specific time or market, and thus fail the “repeatability” criterion we suggested earlier for generalizations. In addition, for us to make empirical generalizations at any time, there should be a sufficient body of knowledge obtained via *relevant* research about the phenomenon. By relevant research we mean analytical as well as empirical investigations that address the key dimensions characterizing the marketing phenomenon under consideration. Such a range of research should help us span Kaplan’s gap from experimental to theoretical laws.

3. Criteria and a Procedure for Making Inductive Empirical Generalizations in Marketing

A sound procedure for developing a useful body of knowledge and for making empirical generalizations in marketing should guard against key biases or threats to validity. Two that we feel are particularly important are *sample selection bias* and *simplicity bias*.

3.1. *Sample Selection Bias*

Assuming that we look at a sample of published research studies for empirical generalizations, it is important that the relative incidence of the characteristics of the phenomena in the sample at least roughly match the universe of problems that we are trying to generalize to. Suppose that all published promotional studies took place during a period of "market warfare." Such situations gain the attention of managers and academics alike; however, if we were to generalize from such a knowledge base to all promotional response phenomena, we might be generalizing from a biased sample. Note that while the periods of "market warfare" might uncover some market phenomena that may exist during nonwarfare periods, we would have no way of verifying the generality of those phenomena without further observations. Note also that the frequently noted bias in the academic literature against publishing replications and negative results makes the sample selection bias from previously published research an important and pervasive concern as well.

3.2. *Simplicity Bias*

Research in marketing uses a number of paradigms, including stylized theoretical models, empirical laboratory studies, and field studies. Theoretical and empirical laboratory studies explicitly introduce simplicity bias either through specific model assumptions or through experimental design, respectively. Such studies could very well focus on those situations that are easy to analyze or manipulate, rather than on those that are more representative of the phenomena of interest.

This condition [oversimplification] is especially likely either when we do not know what factors can safely be neglected or when we cannot treat by the mathematics available to us for the model some factors which we already know to be important in that context of inquiry (Kaplan 1964, p. 282).

Thus it is important that our sources of knowledge be sufficiently rich in important phenomena to enable us to make *empirical* generalizations. We intend to make no negative judgment about the value of theoretical inquires in marketing; indeed we have argued elsewhere (Eliashberg and Lilien 1993) that such inquiries play a key role in the development of the science of marketing. For example we agree with Chatterjee's (1994, p. 16) assessment of the value of game theoretic results in the domain of negotiations: ". . . the theory is . . . valuable not because it provides us sharp quantitative predictions of outcomes, but because it gives us qualitative insights into behavior." Thus, we develop these criteria solely to guide the inductive development of *empirical* generalizations in marketing.

We assert that for developing a research-based body of knowledge amenable to empirical generalizations to be valid, we must guard against at least these two forms of bias through a "reality check"—a determination of whether the reported research at least roughly matches real phenomena. There are at least three sources for such reality checks that we can think of:

(1) *Empirical evidence of phenomena*. Scanner data, for example, provide fairly broad coverage of the sales-related phenomena that occur in the frequently purchased consumer goods arena. In such areas, reality checks can be made by the researcher in a compelling manner simply by *observing* the data set.

(2) *Managerial reports and surveys.* By talking and listening to managers in a systematic way about "what is important," the researcher can check to see if he or she is addressing the right phenomena with the right amount of detail. Little's (1970) decision calculus approach popularized a form of this research approach that has helped generate empirical generalizations in the context of advertising decision-making.

(3) *Case studies and published reports of practice.* This is an archival approach closely related to the previous one. Important characteristics of marketing phenomena tend to be included in case-teaching materials. Indeed, the existence of a published case ensures that some individuals (the developers and users of the case) believe the subject-phenomena to be important, rich, and repeatable or the case would not be appropriate pedagogic material. (Note, however, that case materials rarely provide suggested or "optimal" solutions to problems; rather they can best be used to identify and describe the important characteristics of marketing phenomena.)

These sources are meant to be illustrative and not exhaustive; each domain of marketing phenomena may have different sources that can be used to identify important characteristics of phenomena and thus provide opportunities for reality checks. We do not pretend to come up with a universal definition of "importance," as such a definition would reintroduce the problem of induction. Our point is merely that we should try to be thorough and careful in removing apparent biases in our search for empirical generalizations in marketing, and that we should consult at least one of the knowledge sources discussed above for a reality check. To this end we suggest the following three-step procedure:

Step 1. Develop a taxonomy of the characteristics of the phenomena that have a high level of incidence in practice. (All the sources above should give some guidance on what those phenomena might be.) We seek not just key characteristics that occur singly, but how and when they occur coincidentally with other characteristics. This "sample from practice" should be as large as possible.

Step 2. Search for a systematic "body of knowledge" (by sampling research articles) and code both the presence/absence of the key characteristics of the phenomena identified in Step 1, as well as the findings of the articles.

Step 3. Match the characteristics studied in the research articles with the characteristics identified from the study of practice. Use a procedure such as cluster analysis to identify subsets where there is significant overlap of relevant research and important characteristics. Report the findings of the relevant research studies in those subsets as empirical generalizations.

Step 1 determines *where to look* for empirical generalizations (our tracking of the phenomena that occur in practice) while the (overlapping) research that we discover from Step 3 tells us *what those generalizations are*. This procedure has an important bonus: it can identify two types of problems in a given research area:

Problem 1. Oversights. The procedure may uncover characteristics or combinations of characteristics that have not been subject to research. One could view this outcome as a way of identifying research gaps or as a mechanism for combating various forms of publication bias.

Problem 2. Toy Problems. If there is significant research (either of the theoretical or laboratory/empirical variety) applied to combinations of characteristics that neither occur naturally, nor are reported as relevant in practice, one might question the contributions of such research as crucial in developing a generalizable body of knowledge.

We illustrate a test of such a procedure for the phenomenon of business marketing negotiations next.

4. An Application to Business Marketing Negotiations

Almost any human interaction involves some form of give-and-take, i.e., negotiation. The literature on bargaining can be divided roughly into five main areas of study: (1)

business marketing negotiations; (2) political negotiations; (3) labor/management negotiations; (4) legal negotiation/arbitration; and (5) interpersonal negotiations. While areas (2) and (5) have some overlap with the negotiations that arise in business marketing, marketing negotiations generally have the distinctive characteristic that there are generally one or more items under consideration within a process of exchange having some marketing implications (e.g., pricing, warranty, delivery time). We restrict ourselves here to business marketing negotiations phenomena, the exchange process between organizational or business decision-making units.

Operationally, these exchange processes take place between individuals within an organizational context. Hence, phenomena related to characteristics such as the negotiator's personality traits, venue, culture, and the like are potentially important and relevant. Interpersonal negotiations take place between individuals for their own immediate personal benefit; business marketing negotiations take place, however, between agents of organizations for the benefit of the organization as well as for the personal gain of the individual.

While some consumer markets (for houses, automobiles, works of art, some durable goods) do clear via a bargaining mechanism, bargaining is the generally recognized norm in the business marketplace: "Most purchases by institutions, government agencies and commercial businesses are negotiated" (Reeder et al. 1987, p. 475). If we combine Reeder et al.'s comment with the observation that the dollar volume of transactions in the business marketplace far exceeds that of the consumer marketplace (Hutt and Speh 1989, p. 4), it becomes apparent that negotiations phenomena are quite central both to marketing theory and to marketing practice. It is interesting to note also in this regard that five key journals (*Journal of Marketing*, *Journal of Marketing Research*, *Marketing Science*, *Industrial Marketing Management*, and *Management Science*) published 441 articles in the 1990 to 1992 period (counting only the marketing or negotiation-related articles from *Management Science*). Of those 441 articles, 39 or nearly ten percent dealt with business marketing negotiation issues, with topics such as procurement and channel interactions occurring with the highest frequency.

We conducted a review of the business marketing negotiations literature and identified 30 characteristics whose presence were consistently cited as important and relevant in describing at least some negotiation settings. (See Eliashberg et al. 1994 for a complete discussion.) We used those characteristics as classification variables to code various bargaining situations and scenarios from both the researchers' and the practitioners' perspectives. We included an additional 25 variables for research articles, describing both the research perspective/paradigm and the type of methodology used (see Exhibits 1, 2, and the appendix for the operational definitions of these characteristics).

In order to get a sample of research articles and case studies, we used the following snow-ball procedure: we started with a well-known and widely cited set of research articles on business marketing negotiations, traced references in those articles, traced the references in the references, and so on until we were able to find no new relevant articles. This process resulted in 293 research articles. We drew the case studies from the reference lists as well, but included material we and our colleagues had gathered over the years from teaching materials, texts, monographs, and the like, resulting in 97 case articles. In order to be usable, each case article had to include a fully developed discussion of the bargaining situation; a major screening criterion for inclusion for both case and research articles was that the coder had to be able to provide reliable answers to the questions in our coding instrument.

Most (71) of the 97 case articles come from chapters in books; of the remaining 26 cases, 13 are separately published Harvard Business School cases, and the other 13 come from journals such as *Industrial Marketing Management* and *The Negotiation Journal*.

We attempted to identify the presence or absence of our key characteristics of business marketing bargaining situations described in the research articles and in the case studies.

EXHIBIT 1
Incidence of Key Characteristics

Characteristics	Case Articles	Research Articles
1. Two Parties	93%***	74%
2. Single Agents	10%	53%
3. One Time	9%	40%
4. Linkage/Precedents	63%	16%
5. Single Issue	1%	34%
6. Agreement Required	25%	13%
7. Ratification Required	67%	4%
8. Credible Threats	97%	23%
9. Time Constraints	62%	24%
10. Bargain Cost Important	76%	16%
11. Contracts Binding Legally	100%	26%
12. Zero Sum	3%	28%
13. Symmetric Objective**	—	—
14. Objectives Private*	25%	24%
15. Utility Maximization**	—	—
16. Aspiration Level Explicit	92%	22%
17. Single Objective	5%	39%
18. No Agreement Risk Important	89%	17%
19. Personality Important	83%	15%
20. Power Important	98%	27%
21. Private Information Important	66%	44%
22. Simultaneous Offers	16%	77%
23. First Offerer Important	75%	13%
24. Social Relations Important	75%	15%
25. Expect Future Interaction	92%	19%
26. Venue Important	62%	3%
27. Cultures Different	59%	10%
28. Tactics Important	97%	41%
29. Learning Important	85%	18%
30. Inter-Organizational	100%	74%
	<i>n</i> = 97	<i>n</i> = 293

* The two percentages are NOT significantly different from each other at the 1% level; all other percentages ARE significantly different at that level.

** Not reported due to inconsistency amongst coders.

*** Read as "93% of the 97 case articles represented negotiations between two parties."

We employed three independent coders for each of the articles, all of whom were Ph.D. students with backgrounds in bargaining research. In each situation, the coder assigned his/her subjective probability to the existence/nonexistence of a characteristic of the negotiation in the written materials. If all three coders assigned a probability greater than 0.5 to the existence of a characteristic, we coded that characteristic as "present." If all three coders assigned a probability of less than 0.5, we coded the characteristic as "absent." If the coders disagreed about a characteristic, they met and resolved their differences. We encountered relatively little ambiguity in the coding process; for the most part, the coders were able to resolve differences with minimal discussion. For two issues, however (whether objectives were utility maximizing, and whether they were symmetric), the coders could not agree, and we dropped those characteristics from further analysis. Our objective with this coding scheme was to create a basic data matrix of (97 + 293 = 390) articles by (30 - 2 = 28) characteristics of the articles as a foundation for further data analyses.

Exhibit 1 indicates the relative occurrences of the coded characteristics broken down by source: case versus research article. This breakdown shows that the case articles stress more complex phenomena, characterized by more qualitative items such as linkages,

EXHIBIT 2

Key Characteristics of Research Articles: Formulation and Methodology

Formulation/Approach:		
1. Theoretical (68.3%)	vs.	Empirical (31.7%)
2. Process oriented (59.4%)	vs.	Outcome oriented (40.6%)
3. Normative (55.6%)	vs.	Descriptive (44.4%)
4. Deterministic (86%)	vs.	Stochastic (14%)
5. Continuous (74.7%)	vs.	Discrete (25.3%)
6. Linear (86.3%)	vs.	Nonlinear (13.7%)
7. Delayed response (82.6%)	vs.	Instant response (17.4%)
8. Equilibrium (85.7%)	vs.	Nonequilibrium (14.3%)
Methodology:		
9. Game theory (47.1%)		18. Content Analysis (1.7%)
10. Control theory (0.7%)		19. Discriminant Analysis (0.3%)
11. Utility theory (18.8%)		20. Factor Analysis (1.4%)
12. Dynamic programming (0.3%)		21. Regression (3.8%)
13. Math programming (1.4%)		22. Simple Frequency (3.8%)
14. Decision analysis (47.1%)		23. Simulation (0.7%)
15. Conjoint analysis (0.3%)		24. Structural Equations (0.3%)
16. ANOVA (11.6%)		25. Others (2.4%)
17. Cluster Analysis (0.7%)		
<i>n</i> = 293		

credible threats, time constraints, and power while research articles have focused primarily on simpler, more quantifiable situations. Case articles also show a near absence of one-time or single-issue negotiation situations while many research studies address these topics. In addition, we see single agents (i.e., monolithic parties) as the focus in over half the research articles compared with only 10% of the case articles. And while simultaneous offer bargaining seems to be a popular research topic (77%), it is rarely observed in case articles (16%).

To develop additional insight into the research approach and methodology used, we also coded the research articles in terms of problem formulation and approach, and methodology. Exhibit 2 indicates that about two-thirds of the research articles in our sample are purely theoretical, i.e., they do not report any empirical analysis. The articles are split nearly evenly between normative and descriptive analyses. The theoretical papers focus primarily on situations that are deterministic, can be modeled in continuous time, with linear objective functions, delayed response, and seeking equilibrium analysis. Game theory, utility theory, and decision analysis are the main analytical methodologies that see by far the greatest amount of use in analyzing these situations, while analysis of variance (ANOVA), regression, and frequency analysis are the statistical methods that are most often used in the empirical studies.

Now let us seek those subsets of knowledge bases that are amenable to empirical generalizations. Conceptually, we want to identify clusters of business marketing negotiations problems (cases) and clusters of findings (research) that overlap within the space of bargaining situation characteristics. To this end we must develop a measure of association between any pair of articles.

We used a matching coefficient, S (Anderberg 1973, p. 88–89), for this purpose. It can range between 0 (most dissimilar pair) and 1 (most similar pair):

$$S = \{ \# \text{ of } 1/1 \text{ matches} + \# \text{ of } 0/0 \text{ matches} \} / \{ \# \text{ possible matches} \},$$

where “1” indicates that one of the 28 characteristics is present in an article

and “0” indicates it is absent.

Our distance (dissimilarity) measure is $1 - S$ from the equation above.

EXHIBIT 3
General Results of Cluster Analysis for Ward's Method

Cluster							
1	2	3	4	5	6	7	8
R54	R17 C15	R69	R31	R58	R14	R1 C70	R18 C4

R = # of research articles in cluster.

C = # of case articles in cluster.

The output of this step is a 390×390 (symmetric) matrix of dissimilarities, which is the main input to our clustering procedure. We removed outliers (articles close to no others) using the trim (10%) option in SAS (1990) with the control value ($k = 20$) set to the square root of the number of observations (Silverman 1986). For k th-nearest-neighbor density estimation this eliminated eight case articles and 31 research articles from further analysis.

EXHIBIT 4
Mean Incidence of Characteristics from Three Key Clusters from Ward's Method

Variable	Cluster 2 (R17, C15)**	Cluster 3 (R only, 69)	Cluster 7 (R1, C70)
1. Two Parties	.84	.55	.94
2. Single Agents	.13	.26	.08
3. One Time	.09	.25	.08
4. Linkage/Precedents	.56	.06	.61
5. Single Issue	.06	.06	.00
6. Agreement Required	.13	.10	.28
7. Ratification Required	.38	.01	.70
8. Credible Threats	.91	.09	.97
9. Time Constraints	.56	.03	.65
10. Bargain Cost Important	.78	.10	.80
11. Contracts Legal	.88	.19	1.00
12. Zero Sum	.19	.10	.00
13. Symmetric Objective*	—	—	—
14. Objectives Private	.78	.29	.20
15. Utility Maximization*	—	—	—
16. Aspiration Level Explicit	.72	.09	.99
17. Single Objective	.09	.03	.00
18. No Agreement Risk Important	.63	.00	.96
19. Personality Important	.44	.10	.90
20. Power Important	.97	.26	.99
21. Private Information Important	.78	.10	.66
22. Simultaneous Offers	.69	.99	.11
23. First Offerer Important	.50	.03	.79
24. Social Relations Important	.59	.06	.82
25. Expect Future Interaction	.63	.04	.97
26. Venue Important	.16	.00	.75
27. Cultures Different	.25	.06	.66
28. Tactics Important	1.00	.19	.99
29. Learning Important	.94	.03	.89
30. Inter-Organizational	1.00	.90	.99

* Not reported due to inconsistency amongst coders.

** Candidate for empirical generalizations.

R = Research Article.

C = Case Study.

We then used four different cluster analytic procedures to group the data: (1) Average Linkage Clustering, (2) the Centroid Method, (3) Ward's Method, and (4) Complete Linkage Clustering. All of these are hierarchical methods (Anderberg 1973; Johnson and Wichern 1988), building up clusters from individual data elements (i.e., articles). By reviewing pseudo F and pseudo t^2 statistics, we determined that the Average Linkage clustering procedure generates 11 clusters while the other procedures suggest eight clusters. We adopt the eight cluster solutions for simplicity throughout the rest of this paper. To test the robustness of the four clustering algorithms, we performed a convergence test (Eliashberg et al. 1994) that revealed that the percentage of consistent classification for any pair of methods is significantly higher than chance in each case.

Exhibit 3 provides the results from the most robust of the methods, Ward's Method, indicating the number of case articles and the number of research articles in each of the eight clusters. Exhibit 4 focuses on three critical clusters that reflect our overall results: Cluster 2 (evenly split between research and case articles, and thus the only cluster that potentially can suggest empirical generalizations), Cluster 3 (the largest cluster involving all research articles), and Cluster 7 (the largest cluster dominated by case articles).

EXHIBIT 5

Time Trends in the Incidence of Characteristics in Research Articles Cited in Exhibit 1

Variable	Year				
	Pre 1970	1971-75	1976-80	1981-85	1986-90
1. Two Parties	91%	91%	75%	66%	70%
2. Single Agent	72%	53%	51%	47%	59%
3. One Time	53%	40%	50%	31%	43%
4. Linkage/Precedents	22%	23%	11%	15%	17%
5. Single Issue*	48%	48%	42%	30%	32%
6. Agreement Required	10%	14%	17%	15%	12%
7. Ratification Required	1%	1%	1%	8%	05%
8. Credible Threats	34%	14%	32%	21%	16%
9. Time Constraints*	46%	27%	22%	24%	20%
10. Bargain Cost Important	25%	23%	13%	21%	11%
11. Contracts Legal*	32%	33%	26%	24%	20%
12. Zero Sum	25%	27%	20%	31%	27%
13. Symmetric Objective**					
14. Objective Private	20%	40%	28%	29%	13%
15. Utility Maximization**					
16. Aspiration Level Explicit	29%	35%	20%	25%	16%
17. Single Objective	39%	40%	48%	37%	40%
18. No Agreement Risk Important	22%	35%	17%	18%	9%
19. Personality Important	15%	18%	13%	15%	11%
20. Power Important	25%	18%	27%	35%	19%
21. Private Information Important*	72%	53%	50%	40%	38%
22. Simultaneous Offers	72%	83%	85%	71%	74%
23. First Offerer Important	15%	18%	9%	17%	9%
24. Social Relations Important	6%	23%	11%	17%	14%
25. Expect Future Interaction	15%	23%	16%	29%	14%
26. Venue Important	1%	5%	1%	4%	5%
27. Cultures Different	1%	5%	13%	10%	9%
28. Tactics Important	43%	53%	44%	39%	34%
29. Learning Important	20%	23%	18%	24%	11%
30. Inter-Organizational	72%	87%	82%	61%	76%
Sample Size =	26	34	50	124	59

* Trend in incidence of characteristics significantly *negative* at $\alpha = 0.1$ level; all other trends *not* significant.

** Not reported due to inconsistency amongst coders.

Consider Cluster 2, the candidate for empirical generalizations. This cluster focuses on business marketing negotiating situations involving multiple issues, multiple agents, multiple time periods, credible threats, power, bargaining tactics, and a risk of no agreement as important negotiations issues. An in-depth analysis of the research article findings in this cluster provides one potential generalization stated below:

Bargaining Generalization: Bargainers who view their task as joint problem-solvers settle their dispute closer to the Pareto frontier. That is, they generate more efficient agreements on average than those who do not view their task as joint problem solving.

Two other observations emerge from analysis of the research articles in this cluster:

1. *Research results are situational and context specific.* We found, in general, that there were *no* results that were universally valid, either descriptively (*W* always happens in situation *X*) or normatively (negotiators should always do *Y* in situation *Z*).

2. *Simple economic-based models predict negotiations outcomes rather poorly.* Contextual and situational variables (such as venue, rhetoric, style, etc.) as well as their interactions add significantly to the descriptive power of bargaining models; hence models that include only economic variables can be significantly improved by including these other variables.

Let us briefly compare Cluster 3 (the largest cluster with research articles only) with Cluster 7 (the largest cluster dominated by case studies). Almost all the case studies report the incidence of linkages/precedents, credible threats, legal issues, time constraints, explicit aspiration levels, and behavioral issues such as personality, social relations, venue, culture, specific bargaining tactics and the expectation of future interaction as major characteristics of importance. Research articles tend to underrepresent these characteristics. A three-group discriminant analysis, not reported here, confirmed these observations but did not provide additional insight.

We thought that perhaps our conclusions were too severe, that perhaps the gap was indeed closing, and that we were reflecting on a situation that was in the process of correcting itself. Exhibit 5 shows that this is not the case. Indeed, many of the "hard to quantify" phenomena that we referred to above (such as aspiration level, personality, bargaining cost, learning, and the risk of no agreement) appear to have been given less emphasis in recent research than in earlier periods.

5. Conclusions

Let us sum up: there are two categories of conclusions to draw from this paper. The first is specific to business marketing negotiations: the second to developing empirical generalizations in marketing.

In the area of business marketing negotiations, we note that a clear gulf exists between research and real-world problems. Research articles and case materials that reflect actual bargaining issues overlap to a disappointing degree. We need more researcher-practitioner interaction to allow researchers to better understand the important elements of the real-world negotiations problems they are researching. Such interaction may induce researchers truly interested in the problem domain (and not just looking for a convenient place to apply their favorite research methods) to adopt a more eclectic set of research tools to address these problems.

In our ideal world, we would find that all the clusters of research articles would have at least a modest number of parallel case studies. For that to happen we need an active research agenda focusing on the missing issues like personality, social relations, venue, cultural differences, time constraints, learning, and the like. It is unlikely that such research will occur without expanding our set of research tools beyond stylized theoretical models and equally narrowly focused laboratory experiments. We should perhaps look to electronic data capture (computer-as-intermediary; video-taping the negotiation process, etc.)

as well as ethnographic procedures (Van Maanen 1983), and the whole range of artificial intelligence/expert system approaches (Rangaswamy 1993) to help bridge the gap.

There is a large domain of “conventional wisdom,” “tips,” or “guidelines,” synthesizing the experiences of successful practitioners that might be mined for “empirical generalizations” in this area (see Karrass 1974, for example). We are wary of such generalizations. Most of them are stated in noncontingent language (“Always let the other party make the first offer,” for example). When understood by all, such generalizations may even reduce to foolishness: both parties cannot make the second offer. One’s bargaining strategy **MUST** depend on the specific situation—the context, the level of knowledge and expertise of the opponent, past and future relationships, etc.; it is inconceivable that such “dominant” (across the board) generalizations can exist in this area. Most rules and heuristics extracted from bodies of negotiations knowledge are of the form “if *X* and *Y*, then *W* or *Z*.” For example, one of the rules in the expert system that Rangaswamy et al. (1989) developed is as follows:

If you are the agenda setter AND
the negotiation is in an early stage OR
you are a problem-solving negotiator OR
the other party is stronger than you THEN
discuss minor issues before major issues in the negotiation.

Note that an AND and two ORs precede the recommended strategy here, suggesting that such generalizations (about marketing negotiation strategies at least) are situation specific or contingent.

There are a number of important limitations to our proposed search for an empirical generalizations procedure. As we have not been able to locate other systematic procedures for searching for generalizations, we have difficulty in evaluating the relative performance of our approach; as with any initial trial of a procedure, it should be improved and tuned after testing. While we tried to be exhaustive in our selection of articles concerning business marketing negotiations, we might have overlooked some important ones. Our identification of issues, our coding system, and our measure of inter-article association might also be improved. We attempted to condense the set of characteristics via cluster analyses, but no clear grouping occurred, leaving us with the original set of characteristics rather than with a smaller set of characteristics-groupings that we might have hoped for. And we coded the incidence of the characteristics, rather than trying to address the problem of “characteristics-importance.” It is possible (although, we feel, unlikely) that the characteristics that researchers have been neglecting are not important. The literature on practice suggests that all these characteristics are important, but it is not clear how one might assess that importance or how that importance might vary. While these limitations are important, we concur with one of this article’s reviewers who stated, “One of the central functions of the special issue is to get the field to think about what generalizations there are out there and how we should look for them, and this paper should help generate thinking along these lines, if only to identify better alternates to the approach suggested by the authors.”

From the standpoint of research to support empirical generalizations in marketing, we note that if we had merely looked at research articles in this area, we would have developed generalizations about situations that largely do not correspond to real market conditions. The characteristics that have been omitted or received little attention by researchers have been shown (in Cluster 2) to be important to the final conclusions and generalizations. Hence, the sample selection of research evidence for empirical generalizations is of critical importance to the validity of the results. We have argued that such empirical generalizations should match real phenomena to pass a reality check and that our proposed methodology provides a mechanism for such matching.

Finally, we note that if one construes the body of knowledge concerning a marketing phenomenon as a tree whose branches depict the nature of the contingencies that we must employ before stating any empirical generalization, then phenomena in business marketing negotiations can be represented by deep (i.e., “bushy”) trees. Hence, it appears that this marketing domain is not amenable to universal unqualified empirical generalizations (shallow trees). Indeed, we have yet to be convinced that universal empirical generalizations exist for many other marketing phenomena, and await the further development of systematic search mechanisms to better identify such generalizations.

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Appendix 1. Coding Procedures for Cases and Articles

1. Two Parties (1) vs. More than two parties (0)
Rule: Always restrict to negotiation situation alone. Unless explicitly stated that more than two parties take active part in negotiation under study always code as (1). Even if we do not find a statement of the number of parties it is reasonable to assume that a minimum of two is required and then look for multi-party evidence.
2. Single (1) vs. Multiple Agent (0)
Rule: Look for participating members in the process of negotiation, and if even one party has multiple agents code as (0). If explicitly stated that each party is represented by a sole agent throughout the process then code as (1).
3. One Time (1) vs. Repetitive/Reputation (0)
Rule: Are there continued negotiation sessions—if yes then code (0). Code as (1) only if explicitly stated that the negotiation was viewed as being one-shot.
4. Linkage/Precedents Yes (1) No (0)
Rule: Restrict to the two-party negotiation situation. There must be explicit mention of Linkage Effects to code as (1) or (0).
5. Single Issue (1) vs. Multiple Issue (0)
Rule: Again look for what issues could have been debated and resolved. Similar to Item 3.
6. Agreement Required Yes (1) No (0)
Rule: If solution alternatives, next “best” competitors are explicitly mentioned, then (0). If explicitly stated that no such alternatives exist, then (1).
7. Ratification Required Yes (1) No (0)
Rule: If explicit statement is made that the negotiator went to a higher authority not involved directly in negotiation or that the negotiators decision-making capacity (role) is limited then code as (1), otherwise look for statements relating to negotiators’ authority in making offers and finalizing the contracts.
8. Credible Threats Possible Yes (1) No (0)
Rule: If threat is credible and so mentioned and if threat is used in a stated sense, then code as (1). If reason to believe that threats are not credible, then (0).
9. Time Constraints Yes (1) No (0)
Rule: Explicit mention of time pressure—code (1). If mentioned that negotiations are protracted “for years,” then code (0).
10. Bargaining Costs Important Yes (1) No (0)
Rule: If (a) it exists and (b) is critical, then (1)
11. Contracts Binding: Legally Yes (1) No (0)
Rule: Use (0) only if mentioned that no legal papers are dealt with or if a “gentlemen’s” agreement was reached.
12. Zero Sum (1) vs. Non-Zero Sum (0)
Rule: View this as being distributive vs. integrative. *Zero sum* (1) only if it is stated that there is no trade-off between issues and at least one of the parties tries to get the best deal on even one issue. *Nonzero sum* (0) if trade-offs stated to exist.
13. Objectives: Symmetric (1) vs. Asymmetric (0)
Rule: Need a priori descriptive statements of each party’s objectives to determine symmetry vs. asymmetry.
14. Objectives: Common Knowledge (1) vs. Private Information (0)
Rule: Reinterpret as Revealed vs. Nonrevealed. Need explicit statements about each.
15. Objectives: Utility Max (1) vs. Other (0)
Rule: Consider explicit statements such as a “satisfying” rule or less than optimum decision being made as an indicator of the other category.

16. Aspiration Level Explicit Yes (1) No (0)
Rule: If mentioned that aspiration level was known to either party then code as (1). If mentioned that the aspiration levels of the two parties were not known to the two parties, then code (0).
17. Objectives: Single Objective (1) vs. Multiple (0)
Rule: Look for statements or inferences as to the number of objectives being sought to fulfill via negotiation. Code as (1) if explicitly stated and code as (0) if several issues mentioned for even one party. Often after a series of negotiations the last negotiation session may be on a single issue—do not confuse with objectives. Take objectives in a holistic sense.
18. No Agreement Risk Important Yes (1) No (0)
Rule: If (a) it exists and (b) is critical, then (1). If no mention, then (0).
19. Personalities Important Yes (1) No (0)
Rule: If any party acted as if personalities are important then code as (1). If both did not, then (0).
20. Power Important Yes (1) No (0)
Rule: If there is dependence of one party on another in terms of “volume of product exchanged,” number of “alternative” suppliers or buyers, tendency to “do as told” then infer (1). Otherwise look for explicit statements of relative power, size, etc., to be able code (0).
21. Private Information Important Yes (1) No (0)
Rule: If (a) it exists and (b) is critical, then (1). Otherwise if not critical, then (0).
22. Simultaneous Offers Yes (1) No (0)
Rule: Are the offers made in “package” in each round? If yes, then (1).
23. First Offerer Predetermined Yes (1) No (0)
Rule: If there is reference to who sought an offer first then (1). If there is an exchange of “possible sets” of offers by both parties until a real offer is made then (0).
24. Social Relations Important Yes (1) No (0)
Rule: If (a) it exists and (b) is critical then (1). Extra negotiation relations can be mentioned in such terms as “informal” negotiations, etc.
25. Expect Future Interactions Yes (1) No (0)
Rule: If high likelihood is mentioned then (1). If low likelihood is mentioned then (0).
26. Venue Important Yes (1) No (0)
Rule: If (a) exists and (b) is critical then (1). Thus “place” must be mentioned and must be critical to negotiation process or outcome, e.g., “all in one setting,” etc.
27. Cultures Different Yes (1) No (0)
Rule: Cultures different if negotiators come from different countries, or if explicitly stated that cultures are different (not in organizational culture sense).
28. Tactics Important Yes (1) No (0)
Rule: If (a) it exists and (b) is critical then (1). See each party’s actions as moves to achieve a goal. Thus see if moves matter at all.
29. Learning Important Yes (1) No (0)
Rule: If in the process of information exchange there is an improvement in the quality of the offers, i.e., one party is now able to place the other party’s perspective and also seek to alter its negotiation style, and this critically affects the outcome then code (1). If a statement can be found that says that such learning did not affect the situation then code (0).
30. Inter-Organizational Yes (1) No (0)
Rule: If negotiations occur between different organizations, then (1). Internal negotiations (within organization), then (0).

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