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PARALLEL PROCESSING OF SATISFACTION FORMATION: AN EMPIRICAL ANALYSIS OF COMPETITIVE ALTERNATIVES

By

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ABSTRACT

PARALLEL PROCESSING OF SATISFACTION FORMATION:
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The notion of competition is an integral element of the choice process. Yet postchoice processes, such as satisfaction formation, are modeled in a manner inconsistent with the competitive reality in which they, too, occur. Current models of satisfaction formation focus exclusively on the single, chosen product while assuming that evaluations of competing products are no longer salient. This dissertation reviews the satisfaction literature in marketing and presents a model of satisfaction formation which explicitly considers competitive alternatives. Parallel yet interrelated paths of satisfaction formation are hypothesized to lead to satisfaction with the competing targets (both the choice and nonchoice alternatives) and then to overall satisfaction. Also addressed are issues related to postchoice processing. In this dissertation, dissatisfied consumers are hypothesized to process more extensively than do satisfied consumers. The relative importance of predictive expectations, desires, attitudes and disconfirmation of expectations as antecedents of satisfaction are investigated within this framework.

The research hypotheses are tested using data from the 1992 U.S. presidential election within a longitudinal research design. Using primarily LISREL two-group analyses, support is found for each of the following research hypotheses:

- Research hypothesis 1: Multiple targets of satisfaction may remain salient post choice during satisfaction formation.

- Research hypothesis 2: The processing paths associated with each of the multiple targets of satisfaction are interrelated, i.e. there are cross-over effects.
- Research hypothesis 3: Dissatisfied subjects process more extensively or completely than do satisfied subjects.
- Research hypothesis 4: Desires have a greater impact on satisfaction formation than do expectations.

The dissertation has significant implications for the satisfaction formation literature. Specifically, all current models of satisfaction formation focus on the single product or service of interest; yet this dissertation shows that, in a competitive environment, alternative products or services not chosen may also impact satisfaction formation. One conceptual implication is that the fundamental structure of future satisfaction models should be altered to include competitive alternatives. In addition, managerial implications include the necessity of revising both satisfaction monitoring methodologies and the strategies for managing key marketing mix variables.

DEDICATION

This work is loving dedicated to my wife, Tina, whose support, patience and effort made it possible both to contemplate and to complete this endeavor.

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I gratefully acknowledge the contributions of my dissertation committee, both collectively and individually. Professor Roger Calantone and Professor Bixby Cooper each provided helpful comments and guidance early in the proposal stage, and each provided useful comments on successive drafts. Professor Richard Spreng was extremely generous with his expertise in the area of consumer satisfaction and with his time: he spent countless hours with me and with each version of this dissertation. He also provided valuable insights about the early years of an academic career. To my chair, Professor Cornelia Dröge, I am especially grateful. Her masterful guidance at each stage of this work -- encouraging, discussing, criticizing, challenging, analyzing -- kept me moving in the right direction. She has taught me how to engage the research process with curiosity, with thoughtfulness, with thoroughness, with tenacity, with wonder. For this, for expertly managing the committee, and for sharing her thoughts about thriving in an academic career, I am truly indebted.

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Introduction, Problem Statement, and Expected Contributions

I. Introduction and Overview

Since marketing scholars first began to investigate consumer satisfaction, the literature has been dominated by two conceptualizations regarding the satisfaction formation process. These widely accepted but rarely discussed conceptualizations are that:

1) satisfaction formation occurs post-purchase relative to a single relevant product or service target (the "choice") and is unrelated to alternatives considered but not chosen (the "nonchoice");
2) there is a single underlying satisfaction formation process that operates across individuals and usage contexts.

This dissertation questions these two conceptualizations by addressing four general research themes: (1) multiple targets (both "choices" and "nonchoices"); (2) interrelated processes of satisfaction formation relative to the multiple targets; (3) differential processing for satisfied versus dissatisfied consumers; (4) expectations versus desires as antecedents of satisfaction formation. The first three of these themes address directly the widely accepted conceptualizations enumerated above.

In this introductory chapter, the logic behind the four research themes of the dissertation is introduced in relation to the field of consumer behavior as a whole, and then is illustrated using examples based on common consumer experiences. Next, the four themes are briefly presented along with the theoretical contributions each is expected to make. The context within which

the four research themes will be analyzed is then presented. Managerial implications of the dissertation are presented next. Finally, the structure of this dissertation is summarized.

I-1. Logic of the thesis: Relation to consumer behavior

Marketing scholars have long recognized the centrality of the concept of satisfaction to their discipline. Early in the twentieth century, it was recognized that the drive to satisfy desires coupled with the reality of limited resources resulted in the need to choose from among competing alternatives. For example, one early marketing text states: "No one can satisfy all of his wants. People are never entirely satisfied .... Because the human being has many wants and only a part of them can be satisfied, choice must be made .... The consumer undoubtedly finds the greatest satisfaction when his choices accord most fully with all of the factors enumerated" (Nystrom, 1929, pages 51, 72). In other words, consumer satisfaction and consumer decision-making were recognized as being interdependent.

As the discipline evolved, marketing scholars used taxonomical distinctions to help analyze the structure and function of marketing processes. Alderson (1957) bisected consumer behavior into buying processes and consuming processes en route to developing his functionalist theoretical perspective. The distinction between buying and consuming as discussed by Alderson continues to be useful when looking at the field of consumer behavior as a whole. "Buying" refers to the information-processing aspects of consumer decisions and consumer choice, while "consuming" refers to often-neglected but "....equally important experiential aspects of consumption" (Holbrook and Hirshman 1982, page 139). Westbrook and Oliver (1991) go so

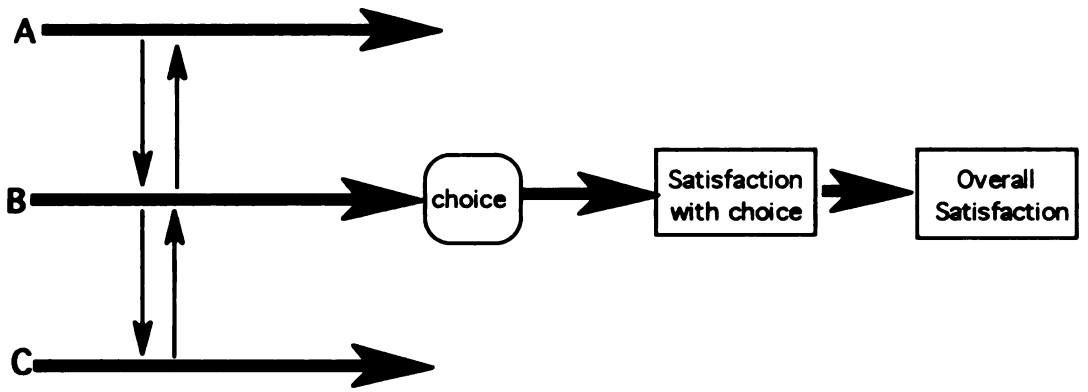
far as to consider this distinction to be an "....emerging dialectic between decision processes and experiential perspectives of the study of consumer behavior" (p. 84).

Study of consumer satisfaction is one topic which resides primarily in the post-decision, consuming realm of consumer behavior. Traditional models of satisfaction formation typically regard consumer choice as a given and specify satisfaction to be a function of antecedents such as expectation, desire, attitude, perceived performance, and disconfirmation relative to the choice already made. Thus, most satisfaction models have been structured and tested in a manner consistent with Alderson's (1957) distinctions, that is, with consumption as totally separate from the "buying" process.

However, should the fact that it is possible to distinguish between the purchase decision and consumption imply that it is desirable to study each as if they are unrelated? Consider the implications of the "emerging dialectic" as illustrated in Figure 1. The consumer considers purchasing one of three alternative products or services. To explain how the choice is made, numerous models have been proposed, tested and supported. Often such choice processes include intensive information manipulation on an attribute-by-attribute basis comparing expected characteristics or performance levels. Such comparisons are made with the consumer's internal standards and/or with the characteristics and performance levels of the other alternatives. The end result of this "buying" process is a selected alternative, in this case, Alternative B.

Consumer satisfaction, as part of the "consuming process," is universally modeled as a response or a judgment of the consumption experience related only to Alternative B. Expectations, desires, attitudes, perceived performance,

Pre-Decision Post-Decision



Choice Models:

Alternatives A, B, and C are considered and comparatively evaluated. Expectations and desires are formed relative to all three alternatives.

Traditional Satisfaction Models:

Only the antecedent constructs in relation to the choice (here, alternative B) are considered relevant.

Figure 1
Pre-Decision Versus Post-Decision Models

and disconfirmation related to Alternative B are considered sufficient to understand satisfaction with the consumption experience. In other words, satisfaction is modeled as a single process related to a single target. When one considers the intensive choice processing which involved Alternatives A and C in addition to B, it seems unreasonable to assume that those alternatives not selected become totally irrelevant to post-choice satisfaction formation processes. Expectations, desires and attitudes regarding Alternative B evolved in relation to expectations, desires and attitudes regarding the two other alternatives. Likewise, in some usage contexts, the perceived performance of Alternatives A and C may influence the consumption experience of the consumer who selected Alternative B, especially if the consumer is dissatisfied with B.

Some researchers (e.g., Cadotte, Woodruff and Jenkins 1987; Spreng and Olshavsky 1993) have used nonchoice alternatives as standards of comparison in satisfaction formation processes; however, the "comparison" is thought to occur at a distinct, single point (e.g., disconfirmation) in a total process which still focuses only on the choice alternative.

In summary, it is unrealistic to assume that intensively "processed" but unselected alternatives ("nonchoices") have no impact on satisfaction formation regarding the selected alternative (the "choice"). Given that many consumer decisions of interest to marketers occur in a competitive context -- one in which alternatives exist, information is abundant, processing is encouraged, and risk is involved -- it becomes clear that the satisfaction literature has not developed a satisfaction model which explicitly considers competition.

I-2. Logic of the thesis: Theoretical support

While marketing scholars have neglected the relationship between consumer decision making and satisfaction formation, theoretical support for such a relationship is apparent from two other sources. In A Theory of Cognitive Dissonance, Festinger (1957) explicitly recognizes that dissonance can be created by the simple act of choosing one alternative while rejecting others. He states: "....There will be some cognitive elements corresponding to the positive aspects of the unchosen alternative and some elements corresponding to the negative aspects of the chosen alternative which will be dissonant with the cognition of having chosen one particular alternative...." (p. 36). Thus, Festinger provides a theoretical link for hypothesizing that nonchoice alternatives may continue to have an impact on consumers' post-choice experiences. Although Festinger's analysis is limited to the period following the choice and prior to actual consumption (p. 43), there is no logical reason for concluding that dissonance can not extend into post-consumption processes.

Theoretical support for the major premise of this dissertation may also be found in regret theory from the field of economics. Loomes and Sugden (1982) offered regret theory as a parsimonious alternative explanation of some types of observed "non-rational" consumer choice behavior. Numerous scholars (e.g., Kahneman and Tversky 1979) have demonstrated that consumers systematically violate commonly accepted axioms of choice under uncertainty. Rather than construct elaborate explanations of such behavior, Loomes and Sugden (1982) question the axioms themselves. Their theory is based on the notion that consumer choice is not "....independent of the nature and combination of actions simultaneously rejected...." (p. 82). In their theory,

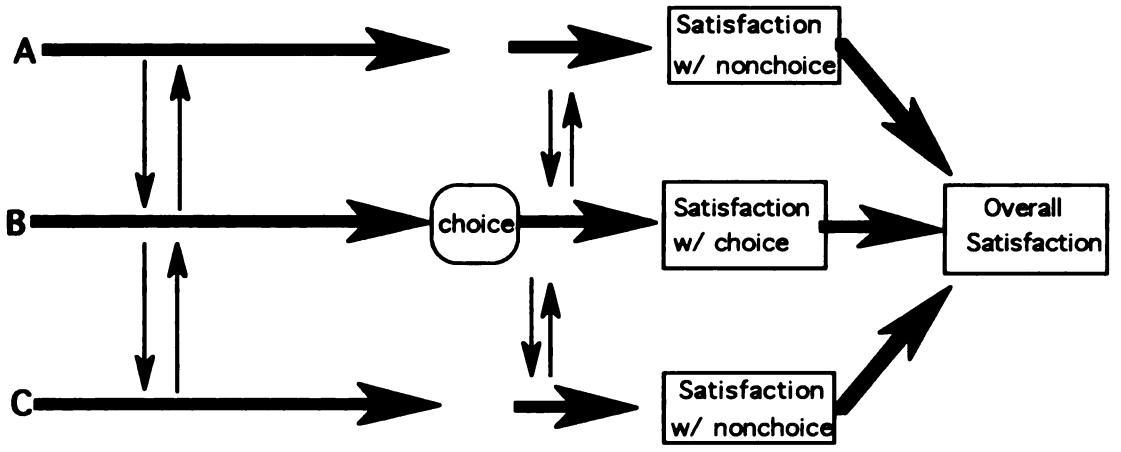
the anticipation of regret (and/or "rejoicing") is combined with factors derived from conventional utility theory. The entire constellation of alternatives in the choice set is evaluated in terms of expectations following the decision. For example, using the situation depicted in Figure 1, traditional choice theory would state "choosing alternative B is preferred to choosing alternatives A or C." Regret theory would state that "choosing alternative B and simultaneously rejecting alternatives A and C is preferred to 1) choosing alternative A and simultaneously rejecting alternatives B and C or 2) choosing alternative C and simultaneously rejecting alternatives A and B." The rationale for the latter framework is that consumers anticipate (expect) regret from choices not made and factor that anticipation into their decision. For our purposes, the important point is the implication that consumers develop expectations regarding their future responses to nonchoice alternatives. Thus, it is logical to hypothesize that nonchoice alternatives may remain salient in both buying and consuming processes.

I-3. Logic of the thesis: Example

In this dissertation, the relevance of Alternatives A and C, the unselected alternatives, will be explored. Specifically, it will be proposed that multiple "targets" and parallel satisfaction processing paths for these targets are relevant to satisfaction formation (see Figure 2). The logic of multiple targets and parallel processing of satisfaction formation can be illustrated with the following example.

Consider a husband and wife who buy new cars at approximately the same time. She buys a Geo Prizm and he buys a Toyota Tercel. The wife was confronted with an attempted "bait and switch" maneuver and dealt with a

Pre-Decision Post-Decision



Choice Models

Proposed Satisfaction Model

Constructs relevant to both choice ("B") and nonchoice ("A" and "C") alternatives affect choice satisfaction processes and overall satisfaction.

Figure 2
Pre-Decision Versus Post-Decision -- Proposed Model

salesman who tried to add on several new costs at the closing. Still, the wife remained firm in her position and ultimately obtained the car she wanted at the expected price. Her husband, on the other hand, experienced no problems or surprises during the entire negotiation and closing process, and in fact was offered several minor services (free of charge) which had not been expected.

During the first year of ownership, the wife's car needed minor repairs on two occasions to correct a manufacturing defect. Both events were covered by warranty. The husband's car did not need any repairs. At the end of the second year, the wife's car began to exhibit minor rust spots; the husband's car did not. Though the wife is, in general, satisfied with her car, that satisfaction is diminished because of her "experiences" with the husband's car. The husband's satisfaction with his car is intensified because of his experience with his wife's car. In other words, satisfaction with the choice is partly the result of expectations, desires, performance, and disconfirmation associated with the nonchoice. Note that this experience is <u>not</u> simply the result of having another substitute comparison standard as some have suggested. Rather it is the result of parallel processing along the entire satisfaction formation process. The husband's overall satisfaction with his transportation experience is influenced not only by his satisfaction with the Tercel, but also by his satisfaction with the Prizm. His satisfaction with the Prizm is determined in part by his expectations, desires, performance perceptions, and disconfirmation related to the Prism as well as by the these same constructs related to the Tercel. (This illustrates the first and second themes of the dissertation--see Section I-4.)

Because the husband is satisfied with his car, he does not think much about his original expectations, desires, or attitudes, nor does he think about

whether these pre-purchase expectations, desires, and attitudes have been supported in his experience with the car. Because he is satisfied, he can move about his daily routine without giving the car much thought. On the other hand, his wife is mildly dissatisfied with her car. This dissatisfaction "gnaws" at her. It bothers her that although she spent $800 more for her car, she is less satisfied than her husband is with his car. She recalls her original expectations, desires and attitudes: "What did I expect? Were my expectations unreasonably high or is the performance really worse than it should be? All I really wanted was a trouble-free car; was that unreasonable? I really believed that American car companies could once again compete with Japanese companies, but maybe my husband was right ....". She replays her decision process in her mind, partly because she doesn't want to repeat her "mistake" and partly because her dissatisfaction just bothers her. (This illustrates the third theme of the dissertation.)

Upon reflection, the wife realizes that she had, to a certain extent, talked herself into believing that American cars were once again of high quality. She wanted it to be true, but in the back of her mind she expected to have a few more problems with her car than her husband had with his. When she actually experienced the problems, however, she was dissatisfied because she had desired a trouble-free car, though she had expected less. (This illustrates the fourth theme of the dissertation.)

I-4. Four research themes and expected contribution

Because this thesis will investigate issues pertaining to the core structure of satisfaction formation processes, it is expected to make theoretical contributions to the satisfaction literature. Each of the four themes of this

dissertation will contribute directly to the conceptual understanding of satisfaction formation processing. In some cases, significant new structural enhancements are proposed. In other cases, discussion will address areas in which conflicting results have been obtained. Expected theoretical contributions are outlined next.

(1) The potential relevance of multiple targets of satisfaction formation (i.e., choice and nonchoice) will be investigated. Current models of satisfaction formation processes universally focus on a single target, the central object or event about which satisfaction is being measured. It will be demonstrated that, at least in some situations, measuring satisfaction with multiple targets, individually and collectively, is more relevant than measuring satisfaction with a single target. Situations in which multiple targets are likely to be relevant are those in which consumers select a product or service from among a set of alternative possible choices, and have some exposure (direct or vicarious) to the performance of nonchoice alternatives. Since a large proportion of consumer decisions occur in such situations, conceptual implications of this thesis may be far reaching.

(2) It will be demonstrated that the processes resulting in satisfaction/ dissatisfaction with multiple targets are parallel yet interrelated. The major implication of this finding is that the complexity of satisfaction formation processing is not adequately captured in current models of satisfaction formation. Not only should satisfaction with multiple targets be considered, but the satisfaction formation process of each target also needs to be included in satisfaction models, since the processes themselves are interrelated.

(3) It will be tested whether dissatisfied consumers process differently from satisfied consumers. Current satisfaction formation models do not differentiate between the actual processing of satisfied versus dissatisfied consumers. The demonstration of differential processing implies the need for using models of greater complexity, and/or for developing a contingency processing model.

(4) It will be tested whether the total effects of desires are greater than the total effects of expectations in determining satisfaction with an important, highly involving event. One could argue that desires is a future-oriented affect-based construct, just as expectation is a future-oriented cognition-based construct. If supported, the implication of this theme is that the recent trend in satisfaction literature towards an increased focus on affect should be continued or expanded.

I-5. Context of the empirical test

It seems logical to expect there to be a continuum of usage contexts based on the degree to which non-selected alternatives (nonchoices) are relevant to satisfaction formation. At one extreme would be the context implied by the traditional satisfaction model (i.e., single target and single process). At the other extreme would be contexts in which all alternatives considered have significant impacts on satisfaction formation. To explore the proposition that nonchoices can have a significant impact on satisfaction formation, it makes sense to select a context in which the probability of uncovering such relationships (if they exist) is high. If it can be demonstrated that nonchoices can influence consumption experience satisfaction formation in one context,

then the range of contexts within which such relationships occur can be explored. The first step, however, is to demonstrate that it can occur.

The context for analyzing the four research themes will be the 1992 U.S. presidential election. An election entails many of the same characteristics as many more traditional consumer choice settings: an abundance of information, choice among alternatives, relevance of traditional antecedent constructs (e.g., expectations, desires, attitudes, etc.), persuasion attempts that can create expectations, the probability that individuals will ultimately be satisfied or dissatisfied. In addition, an election provides the potential to obtain additional benefits rarely evident in more traditional consumer behavior settings: wide variance in measures of satisfaction, wide variance in measures of desires, and clear, objective, widely perceived measures of performance (i.e., the outcome of the election).

Use of the 1992 presidential election as an arena for testing and developing satisfaction theory is appropriate for at least three additional reasons:

1) Marketing of political candidates is a huge industry in its own right. Tens of millions of dollars are spent on campaigns during presidential election years, and nearly as much is spent on campaigns, research, and political strategizing during other years. The high cost of running for office is the major force behind proposed campaign finance reform legislation. Marketing research firms using established market research techniques play a prominent role in identifying target markets and effective communications program development. All the tools of advertising and public relations are utilized. The "product" (i.e., candidate) is created and modified to most closely match the wants and desires of the "consumers" (i.e., voters). Given the clear

role of marketing in elections, it is surprising that political campaigning is a topic seldom discussed by the marketing discipline.

2) Several topics clearly within the domain of marketing possess characteristics which parallel those of political marketing. Any situation in which few competitors compete in a zero-sum situation has similarities to election marketing. Professional sports marketing, for example, is one marketing application which may have similar satisfaction formation processes. Two teams compete head-to-head and one team wins. Fans of each team have expectations and desires before the contest, and varying degrees of disconfirmation and satisfaction following the contest. The outcome itself is generally unambiguous, and people can distinguish between the process and the outcome. Other possible parallels include governmental and organizational buying in which a limited number of bidders compete in a zero - sum situation.

3) Findings from this investigation may be relevant to the broad spectrum of product and service contexts because what is being investigated is the structural relationship among the antecedent constructs of satisfaction. As such, the investigation may have implications for satisfaction theory in general. In other words, because the topic of interest is the relationship among constructs, the findings may be relevant to the relationships among satisfaction constructs in general.

I-6. Managerial implications

Top managers understand the importance of satisfaction formation processes in determining corporate success. For example, Jack Welch, successful CEO of General Electric, states: "Too often we measure everything

and understand nothing. The three most important things you need to measure in a business are customer satisfaction, employee satisfaction and cash flow. If you're growing customer satisfaction, global market share is sure to grow too" (Tichy and Sherman 1993, p. 88).

Conversely, managers recognize that dissatisfaction has serious repercussions. Numerous consequences of consumer dissatisfaction have been documented including loss of repeat business, low employee moral, negative "halo" effect on other aspects of the business, and negative word-of-mouth communications (Albrecht and Zemke 1985). The cost of adding a new customer is significantly higher than retaining an existing customer and even small decreases in customer defection rates can have a major impact on company profits (Reichheld and Sasser 1990). Given the increasing openness of global markets, foreign firms which have specialized in satisfying customers will enjoy competitive advantages over U.S. firms which have not.

Because this dissertation questions the core structure of satisfaction formation processes, results are expected to have numerous implications for managerial application.

1) If the parallel satisfaction processing framework is supported, managers may have to alter their strategies for increasing/maintaining consumer satisfaction. They will have to consider that consumer satisfaction with their product or service is, in part, determined by consumer satisfaction with competitors' products or services. Also, they will consider the implications of the fact that consumer satisfaction with competitors' goods and services is at least partially determined by customer satisfaction with their goods and services. <u>This represents the simple, but critical recognition that satisfaction formation processes, too, occur within a competitive environment.</u>

Producing high quality products at a fair price is not the only determinant of satisfaction even among one's own customers. Of course, much more research will be needed to establish that such parallel processing occurs in the context of consumer and durable goods. The exact nature of the "cross-over" effects in various contexts will also need to be specified.

2) Support for the parallel processing framework would imply managers should immediately begin to alter the way they monitor customer satisfaction. Most firms which monitor satisfaction currently collect measurements only with regard to their own products; those firms which do collect information related to competitors' products collect only summary information instead of information relevant to the satisfaction process. Satisfaction information with regard to competitors will help in determining the degree to which parallel processing occurs in a particular industry, and if it does occur, will provide guidelines for managing satisfaction formation.

3) If it is determined that satisfied versus dissatisfied consumers arrive at their ultimate level of satisfaction/dissatisfaction differently, efforts to promote or discourage specific kinds of processing may be effective in managing satisfaction formation.

4) By clarifying the relative importance of expectations versus desires in the satisfaction formation process, firms will have a clearer idea of how to promote and advertise their products and services. Again, specific findings from studies conducted in specific industries will be necessary to determine ideal applications. However, this dissertation is a necessary first step.

5) If this research effort is successful, at least part of its success will be due to the wide variance of the satisfaction measures. Thus, the dissertation will demonstrate the practical implications of developing satisfaction

measures which exhibit variance. Currently, many satisfaction monitoring efforts in industry are ineffective because satisfaction levels are consistently high. This causes two problems. First, it is impossible to measure any improvements which do occur because satisfaction levels cannot increase. Thus, the usefulness of such measures as a factor in determining manager bonuses, for example, becomes insignificant. Some firms have attempted to address this by measuring proxies for dissatisfaction such as customer complaints. However, such a practice is dangerous because then the manager has an incentive to minimize or suppress complaints even though complaints are a valuable source of information. Second, relationships between potential antecedents of satisfaction and dissatisfaction become extremely difficult to identify or monitor. Thus, managers are unable to establish priorities among the factors responsible for satisfaction. Obviously, this reduces the probability that resources will be optimally distributed. Therefore, simply increasing variance in the satisfaction measure can lead to improvements in the usefulness of satisfaction measurement.

6) Clarification of the relationship between attitudes and desires, and their relative importance in the satisfaction formation process, will help managers make decisions regarding allocation of resources among efforts designed to alter desires (or perceptions of desires congruence) versus those designed to improve attitudes.

I-7. Structure of the dissertation

Following this introductory chapter, the dissertation is organized as follows. Chapter II contains a review of the traditional satisfaction literature with a focus on the constructs used and the relationships among constructs.

Chapter III provides the formal development of the research and testable hypotheses associated with the four general research themes of this dissertation. Chapter IV contains a description of the design, data collection and analytical methods used to test the research hypotheses. Chapter V presents results of the empirical investigation, and Chapter VI contains the discussion of results, limitations, and implications for future research.

Chapter II
Satisfaction Literature in Marketing

II. Introduction

The purpose of this chapter is to review the relevant satisfaction literature (within the limits described below) in order to develop a thorough understanding of the current state of satisfaction formation processing models in marketing. The review will be broken into four broad topic areas. In the first, the conceptualization and operationalization of commonly used constructs will be analyzed. The second will focus on empirical findings regarding key relationships among the antecedent constructs. The third topic area will focus on the relationship between antecedent constructs and satisfaction. The final topic area will examine other relevant findings not explicitly involving common constructs.

Throughout this chapter, distinctions will be drawn between how a construct is conceptualized and how it is measured, as the two often appear to be different. These differences may be responsible for at least some of the confusion and inconsistencies found in the satisfaction literature.

II-1.1 Scope of the literature review

This review is necessarily limited both with regard to concepts addressed and to sources reviewed. The purpose of this section is to make the limits explicit. Thus, the following are discussed in this section: (1) sources reviewed; (2) the political science literature; and (3) goods versus services marketing.

Sources reviewed

With regard to sources utilized, this review of theoretical and empirical contributions to the satisfaction literature is delimited as follows. First, the review will focus on contributions from marketing publications only. Specifically omitted from the formal review are works focusing on job satisfaction, life satisfaction, and patient/healthcare satisfaction. Occasional reference to these disciplines will be made when appropriate, but the extensive nature of each of these literatures precludes comprehensive coverage in this review.

Second, this review concentrates on consumer rather than organizational satisfaction as its central construct. The concept of organizational satisfaction is fundamentally different from consumer satisfaction in that the former somehow encompasses a collective judgment or evaluation of a product or service. No empirical study has demonstrated that the two types of satisfaction are similar enough to be considered a single construct.

Third, the review focuses on theoretical and empirical works appearing in a set of academic publications. Peterson and Wilson (1992) state that over 12,000 books and articles on satisfaction have appeared in the past 25 years. A complete review of the "satisfaction literature" is thus impractical if not impossible. Therefore, the review focuses primarily on works appearing in the following publications: Journal of Marketing, Journal of Marketing Research, Journal of Consumer Research, and Journal of the Academy of Marketing Science. These journals represent the major outlets for quality theoretical and empirical analyses of consumer satisfaction. In addition, works presented at the American Marketing Association Summer and Winter

Educators' Conferences, Association of Consumer Research conference and the conference of Consumer Satisfaction/Dissatisfaction and Complaining Behavior will be reviewed as these conferences have also yielded noteworthy contributions to the field. Finally, significant contributions from other sources which have been referenced in the works listed above will also be included.

Political science literature

Although the setting used here for investigating satisfaction formation processes is the 1992 presidential election process and outcome, a review of the political science literature will not be extensively discussed here. There are two reasons for this:

1) This dissertation addresses satisfaction theory from a marketing perspective. The constructs of interest, the measurement of those constructs, and the hypothesized relationships among constructs all come from marketing literature. The particular setting of a presidential election was selected to overcome some clearly documented problems with the conduct of satisfaction research in traditional marketing contexts. The analysis presented here is neither designed nor intended to address theoretical constructs or relationships of interest to political scientists. Therefore, a comprehensive review of that literature is unwarranted.

2) A preliminary review of the political science literature revealed that much effort is devoted to predicting the outcome of elections and to monitoring public opinion and satisfaction with the performance of elected officials. Very little effort is directed to measuring, or explaining, voter satisfaction with the outcome of an election immediately after its conclusion.

There appears to be an implicit assumption that if a voter's candidate won, the voter will be satisfied, and vice versa. The formation (e.g., antecedents) of satisfaction are not of immediate concern, and there is little emphasis on process as defined in the marketing literature. Therefore reference will only be made, when appropriate, to specific works from political science.

Goods versus services marketing

The marketing discipline has long distinguished between the marketing of goods versus services. This distinction remains intact in the traditional satisfaction literature. For example, Parasuraman, Zeithaml, and Berry (1988) draw a clear distinction between the two at the level of construct definitions, while Yi (1990) in his comprehensive review claims to focus exclusively on consumer satisfaction with products. (However, it should be pointed out that Yi did include references from the service satisfaction literature on a selective basis, e.g., his references to Cadotte, Woodruff, and Jenkins 1987). Justification for separate treatments appears to derive from the classical distinction between goods and services marketing, such as the simultaneous production and consumption for services versus sequential production and consumption of products, and the intangible nature of services versus the tangible nature of products.

While the distinction between goods and services may be useful for some purposes, the distinction appears to be artificial in the satisfaction literature, and thus is not presumed for this review. There are four reasons for this:

1) There appears to be little difference in the antecedents and consequences of services versus product satisfaction. Though this argument

can only be convincingly made following the review, a brief analysis of the antecedents and consequences of satisfaction in product versus service situations reveals more similarities than differences. Antecedents common to both conceptualizations include expectations, desires, attitudes, perceived performance, and disconfirmation. Consequences common to both include word of mouth, complaining behavior, repeat purchase intentions, repeat purchase behavior, and attitudes. Thus, at least on the surface, satisfaction seems to be related to similar constructs in both product and service contexts.

2) The satisfaction concept itself seems to be similar if not identical in both the product and service contexts. In general English usage, the term "satisfaction" is commonly used in both contexts. Likewise, dictionary definitions of "satisfaction" do not distinguish between satisfaction with products and satisfaction with services. Also, as will become clear in the review, satisfaction is measured similarly in both service and product contexts. Both employ overall and trait-specific measures, and both employ a range of scales including semantic differentials anchored by "satisfied - dissatisfied" or variations employing these terms. Thus, there is no a priori reason based on the satisfaction construct itself for distinguishing between product and service contexts.

3) Even those scholars who distinguish between products and services are quick to acknowledge that such distinctions are at least somewhat artificial. For example, businesses may be placed along a continuum based on the degree to which each provides goods versus services. Kotler (1980) states that all goods producers provide at least some services; many service providers also include some products or product-like attributes in their service offerings. Given that those who draw distinctions between goods and services admit

ambiguity in those distinctions, it seems more prudent to utilize the distinctions only when there is clear benefit to doing so rather than to assume such distinctions are always relevant. Again, there is no clear a priori reason for assuming the distinction is relevant in analyzing satisfaction formation processes.

4) The trend in both academic and managerial sectors has been to expand the "target" of satisfaction. For example, in a product context, the relevant target of satisfaction seems to be expanding from satisfaction with a specific product's performance to satisfaction with a broader "consumption experience" (Yi 1990). Given that there is some mix of service and product in most marketing exchanges, the practical distinction between the two, especially in the mind of the consumer, is even more likely to blur as the target of satisfaction measurement is expanding.

II-1.2 "Traditional" satisfaction model framework

The following discussion of constructs and relationships is structured around what is referred to throughout this dissertation as the "traditional" model within the "traditional" satisfaction literature. As used here, the term traditional satisfaction literature refers to the family of satisfaction formation models which utilize a single target of satisfaction. It is understood that this family of models includes a wide variety of hypothesized relationships.

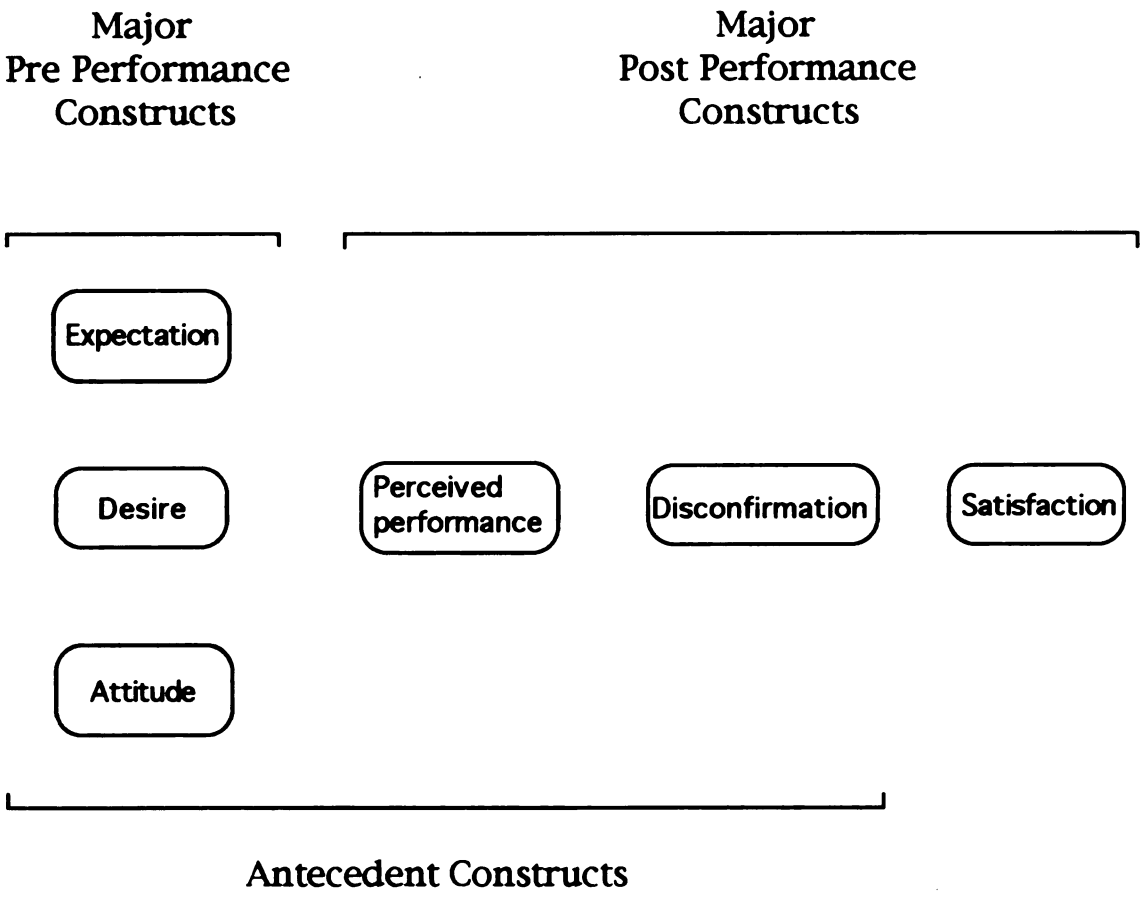
In addition to focusing on a single target, traditional satisfaction models are built around a core set of constructs and theories (Yi 1990). In the marketing literature, satisfaction processes have been studied from a variety of theoretical perspectives. Although the disconfirmation of expectations

perspective clearly dominates the literature (Yi 1990), the following perspectives have also been proposed, and, to a greater or lesser extent, have been shown to be useful:

- Value-percept disparity--The difference between perceived performance and a person's values-related desired level of performance is conceptualized as the major antecedent of satisfaction (Westbrook and Reilly 1983).
- Equity theory--The perceived relationship between input/output (cost/benefit) ratios of the consumer versus the salesperson is the primary antecedent of satisfaction (Oliver and DeSarbo 1989).
- Extraordinary experience--Satisfaction with extraordinary experiences is determined by a complex set of cultural and personal factors which unfold over time and cannot be adequately captured in simplistic measures of expectations and disconfirmation (Arnould and Price 1993).
- Desires congruency--An extension of the value-percept disparity perspective, desires congruency is the difference between a desired and perceived level of performance, and is the primary antecedent of satisfaction (Spreng 1992; Spreng and Olshavsky 1993).

Although each of these perspectives contributes to our understanding of satisfaction formation processes, the disconfirmation of expectations model will provide the primary orientation for this dissertation given its dominance of the marketing literature. However, these other perspectives will be utilized frequently throughout this dissertation when relevant (e.g., to demonstrate the variety of ways in which satisfaction is operationalized).

Within the disconfirmation of expectations perspective, the core antecedent constructs in the satisfaction formation process are illustrated in Figure 3. In the traditional model, antecedent constructs fall into two



In the traditional model, only constructs related to the choice alternative are considered. Thus, constructs illustrated here are all "post choice" constructs. While the temporal order of pre-performance constructs is unclear, the generally accepted order of post-performance constructs is as illustrated.

Figure 3
Classification of Satisfaction Formation Constructs from the Traditional Model

categories, those which precede performance and those which follow. Note that expectations, desires, and attitudes, are the core pre-performance, or pre-experience, constructs. Perceived performance and disconfirmation are the core antecedent constructs which follow product/service performance. While there is little agreement on the temporal order of pre-performance constructs, post-performance constructs are generally thought to occur in the following order: perceived performance -> disconfirmation -> satisfaction.

The review which follows begins with a conceptual and empirical analysis of "satisfaction" as a construct (Section II-2). Next, the pre-performance and post-performance constructs are examined (Section II-3); then, relationships among the constructs are reviewed (Section II-4). Additional constructs not generally considered part of the traditional satisfaction model are reviewed (Section II-5). Finally, the major points of the chapter are summarized (Section II-6).

II-2. Satisfaction and its measurement

Satisfaction of consumer needs and wants is arguably the central theme of marketing as a discipline. Therefore, it is surprising that serious attempts to define satisfaction both theoretically and empirically did not begin until the late 1960s. Two related forces may be credited with the rise of interest in satisfaction as a topic worthy of investigation. First, the rise of consumer behavior as an identifiable subdiscipline within marketing brought the perspectives and methods of psychology and social psychology to marketing. The focus on understanding and predicting the perceptions, attitudes and behaviors of individual consumers resulted in the identification of satisfaction as a key construct (Hunt 1977). Second, one of the periodic revivals of

consumerism as a social and political force occurred during this period. Consumer satisfaction became a salient public policy issue due to widespread perceptions that companies were not responsive to consumer demands and that the federal government was overly supportive of business interests at the expense of consumers. Perhaps not surprising is the emphasis on consumer dissatisfaction and complaining behavior which resulted from this reincarnation of consumerism.

Cognitive versus affective content

Early conceptualizations of satisfaction in the marketing literature described satisfaction in cognitive terms (Engel, Kollet, and Blackwell 1973; Howard and Sheth 1969). For example, Howard and Sheth (1969) define satisfaction as "....the buyer's cognitive state of being adequately or inadequately rewarded for the sacrifices he has undergone" (p. 145).

The traditional satisfaction formation model treats the process as being primarily cognitive, while the satisfaction construct itself is generally perceived to have definite affective overtones. Only recently have affect-based processes been proposed to help explain satisfaction. This may be due in part to the recent theoretical advances made in understanding affect (e.g., Izard 1984). Zajonc (1980) indicates that though the importance of affect has long been recognized, empirical and theoretical emphasis on cognitive psychology has dominated the discipline of psychology. Given the close relationship of psychology and marketing, especially in the consumer behavior school (Sheth, Gardner, and Garrett 1988), it is not surprising that early satisfaction researchers sought cognitive antecedents of satisfaction.

Within marketing, the role of affect in satisfaction is first discussed by Hunt (1977) who states that affective responses to a product experience follow the formation of satisfaction via cognitive processes. Westbrook (1980) raises the question of whether affect enters the satisfaction process prior to or concurrent with satisfaction. He states "....affective influences do not, of course, deny the role of cognitive processes such as expectancy confirmation or disconfirmation, but rather combine with them in the determination of consumer satisfaction" (p. 50). Customer satisfaction, then, is viewed as a combination of cognitive and affective elements in an overall evaluation of a product.

Others also believe that satisfaction is a general, overall feeling. For example, Westbrook and Newman (1978) state "Satisfaction typically is conceived as the extent to which consumers feel subjectively pleased with their ownership and usage of products" (p. 456). Likewise, Cadotte, Woodruff and Jenkins (1987) define and measure satisfaction as a summary, affective construct.

Dimensionality

The dimensionality of satisfaction has been questioned (Swan and Combs 1976; Maddox 1981) and the issue remains unresolved (Yi 1990). The primary issue is whether satisfaction is a unidimensional construct (e.g., with anchors of "completely dissatisfied" and "completely satisfied") or two separate constructs, one being "level of satisfaction" and the other being "level of dissatisfaction." The two-factor conceptualization is based on Herzberg's Two-Factor Theory (Herzberg, Mausner, and Snyderman 1959) and derives support from two basic observations. First, consumers appear capable of being both

satisfied and dissatisfied at the same time and therefore the two constructs must be at least somewhat independent. Second, consumers who are asked to recall both satisfying and dissatisfying experiences recall different "levels" of phenomena for describing why they are satisfied versus dissatisfied (Maddox 1981).

Only equivocal empirical evidence has been found to support the two-construct conceptualization. Swan and Combs (1976) found weak preliminary support. Their study was replicated by Maddox (1981) using larger samples of customers drawn from multiple industries. Maddox found little support for the two-factor conceptualization, and concludes that such a conceptualization also yields implications which run contrary to common sense.

Until recently, support for the two factor conceptualization has been derived almost exclusively from studies using a single methodology: the "critical incidents" method described above. An alternative explanation of the findings yielded by this method is possible. Briefly, it is possible that the satisfaction construct is unidimensional, but, given that satisfied and dissatisfied consumers may process differently, they remember different kinds of factors as being responsible for their ultimate level of satisfaction. Because the critical incidents method requires consumers to "retrace" their process, it is not surprising that their responses are qualitatively different. Recent evidence from Babin et al (1993) provide stronger empirical support for a two-dimensional conceptualization using confirmatory factor analysis. The evidence is not conclusive however, as (1) measurement scales selected for use may have "pre-disposed" the two-dimensional findings, and (2) theoretical justification for the two dimensions is weak.

Measurement

Table 1 and Table 2 list the empirical studies reviewed which measure satisfaction as either an antecedent or consequent construct. Certain characteristics of the satisfaction measurement are also indicated. The variety of satisfaction measurements is discussed next, and the relationship between how satisfaction has been measured and specific research findings will be analyzed later (see section II-4.4).

Table 1 indicates whether the study cited uses some form of "satisfaction/dissatisfaction" anchors for measuring satisfaction, and whether the study uses an overall and/or attribute-specific measurement of satisfaction. Table 2 presents details of the satisfaction measurement including number of items and scale points, actual question wording, and scale anchors.

Table 1 and Table 2 reveal the following:

1) The single most striking observation regarding the actual measurements of satisfaction is that no two studies measured satisfaction in an identical manner. To be sure, there are clear similarities among specific groups of studies, but there is no evidence that a standard satisfaction scale is emerging in the literature. Researchers may choose not to use previously developed scales because they believe they are examining satisfaction in a unique context or because they are testing new satisfaction measures. No matter what the reason, the consequence of using nonstandard measurement scales is that comparisons across studies and the subsequent generalizations must be approached with caution.

The fundamental reason for lack of consistency in the measurement of satisfaction is the lack of agreement on its definition. This observation is not

Table 1
Measures of Satisfaction in Empirical Studies

	"Sat/Dissat" On Scale	By Attribute	Overall
Anderson and Sullivan 1993	NO		√
Babin, Dardin and Griffin 1993	YES		√
Barbeau 1984	NO	√	√
Bearden and Teel 1983	NO		√
Bitner 1990	NO		√
Bitner and Hubbert 1994	YES		√
Bolfing and Woodruff 1988	NO	√	
Cadotte, Woodruff, and Jenkins 1987	NO		√
Cardozo 1965	NO		
Churchill and Suprenant 1982	YES	√	√
Cronin and Taylor 1992	YES		√
Dröge and Halstead 1991	YES		√
Fisk and Young 1985	?	?	?
Garland and Westbrook 1989	NO		√
Halstead 1993	YES		√
LaBarberra and Mazursky 1983	YES		√
Mano and Oliver 1993	NO	√	√
Oliver 1993	NO		√
Oliver 1980	NO		√

Table 1, continued

	"Sat/Dissat" On Scale	By Attribute	Overall
Oliver and DeSarbo 1988	?		√
Patterson 1993	YES		√
Prakash and Lounsbury 1984	YES		√
Richins and Bloch 1991	YES		√
Singh 1991	YES		√
Spreng and Olshavsky 1993	YES		√
Swan and Martin 1981	YES		√
Swan and Oliver 1991	NO	√	√
Tse and Wilton 1988	YES		√

Table 2
Specific Measures of Satisfaction

	Number of Items	Scale Pts. per Item	Question	Scale
Anderson and Sullivan 1993	1	10	Wording not specified	low" - "high"
Babin, Dardin and Griffin 1993	6	7/100	N/A ("similar to Oliver 1980 and Westbrook 1980")	N/A
Barbeau 1984	10	7	For 8 attributes: "How well did the course meet your needs?" Overall question:	 "Extremely well - Extremely Poorly" "Delighted - Terrible"
Bearden and Teel 1983	4	?	examples only: "Our choice to use the repair outlet was a wise one" "If I had it to do over, I would feel differently about using the business"	 "Agree - Disagree"
Bitner 1990	1	7	"Under the circumstances described in the story, how would you feel about the travel agent?"	"Delighted - Terrible"
Bitner and Hubbert 1994	9	7	"How did you feel about your service experience on this particular occasion?" "I was satisfied with that specific service experience." "If I had it to do over again, I would not have gone to that organization." Plus several others, all detailed in their article	"Delighted - Terrible" "Strongly agree - Strongly disagree" "Strongly agree - Strongly disagree"
Bolfing and Woodruff 1988	5	5	Wording not specified	"Warm glow - Cold feeling" "Delighted - Upset" "Contented - Frustrated" "Pleased - Displeased" "Impressed - Unimpressed"

Table 2, continued

	Number of Items	Scale Pts. per Item	Question	Scale
Cadotte, Woodruff, and Jenkins 1987	10	5	Wording not specified	"Warm glow - Cold feeling" "Good - Bad" "Uplifted - Down" "Pleasant - Unpleasant" "Elated - Tense" "Contented - Frustrated" "Fulfilled - Disappointed" "Pleased - Displeased" "Impressed - Unimpressed"
Cardozo 1965	?	infinite	Assumed that performance evaluation = satisfaction	
Churchill and Surprenant 1982	22/24	7	For 10/11 attributes re: beliefs: For 10/11 attributes re: affects: Overall measure: Overall measure:	"Strongly agree" - "Strongly disagree" "Like" - "Dislike" Series of faces with various expressions "Completely satisfied" - "Completely dissatisfied"
Cronin and Taylor 1992	1	7	"My feelings toward _____'s service can best be described as..."	"Very satisfied" - "Very dissatisfied"
Dröge and Halstead 1991	1	4	Wording not specified	"Very satisfied" - "Very dissatisfied"
Fisk and Young 1985	?	?	Wording not specified "Satisfaction with choice of airlines was measured"	
Garland and Westbrook 1989	1	7	Wording incorporated in scale	"I feel delighted about ...." "I have mixed feelings about...." "I feel terrible about...."
LaBarberra and Mazursky 1983	1	5		"Completely satisfied" - "Completely dissatisfied"
Mano and Oliver 1993	13	?/11	N/A (similar to Oliver 1980)	N/A

Table 2, continued

	Number of Items	Scale Pts. per Item	Question	Scale
Oliver 1980	6	?	"....satisfied with my decision...." "If I had it to do over again, I would feel differently" "My choice....was a wise one." "I feel bad about my decision...." "I think I did the right thing...." "I am not happy that I did what I did...."	Likert scales
Oliver 1993	12-6*	?	N/A (similar to Oliver 1980 and Oliver and Westbrook 1982) * 12 for auto sample, 6 for classroom sample	N/A
Patterson 1993	2	7	1) Overall satisfaction 2) "Would you recommend your brand of heater to a friend who was considering buying one?"	"very dissatisfied" - "completely satisfied" "yes" - "definitely not"
Prakash and Lounsbury 1984	1	7		"Extremely dissatisfied" - "Extremely satisfied"
Richins and Bloch 1991	3	11	"Considering all the things you are satisfied with and all the things you are dissatisfied with about your car, where would you rate yourself on the scale..?"	"Not at all satisfied (0%)" - "Completely satisfied (100%)"
Singh 1991	1	10		"Not satisfied at all" - "Completely satisfied"
Spreng and Olshavsky 1993	2	7	"How satisfied would be with the overall experience of buying and using your new camera?" Also, asked how the s would feel about the experience.	"Very dissatisfied" - "Very satisfied" "Terrible" - "Delighted"
Swan and Martin 1981	1	7		"Very satisfactory" - "Very unsatisfactory"
Swan and Oliver 1991	6	6	examples only: "Indicate how satisfied you were with your salesman."	"Salesman pleased me" - "Salesman displeased me"

new (Hunt 1977). Recently, Yi (1990) summarized the problem as follows: "For the field of CS to develop further, a clear definition of CS is needed .... Before more studies are done, an effort should be made to clarify the concept of CS" (p. 74). Without a clear conceptualization, standardized operationalizations will not evolve.

2) A second striking observation from Table 1 and Table 2 is that numerous studies report incompletely, or not at all, exactly how satisfaction was measured. Some omit critical information regarding number of scale points (e.g., Oliver 1980; Bearden and Teel 1983). Some do not report the number of items (e.g., Cardozo 1965). Most, while giving specific information about the scales used, do not provide the wording questions used to elicit the scalar responses (e.g., Cadotte, Woodruff, and Jenkins 1987; Westbrook and Reilly 1983). Others provide only examples of specific questions asked (e.g., Bearden and Teel 1983; Swan and Oliver 1991). Finally, some provide virtually no information : for example, Fisk and Young (1985) indicate simply that "....satisfaction with choice of airline was measured." Because standards for satisfaction measurement do not exist, such omissions further cloud understanding of specific study results and complicate the process of making generalizations.

3) Given that no standard measurement exists, the task remains to document and understand the variation in measurement which does exist. One observation is that most studies utilize some overall measure of satisfaction, whether alone or in combination with attribute-specific measurements. Attribute-specific measures are based on the notion that a consumer can evaluate each product/service trait individually, is satisfied or dissatisfied with each and forms an overall satisfaction judgment in some additive fashion.

Reported reliabilities of such attribute-specific scales are high (e.g., Churchill and Surprenant 1982) indicating at least some support for this method. However, given that most studies use only overall measures of satisfaction, it appears the consensus is that satisfaction is a summary evaluation, and includes reactions to the gestalt of the product/service experience. On the other hand, the prominence of overall measures may simply be due to the recognition of a practical problem: inability to specify all salient attributes would tend to reduce the validity of attribute-specific measurements.

4) Nearly half the studies reviewed used single item measures of satisfaction. Numerous studies reviewed here have utilized single item operationalizations for satisfaction as a key variable: Anderson and Sullivan (1993), Bitner (1990), Cronin and Taylor (1992), Garland and Westbrook (1989), LaBarberra and Mazursky (1983), Prakash and Lounsbury (1984), Swan and Martin (1981), Tse and Wilton (1988), and Westbrook (1980). Note that this list includes multiple studies from the Journal of Marketing and the Journal of Marketing Research. Note also that half of them have been published since 1987.

Yi (1990) criticizes single-item measures on a variety of conceptual and methodological grounds, but his statement that recent studies have tended to use multi-item measures ("....in contrast to earlier studies....") is not supported. Studies conducted before 1988 were roughly 50% multi-item and 50% single item measures; in contrast, nearly 70% of the articles published since 1988 included only single item measures of satisfaction. Although the superiority of multiple item scales is well established, it is clear that use of single item scales remains common.

At the opposite extreme, four studies utilized measures constructed of ten or more items (Barbeau 1984; Churchill and Surprenant 1982; Oliver and Bearden 1983; Cadotte, Woodruff, and Jenkins 1987). The first three of these used so many items because their measures were, at least in part, summations of attribute-specific items. All reported at least moderately high reliabilities.

5) Scale length, or number of points per item, also exhibits wide variation. The minimum number of points appears to be four while the maximum is 11. Approximately half the studies used seven point scales.

6) The wording of satisfaction scales and questions likewise exhibit wide variation. In fact, it is difficult to find two studies which measure satisfaction in exactly the same way. Some studies, including many which have been extremely influential in the literature, do not ever mention the word "satisfaction" in either the question wording or for the scale itself. For example, Cadotte, Woodruff and Jenkins (1987) use "feelings" as the dependent variable in their oft-cited study comparing expectations and norms as standards for disconfirmation. The 10 item "feeling" scale they employed did not use "satisfaction" in any of the items, yet they refer to satisfaction as the dependent variable in the text and title of the article. A sizable minority of studies use scales which did not include the terms "satisfied" and "dissatisfied" or any variation of those words. Four studies used some variation of the "delighted - terrible" scale. Four studies also used Likert scales.

Question wording in some studies indicates that constructs other than satisfaction per se were measured. For example, Cardozo (1965) implies that satisfaction is simply the subjective evaluation of performance. Bearden and Teel (1983) and Oliver (1980) use at least one item which appears to be similar to behavioral intention: "If I had it to do over, I would feel differently about

using the business."

Question and scale wording also reflect diversity regarding the degree to which satisfaction is thought to be primarily cognitive versus affective. Some unabashedly focus on the affective nature of satisfaction. Oliver (1980) states that "....all items were emotional in content...." (p. 463). Cadotte, Woodruff, and Jenkins (1987) clearly favor an affect-based operationalization by utilizing scale anchors such as "warm glow/cold feeling," "uplifted/down," "elated/tense," and "pleasant/unpleasant."

Others use both cognitive-based and affective-based items. For example, Barbeau (1984) measures response to each attribute on an "extremely well" to "extremely poorly" scale, and measures overall satisfaction on the affect-based "delighted - terrible" scale. Churchill and Surprenant (1982) explicitly acknowledge both aspects of satisfaction by measuring half their attribute-specific items as beliefs and half as affects.

7) <u>These articles vary with regard to the actual "target" of satisfaction measurement.</u> The three most common targets appear to be the product or service itself (e.g., Barbeau 1984; Churchill and Surprenant 1982; Tse and Wilton 1988), the consumption experience (e.g., Cadotte, Woodruff, and Jenkins 1987), and the purchase decision (e.g., Bearden and Teel 1983; Oliver 1980). Yi (1990) enumerates a more detailed list of targets.

The distinctions between targets is significant. For example, one could be satisfied with one's decision to take a vacation in Florida (e.g., given the options available, access to information, etc.) but still be dissatisfied with the vacation in Florida (e.g., colder than usual), but feel satisfied with the totality of the experience (e.g., good to get away). Only one study explicitly compared satisfaction with different <u>levels</u> of target (Bitner and Hubbert 1993).

8) Notice that notwithstanding the ongoing discussion about the dimensionality of satisfaction, satisfaction is consistently operationalized as a unidimensional construct. In only a few cases were satisfaction and dissatisfaction measured separately (e.g., Westbrook and Reilly 1983), and in these cases, the scales were simply combined into a single overall measure of satisfaction. Renewed interest in the dimensionality of satisfaction is apparent, but no consensus on the issue has been reached (Babin et al 1993).

Singh (1991) implies a two-dimensional conceptualization given his measure of satisfaction which ranges from "not satisfied at all" to "completely satisfied." Likewise, Richins and Bloch (1991) and Westbrook (1980) imply two dimensional conceptualizations with their numerical scales which range from 0% to 100%, where 0% is labeled "not at all satisfied" and 100% is labeled "completely satisfied." These scales indicate that the opposite of satisfaction is absence of satisfaction rather than dissatisfaction. However, in two of these studies (Singh 1991; Westbrook 1980), this is the only item used to measure satisfaction. The degree to which such measures, as opposed to the more traditional bipolar scales, alter the revealed relationships between satisfaction and its antecedents is unclear. The important observation at this point is that most researchers actually measure satisfaction as if it were unidimensional.

Inconsistent operationalizations of the satisfaction construct mirror the inconsistent conceptualizations of satisfaction. Numerous calls have been made for development of agreed upon operationalizations of satisfaction, but little progress has been made on this problem. Until standard measures of satisfaction are widely implemented and shown to have reliability and validity across a range of contexts, the question "what exactly is being measured

here?" will remain. Hunt (1977) states that the study of customer satisfaction is "...much more advanced in measurement and methodology than...in conceptual development" (p. 16). While much progress has been made since 1977, the statement is still true.

In summary, satisfaction ....

- is generally measured as a unidimensional construct,
- often measured using a single item,
- has a variety of "targets,"
- most often uses seven point scales,
- exhibits wide variation in scale wording, but usually includes the word "satisfaction" or a variation of that word.

In this dissertation, the few conventions regarding satisfaction measurement which do exist are followed. Specifically, satisfaction is conceptualized as unidimensional, measured using a single 7-point item, and is anchored by "extremely satisfied" and "extremely dissatisfied." In addition, two levels of targets of satisfaction are used: satisfaction with a specific target and overall satisfaction.

II-3.1. Expectation

Expectation is the subjective belief that an event or some attribute of an event will occur, or that a product possesses some attribute, or that some product will perform in a certain manner. Expectation can be measured at the attribute and/or overall level. It can be measured either with regard to relevant attribute characteristics (e.g., "hot/cold," "dull/bright," etc.) or as an evaluation of the attribute characteristics (e.g., "excellent/poor"). Olson and

Dover (1979), in an effort to clarify the exact nature of expectations, demonstrated that expectations may be conceptualized as product-specific beliefs.

Notions of expectation can be complex. Miller (1977) identifies four types of expectations: the ideal, the expected, the tolerable, and the deserved. Conceptually, a good case could be made for using any of the four, and the appropriate choice may vary by situation. Although most research examined here uses "predictive expectations," the alternatives have not been shown to be inappropriate.

Czepiel and Rosenberg (1977) propose an algebraic version of the above. They specify three types of expectation: 1) what the subject would like to occur, 2) what the subject thinks should occur, and 3) what the subject thinks will occur. They suggest that the numerical difference between one of these expectations and what actually occurs should be summed on an attribute by attribute basis to calculate customer satisfaction. Several of the studies examined used variants of this approach.

Swan (1981) contends that these variations of expectations are actually points along an "expectation continuum." Consumers have a "modal expectation level" that incorporates the probability of occurrence and the evaluation of the probable occurrence. Thus, for example, consumers take into account all the different types proposed by Miller (1977) and arrive at a realistic modal expectation for a given situation. Simply asking the consumer what he or she expects to occur or what quality is expected yields an overall expectation rating. Though other researchers do not refer to the "modal expectation level," many use this formulation.

Expectations have also been linked to attitudes. For example, Oliver and Linda (1981) state: "Perhaps the most general workable definition is that of Katona (1964) who referred to expectations as a 'subclass of attitudes that point to the future (p. 34).' As such, they may be seen as prediction of affect" (p. 88).

Expectations is one of the earliest and perhaps most consistently studied constructs in the satisfaction formation literature. It was used as an independent variable in early studies of perceived performance. (e.g., Cardozo 1965; Olshavsky and Miller 1972) and in nearly every study of antecedents of satisfaction. Further, it is the construct most closely connected to the theoretical roots of the satisfaction literature.

In the service satisfaction literature, measurements labeled "expectations" usually refer to "desires" (e.g., desired level of service). In order to avoid confusion, this distinction will be clarified as necessary.

Table 3 lists the studies which utilize expectations in a satisfaction formation model. It indicates whether expectations are measured and/or manipulated experimentally, and whether measurement occurred before or after "performance." Table 4 indicates whether expectations are measured by overall versus attribute-specific items, the number of items and scale points used, question wording and scale anchors. The following are observations regarding these tables.

(1) Although most of the studies reviewed included expectations as a potential antecedent variable, over one-third did not (see Table 3). Two additional studies, Cardozo (1965) and Olshavsky and Miller (1972), manipulated expectations in a laboratory setting, but did not measure them. Tse and Wilton

Table 3
Measures of Expectations

	Not Measured	Measured	Manipu-lated	Before Performance	After Performance
Anderson and Sullivan 1993		√			√
Babin, Darden and Griffin 1993	√				
Barbeau 1984		√		√	
Bearden and Teel 1983		√		√	
Bitner 1990	√				
Bolfing and Woodruff 1988		√		√	
Cadotte, Woodruff, and Jenkins 1987		√		√	
Cardozo 1965	√		√	√	
Churchill and Surprenant 1982		√	√	√	
Cronin and Taylor 1992		√			√
Dröge and Halstead 1991		√			√
Halstead 1993		√			√
Mano and Oliver 1993	√				
Oliver 1993	√				
Oliver and Bearden 1983		√		√	
Oliver and Desarbo 1988			√	√	
Oliver and Linda 1981		√		√	
Olshavsky and Miller 1972			√		
Patterson 1993		√		√	
Parasuraman, Zeithaml and Berry 1988	√				
Prakash and Lounsbury 1984		√		√	
Richins and Bloch 1991	√				
Singh 1991		√		√	
Spreng and Olshavsky 1993		√		√	

Table 3, continued

	Not Measured	Measured	Manipu-lated	Before Performance	After Performance
Swan and Martin 1981		√		√	
Swan and Oliver 1991	√				
Swan and Trawick 1981		√		√	
Tse and Wilton 1988		√	√	√	
Westbrook 1980	√				
Westbrook 1981	√				
Westbrook and Newman 1978	√				
Westbrook and Reilly 1983		√			√

Table 4
Specific Measures of Expectations

	By Attribute	Overall	Number of Items	Scale Pts. per Item	Question	Scale
Anderson and Sullivan 1993		√	1	10	N/A	"low" - "high"
Barbeau 1984	√		8	7	For 8 attributes:	"Extremely Well" - "Extremely Poorly"
Bearden and Teel 1983	√		6	7	"reasonableness of costs" "location" "quality of repairs" "reputation of firm" "speed of service" "friendliness of management"	"Likely" - "Unlikely"
Bolfing and Woodruff 1988	√		7	7	attribute * importance one e.g. given: "suitability with meal"	"Very well suited" - "not at all suited"
Cadotte, Woodruff, and Jenkins 1987	√	√	8	5	Asked to think about previous experience with restaurant, opinions of friends, and advertising. Attributes: "food quality" "speed of service" "employee friendliness" "atmosphere/decor" "cleanliness" "price/value" "quality of employee service"	bipolar scales
Cardozo 1965		√			high cost condition: avg. price = $1.95 low cost condition: avg. price = $0.39	
Churchill and Surprenant 1982	√	√	8/9	7	by attribute: overall:	semantic differential "not very good" - "excellent"
Dröge and Halstead 1991	√		3	4	by attribute: appearance, durability, stain resistance	"definitely would" - "definitely would not"

Table 4, continued

	By Attribute	Overall	Number of Items	Scale Pts. per Item	Question	Scale
Oliver and Bearden 1983	√	√	14	7	Belief component (possibility of outcome receipt) times Evaluation component (for each possible outcome)	"no chance" - "certain" "good" - "bad"
Oliver and Desarbo 1988		√			High return condition: 5% above market	
Oliver and Linda 1981	√	√	12	?	Asked respondent to indicate "how satisfied 'you or the male you buy for' would be with regard to each attribute." Overall:	"very satisfied" - "very dissatisfied" "happy" - "unhappy" "pleasant" - "unpleasant "satisfied" - "dissatisfied"
Oliver and Swan 1989						
Olshavsky and Miller 1972	√	√			High quality condition: multiple attribute indicators Low quality condition: multiple attribute indicators	
Patterson 1993	√	√	11	5	Asked for 10 attributes and overall (Overall: "All things considered, I expect the heater to be good value for money.")	"strongly agree" - "strongly disagree"
Prakash and Lounsbury 1984	√		11/7	7	Asked "how a brand was likely to perform on eac attribute." (e.g., for food restaurants, attributes include: taste of food, served way you like it, food served hot, quality of food, menu variety, etc.) (e.g., for beer, attributes include: good taste, good value for price, pleasant after taste, etc.)	semantic differentials

Table 4 continued

Table 4, continued

	By Attribute	Overall	Number of Items	Scale Pts. per Item	Question	Scale
Singh 1991	√	√	4	6	"Assume you reported the incident to the store, I likely is it that the store would.... ....apologize but do nothing. ....take appropriate action to take care of your problem. ....solve your problem and give better service to you in the future. ....be more careful in the future and everyone would benefit."	"very likely" - "very unlikely"
Spreng and Olshavsky 1993	√	√	4	7	3 attributes: "clarity," "sharpness," "color" 1 ovreall: "overall picture quality"	"Terrible, poor quality" - "Excellent quality"
Swan and Martin 1981	√	√	13	7	Attributes: "prestige" "room of interior" "engine power" "options/accessories" "attractiveness of interior styling" "ride comfort" "fun to drive" "durability" "well-engineered" "well made" "handling" "exterior styling" Overall: "....anticipated overall satisfaction"	semantic differentials ?
Swan and Trawick 1981			2	6/7	anticipated satisfaction * prob. that level realized Anticipated satisfaction: "If the food is just like you expect it to be, would you be...." Prob. level realized: "How sure are you that the food you get will be like you expected it to be?"	"extremely pleased" - "very disappointed" "extremely sure" - "unsure"

Table 4, continued

	By Attribute	Overall	Number of Items	Scale Pts. per Item	Question	Scale
Tse and Wilton 1988	√	√	27	5	Ideal Expected: "....anticipated performance of a player that 'has exactly the combination of attributes you would like to see in a miniature record player.'"	"very poor" - "very good"
					Equitable Expected: "....performance that would be 'reasonably expected if you invested $50 of your own money in purchasing the product.'"	"very poor" - "very good"
					Expected Performance: "....performance that 'yc would expect to see, considering everything you have seen or read so far.'"	"very poor" - "very good"
Westbrook 1980					Author called it "expectations," but measured "disconfirmation".	
Westbrook and Reilly 1983	√		?	11	Subjects list expected characteristics, then thei "level of these expectations."	"a great deal" - "very little"

(1988) and Churchill and Surprenant (1982) manipulated and measured expectations.

(2) Though most studies measured expectations prior to product/service exposure, five did not. "Predictive expectations" measured following the experience is really a measure of remembered predictive expectations, subject to modification due to the passage of time, the known performance, the subjects' reaction to the performance, and other potentially confounding factors. Thus, it is generally considered to be an inferior measure of predictive expectations.

All five studies which used post-performance measures of "predictive expectations" were field studies designed to avoid the artificial environment of a laboratory setting. Some of the problems involved in using ex post measures of expectations are discussed in Dröge and Halstead (1991), Halstead (1993), and Yi (1990).

(3) Table 4 provides the details of how expectations were measured for each of the studies reviewed. Note that all but three studies measured attribute-specific expectation or attribute-specific and overall expectations. Two of the three studies which did not measure attribute-specific expectations, Cardozo (1965) and Oliver and DeSarbo (1988) both were laboratory studies and both manipulated expectations regarding performance. However, even in these cases, subjects were provided with a few attribute-specific cues, so it could be argued that all studies but one either manipulated or measured at least some attribute-specific expectations.

(4) Table 4 also indicates wide variation in the number of items used to operationalize expectations. At one extreme is the study by Tse and Wilton (1988) which used 27 items; at the other extreme are studies by Swan and

Trawick (1981) -- which appears to use a single item scale created by multiplying an expectation times the probability of its occurrence -- and Anderson and Sullivan (1993).

(5) The number of scale points per item likewise exhibits some variation ranging from four points to ten points, with seven points also representing the mode.

(6) Note that Westbrook and Reilly (1983) allowed subjects to choose those characteristics about which they recalled expectations in an open-ended format. Thus, the number of items on which expectations were measured varied from subject to subject. (This measurement technique may have contributed to the failure to develop a significant overall model.)

(7) Variation is most evident in the specifics of question and scale wording. Note first of all that actual questions are rarely provided, though attributes measured are usually specified. Likewise, scale anchors are often omitted though readers are told that "semantic differential" (or "bi-polar") scales were used.

(8) On close examination of exactly what was measured, it is questionable whether one of the studies which claims to measure expectations actually does (Westbrook 1980). In reality, he measures performance relative to expectations, or disconfirmation.

It should be noted that two additional studies claim to measure expectations but do not and thus are not included here. Parasuraman, Zeithaml and Berry (1988) and Cronin and Taylor (1992) actually measure "desires," not expectations. Both studies use the SERVQUAL scale which consistently used the word "should" in all items (i.e., "Please show the extent to which you think institutions offering ____ services should possess the

features described"). This could be interpreted as normative or idealized expectations, but they clearly are not expectations in a predictive sense.

(9) On close examination, there are three kinds of "targets" of expectations, i.e., expectations are measured with regard to three subtly different aspects of product/service performance. First, expectations are measured with regard to perceptions of objective performance. Most of the studies using semantic differential (or bipolar) scales fall into this category. For example, Cadotte, Woodruff and Jenkins (1987) measure "speed of service" on a "fast - slow" continuum. Second, expectations are measured with regard to overtly subjective evaluations of performance. Scales such as Oliver's (1980) "good - bad" scale or the Tse and Wilton (1988) "very poor - very good" scale fall into this category. For these scales, the anchors themselves are evaluative. Third, expectations are measured with regard to the level of satisfaction expected from the product/service performance. In other words, respondents are asked their expected reaction to an expected level of an attribute. See for example the question wording used by Oliver and Linda (1981) as indicated on Table 4.

10) Finally, a couple of studies use a combination of types of target. Churchill and Surprenant (1982) use evaluation of performance as an overall expectation measure, while Swan and Martin (1981) use anticipated level of satisfaction as an overall expectation measure.

It seems likely that as expectation measures move farther away from objective performance as a target, individual responses become less and less comparable across respondents. For example, one person may expect "poor service promptness" and another may expect "good service promptness," and both may expect to be served in 15 minutes. The problem is exacerbated when expectations are compared with performance. For example, assume both

people were actually served in 20 minutes. The first person may be pleasantly surprised if he dislikes feeling rushed. The second may be unhappy if he dislikes waiting. Not only are expectations and performance confounded, expectations and desires are also confounded in such scales.

It may be true that expected evaluations of and expected satisfaction with performance is a superior predictor of satisfaction because predictive expectations and expected responses are combined in these two measures. Nevertheless, expectation of objective performance is closer to the original conceptualization of expectations as a cognition-based construct.

Yet even commonly used measures of expectations regarding objective performance are flawed. For example, using "fast" and "slow" to anchor expected service promptness measures may be more "objective" than using "very good" and "very poor." However, even the former set of anchors is subject to most of the same issues regarding individual interpretation. In addition, it is difficult to envision a truly objective expectations measure for some attributes such as "food quality" in Cadotte, Woodruff and Jenkins (1987).

In summary, expectation appears as a construct in about two-thirds of the studies reviewed. Most studies used predictive expectation measures obtained prior to performance, though several actually measured expectations following performance. There is wide variation in question wording, the number of measurement items and points per scale item. Expectations have been measured with regard to (1) objective performance, (2) evaluation of performance, and (3) level of satisfaction.

In short, operationalization of expectations has suffered from three inconsistencies. First, it has suffered from the problem of which attributes to include. Even when attributes have been identified by extensive pretesting,

there is no guarantee that salient attributes are not omitted. When subjects are allowed to state which attributes are salient to them personally, variation between subjects may contribute to problems in fitting the model (e.g., Westbrook and Reilly, 1983). Second, operationalization of expectations has also suffered from the variety of expectations targets, i.e., expectations regarding the product service performance versus expectations regarding the level of satisfaction likely to result from the product/service performance. Further, within the realm of expectations regarding performance, expectations may be measured with regard to the performance itself or with regard to subjective evaluations of performance. Third, operationalization of expectation has suffered from lack of comparability of expectations across subjects, or from one construct to another within a single study.

In this thesis, all three of the problems apparent in the current literature will be addressed. First, the problem of relevant attributes is solved by asking subjects specifically what proportion of the popular vote they expect each candidate to receive. In other words, the target event is so specific that it is defined as possessing a single attribute. Expectations regarding this single attribute can be measured exactly. Similarly, the target also possesses an unambiguous measure of objective performance, and thus the expectation measure is of predictive expectations. Finally, the measure is on the same scale as two other relevant constructs: desires and actual performance. Therefore, more than in any other study published to date, responses across respondents will be comparable.

II-3.2. Desires

"Desires" is a general term indicating the direction and strength of what a person wants to receive from a product or service. Although it seems logical that "desires" would be modeled as an antecedent of satisfaction, especially given early definitions of marketing, "desires" has only recently become the focus of serious attention in the satisfaction literature (with one early exception: Barbeau 1984). In at least three ways, however, "desires" has indirectly entered the satisfaction literature.

First, desires appears to have explicitly entered the satisfaction literature as a disconfirmation standard rather than as an independent construct. Westbrook and Reilly (1983) introduced the concept of "value-percept disparity" in a study which was marked by both design and measurement problems. Value-percept disparity was operationalized as "....the extent to which the respondents' automobile provided the features and performance characteristics needed or desired" (p. 258). As such, it may be thought of as a kind of "desires disconfirmation"; desires were not measured separately (though expectations were).

Second, Sirgy (1984) manipulated desires in an experiment by asking respondents to imagine an "ideal" level of an attribute. However, he did not measure the effects of the manipulation on satisfaction.

Third, desires have been introduced to the satisfaction literature through operationalizations of expectations. When respondents are asked to state expectations on an evaluative scale (e.g., "very poor" -- "very good"), the implication is that expectations occur relative to some "norm" or "ideal," which appears to be closely related to a "desired" level. For example, Tse and Wilton (1988) conceptualized "ideal expectations" as the "anticipated performance of a

player that 'has exactly the combination of attribute you would like to see....'" (p. 206). Likewise, as we illustrated in the previous section, Oliver (1980) operationalized expectations as the sum of the cross products of attribute specific beliefs (degree to which product possesses an attribute) and evaluation of the attribute (degree to which attribute is good/bad). The evaluation component reflects respondent desires relative to that attribute (Spreng and Dixon 1992).

Woodruff, Cadotte, and Jenkins (1983) suggest a move away from pure expectations to an antecedent which is more desires-based: desires as constrained by realistic expectations. In reporting the results of an empirical test of their ideas, Cadotte, Woodruff, and Jenkins (1987) summarize their position as follows: "....consumers are likely to rely on standards that reflect the performance a consumer believes a focal brand should provide to meet needs/wants....These norms have two important characteristics: (1) they reflect desired performance in meeting needs/wants and (2) they are constrained by the performance consumers believe is possible...." (p. 306).

Since desires have appeared explicitly in so few studies, its specific operationalizations will not be presented in a separate table, but will be presented in the discussion which follows. In 1984, Barbeau published a study which explicitly compared the effects of expectations and desires on satisfaction. Both direct effects on satisfaction and indirect effects (via the use of each as disconfirmation standards) were measured. Despite the promising results when desires was used as a standard for disconfirmation, desires was not included in a product-oriented model again until 1990, when Spreng uses desires as the centerpiece of his satisfaction model. Spreng and Olshavsky (1993) measure both "desires" and "desires congruency" in an experiment

involving subjects' responses to a new camera. Desires is operationalized using both attribute and overall measures. The question is worded: "Given your individual photographic needs and desires, what would be the level of ____ you desire?" "Clarity," "sharpness," "color," and "overall picture quality" are the four items for which the question is asked.

In the service satisfaction literature, the construct labeled "expectation" usually is measured as desires. In fact, Parasuraman, Zeithaml, and Berry (1988) state " .... in the service quality literature, expectations are viewed as desires or wants of consumers, i.e., what they feel a service provider should offer rather than would offer" (p. 17).

There has been some discussion about whether desires is best conceptualized as lying on a "more is better" continuum versus an "ideal point" continuum (e.g., Spreng 1992). There are some attributes for which "more is better," such as "quality" or "value." Other attributes, such as "warmth" have an ideal desired point because it is logical for something to possess either too much or too little warmth. Recently, Westbrook (1987) and Westbrook and Oliver (1991) have investigated the dimensionality of affective responses to performance. Yet neither of these studies looked at the pre-performance construct of desires.

Problems involved with measuring desires on an evaluative scale are evident. For example, Barbeau (1984) used scale anchors "extremely well" and "extremely poorly" to measure desired level of attributes. If one attribute is of the "more is better" variety (e.g., in that study, "development of marketing skills"), why would someone desire "extremely poor" performance? Why would someone desire any performance other than that which is "extremely well?" If another attribute in the same study is of the "ideal point" variety,

(e.g., in Barbeau's study, "degree of challenge"), does a high rating indicate a high degree of challenge or a level of challenge identical to the subject's ideal level of challenge? Thus, when "desires" scales are evaluative, is difficult to interpret responses logically. Also, it seems that there would be minimal variance in evaluative desires as everyone would want attributes at their ideal level or at the maximum level of a "more is better" attribute. Further, it appears highly questionable to create a single desires indicator by summing across a mixture of "more is better" and "ideal point" measures.

One additional issue is the degree to which respondents take other attributes into account when rating their desires. For example, an individual may desire a car which is "highly luxurious" but may temper that desire with the knowledge that they have $10,000 to spend on the car. Thus, the context in which desires are measured is critical for understanding results.

In this dissertation, these problems with desires measurement will be minimized. Respondents will be able to specify a level of desire on a non-evaluative, unambiguous scale whether they personally perceive desires in this context to be of the "more is better" or "ideal point" variety. Desire is operationalized as the degree to which a respondent wishes to distribute choice points to one alternative relative to two other mutually exclusive choices. Respondents can allocate all 100 points to their preferred alternative ("more is better") or give the preferred choice some specific number of points less than 100 ("ideal point"). In other words, desire is measured with regard to a total "package" of attributes relative to other "packages" of attributes rather than to a single attribute. An additional benefit of this operationalization of desire is that levels of desire can be directly compared with other relevant constructs (e.g., expectations) and across individuals.

II-3.3. Attitudes

Attitude has been used as both an antecedent and consequent construct in satisfaction formation models. Attitude is generally considered to be an ongoing or persistent affective orientation to a particular "attitude object," or a subjective overall evaluation of an object.

The most widely used attitude model is the Fishbein model (Fishbein and Ajzen 1975). The model defines attitude as the sum of the cross products of the strength of belief that an object possesses an attribute and the evaluation of the attribute, across all salient attributes. In other words, attitudes possess a cognitive component (very similar to long-term expectations; see Katona 1964) and an affective component.

Only three studies have utilized attitude as an antecedent variable in satisfaction formation models, so a table providing operationalization details will not be presented. (In addition, all three studies used similar attitude measures.)

In Oliver (1980), Oliver and Bearden (1983), and Oliver and Bearden (1985), attitudes are measured using 9-item semantic differential scales. In Oliver (1980), attitudes about receiving flu inoculations are measured, while in the latter two studies, attitudes toward diet pills are measured. Exact operationalizations of attitudes in these two studies are not presented.

Theoretical justification for including attitude as an antecedent in satisfaction formation processes is that if attitude is a persistent orientation to an object, attitude may impact satisfaction via its effect on perception of performance and disconfirmation (Oliver and Bearden 1983). In addition, Yi (1990) indicates that attitudes are hypothesized to affect expectations and

perceived performance judgments; this is thought to be especially true among low involvement consumer, because low involvement consumers are thought to be less attentive to actual performance and thus rely more on pre performance factors in forming satisfaction.

In this dissertation, a multi-attribute conception of attitude is used. It is operationalized using four attributes and is constructed using a modified version of the Fishbein model, with attribute "importance" rather than attribute "evaluation" as the factor with which belief is multiplied (Fishbein 1967)

II-3.4. Perceived performance

Churchill and Surprenant (1982) were the first to suggest that perceived performance affects satisfaction. They hypothesize the influence to be both direct and indirect (through disconfirmation). Tse and Wilton (1988) extend the theoretical justification for including perceived performance in the model. They suggest that sometimes consumers have a "learning motive" for consumption, i.e., consumers want to learn about a new product; consumers may thus be satisfied with the product "regardless of the levels of pre-experience comparison standard and disconfirmation" (p. 205). In addition, they hypothesize that the consumption experience itself, especially if it is extremely positive or negative, will affect post-consumption evaluation in accord with cognitive dissonance theory, and will thus have a direct effect on satisfaction.

In some previous studies, constructs which are labeled as "product performance" actually are operationalized in a manner very similar to disconfirmation. For example, Olshavsky and Miller (1972) asked subjects to

rate overall and attribute specific tape recorder performance relative to ".... an ideal or perfect recorder" (p. 20). By providing subjects with a comparison standard, the construct "performance" at best is confounded; at worst, it may be considered to be a measure of disconfirmation.

Table 5 lists the studies which utilize performance in a satisfaction formation model. It indicates whether performance is measured and/or manipulated experimentally, whether performance is measured by overall versus attribute-specific items, the number of items and scale points used, question wording and scale anchors. Table 5 indicates the following:

1) Although the studies presented in Table 5 all claim to measure performance, in at least two of the cases, the operationalizations of perceived performance appears to be confounded. These studies, and the potential confound in each, are:

a) Fisk and Young (1985) explicitly measured performance relative to a standard ("waiting time" relative to what was "expected" and "fare paid" relative to a "friend's"), and therefore it appears to be more like a disconfirmation measure.

b) Olshavsky and Miller (1972) explicitly measured performance relative to a standard ("....compared to an ideal or perfect recorder...."), and therefore it appears to be more like a disconfirmation measure.

2) Cronin and Taylor (1992) and Parasuraman, Zeithaml, and Berry (1988) both measured performance using the SERVQUAL scale. The question wording is somewhat confusing in that subjects are first told that it's their "feelings" which are of interest (an affective cue), and then they are asked to rate how strongly they agree or disagree that a provider possessed or exhibited a specific attribute (a cognitive task).

Table 5
Specific Measures of Performance

	Not Measured	Measured	Manipu-lated	By Attribute	Overall	Number of Items	Scale Pts per Item	Question	Scale
Anderson and Sullivan 1993		√			√	2	10	"rate quality, given price" "assess price, given quality"	"low" - "high" "unfavorable" - "favorable"
Babin, Darden and Griffin 1993	√								
Barbeau 1984		√		√		8	7	For 8 attributes:	"Extremely Well" - "Extremely Poorly"
Bolfing and Woodruff 1988		√		√	√	8	7	one e.g. given: "suitability with meal" (others not specified – multiple attributes)	"Very well suited" - "not at all suited"
Cadotte, Woodruff, and Jenkins 1987		√		√	√	8	5	Attributes: "food quality" "speed of service" "employee friendliness" "atmosphere/decor" "cleanliness" "price/value" "quality of employee service"	bipolar scales
Cardozo 1965		√			√	1			Mark on a 100 mm line
Churchill and Surprenant 1982		√	√	√	√	8/24	7	by attribute: overall: "Overall, quality of the unit is ...."	sem. diff. (e.g., "inferior-superior" "terrible - excellent")
Cronin and Taylor 1992		√		√		22	7	"The following set of statements relate to your feelings about XYZ company. Please show the extent to which you believe XYZ has the feature described by the statement." Asked for all SERVQUAL items.	"strongly disagree" - "strongly agree"
Fisk and Young 1985	√		√					Manipulated "waiting time" vs. expected waiting time Manipulated "price" vs. friend's price	"0 minutes" to "2 hours" more "$0" to $75" more

Table 5, continued

	Not Measured	Measured	Manipu-lated	By Attribute	Overall	Number of Items	Scale Pts per Item	Question	Scale
Garland and Westbrook 1989		√		√		4	7	Attributes included: physical environment, social enviornment, service providers, and service policies	"I feel delighted about .."-"I have mixed feelings about"-"I feel terrible about...."
Mano and Oliver 1993		√		√		25	7	Product evaluation re: involvement, not performance (combined Zaichowsky involvement scales and Batra and Ahtola hedonic and utilitarian scales)	semantic differentials
Oliver and Desarbo 1988			√		√			High return condition: 12% ROI less commissions	
Olshavsky and Miller 1972		√	√	√	√	8	8	Attributes: frequency response, freedom from distortion, background noise level, flutter, speed control, fidelity for voice, fidelity for music, overall performance.	"Best possible - worst possible" NOTE: "COMPARED TO AN IDEAL OR PERFECT RECORDER" -> DISCONFIRMATION?
Parasuraman, Zeithaml and Berry 1988		√		√		22	7	"The following set of statements relate to your feelings about XYZ company. Please show the extent to which you believe XYZ has the feature described by the statement."	"strongly disagree" - "strongly agree"
Patterson 1993		√		√	√	11	5	10 attributes and 1 overall	"strongly agree" - "strongly disagree"
Prakash and Lounsbury 1984		√		√		11/7	7	Asked how a brand performed on each attribute. (e.g., for food restaurants, attributes include: taste of food, served way you like it, food served hot, quality of food, menu variety, etc.) (e.g., for beer, attributes include: good taste,	semantic differentials
Spreng and Olshavsky 1993		√	√	√	√	4	7	3 attributes: "clarity," "sharpness," "color" 1 ovreall: "overall picture quality"	"Terrible, poor quality" - "Excellent quality"

Table 5, continued

	Not Measured	Measured	Manipu-lated	By Attribute	Overall	Number of Items	Scale Pts per Item	Question	Scale
Swan and Martin 1981		√		√	√	13	7	Attributes: "prestige" "room of interior" "engine power" "options/accessories" "attractiveness of interior styling" "ride comfort" "fun to drive" "durability" "well-engineered" "well made" "handling" "exterior styling" Overall: "....overall satisfaction"	not reported
Swan and Oliver 1991		√		√		28	7	"In dealing with salesman, I put in ...." "In dealing with salesman, I received ...." "In dealing with me, salesman put in ...." "In dealing with me, salesman received ...."	"Strongly agree - Strongly disagree"
Swan and Trawick 1981		√			√	1	7	"Please tell us how you thought the food was."	"Excellent - Poor"
Tse and Wilton 1988			√	√	√			Manipulated: Poor performance vs. Good performance	
Westbrook and Reilly 1983		√		√		?	7	Subjects recall needs in an automobile, and then rate degree to which automobile met those needs. NOTE: NOT PURE MEASURE OF PERFORMANCE; "VALUE-PERCEPT DISPARITY"	"Provide for less than my needs" - Provides exactly what I need."

3) In five of the studies, performance is manipulated; in two of these cases, perceived performance is not measured, so actual performance becomes the relevant independent variable. Performance and expectation are the two most commonly-manipulated variables in satisfaction formation research because they can be consistently and easily controlled. The motivation for manipulating performance is not only to manipulate perceived performance, but also to manipulate disconfirmation. Disconfirmation has been the focus of so much attention in satisfaction research and there is no readily apparent way to manipulate disconfirmation directly.

4) The majority of studies measured attribute-specific performance or both attribute-specific and overall performance. Only three studies measured overall performance alone, and these were studies involving products/services that are simple to evaluate (e.g., pen, ROI, etc.)

5) Except for the three studies which use only an overall measure, perceived performance is measured using 7-point scales (range is from 5-points to 8-points). Number of items used ranged from 4 to 28 items.

In this dissertation, perceived performance is measured in one model and not measured in the other. In the model which includes perceived performance, it is measured conventionally, that is, using 7-point scales and multiple attributes. In the other model, perceived performance is not measured because actual performance (i.e., the election outcome) is so clear, and so widely known and accepted, that an objective measure of perceived performance is considered unnecessary.

II-3.5. Disconfirmation

Disconfirmation is a person's evaluation of product or service performance relative to some standard. Performance above the standard is traditionally referred to as "positive disconfirmation," performance below the standard is referred to as "negative disconfirmation," and performance at the standard is referred to as "confirmation."

Disconfirmation has been operationalized in a wide variety of ways. Table 6 and Table 7 list all the empirical studies reviewed which utilized disconfirmation, and certain relevant characteristics of how it was operationalized. All operationalizations can be categorized along two dimensions: 1) subjective versus derived (computational) measures, and 2) standard which is being disconfirmed. The resulting matrix and the classification of studies utilizing disconfirmation as an antecedent construct is shown in Table 8.

The first dimension, subjective versus derived measures, refers to a critical conceptual difference in how disconfirmation is operationalized. Subjective disconfirmation refers to the direct measurement of a person's evaluation of disconfirmation. Such measures are taken following the subject's experience of the product or service. Typically, the subject would be asked to rate whether the performance was "better than expected" or "worse than expected" on some scale. Reporting overall disconfirmation in this manner allows the subject to consider the entire experience relative to expectations or whatever standard is used.

Derived measures of disconfirmation are indirect measures in that the subject is not directly asked the degree to which performance meets the standard (e.g., expectations). Instead, measures of the standard are collected before

Table 6
Measures of Disconfirmation in Empirical Studies

				Standard Disconfirmed					
	Derived or Subjective	By Attribute	Overall	Predictive Expectation	Desire	Past Experience	Ideal	Product type Norm	Best brand Norm
Anderson and Sullivan 1993	subjective		√	√					
Babin, Darden and Griffin 1993	subjective		√	√					
Barbeau 1984	derived	√		√	√	√			
Bearden and Teel 1983	subjective			√					
Bitner 1990	?								
Bolfing and Woodruff 1988	subjective		√	√				√	√
Brown and Swartz 1989	derived	√		√					
Cadotte, Woodruff, and Jenkins 1987	subjective		√	√				√	√
Churchill and Suprenant 1982	subjective	√	√	√					
Cronin and Taylor 1992	NOT MEASURED								
Dröge and Halstead 1991	subjective	√		√					
Oliver 1980	subjective		√	√					
Oliver 1993	subjective		√	√	√				
Oliver and Bearden 1983	subjective		√	√					
Oliver and Desarbo 1988	derived (manipulated)	√		√					
Oliver and Swan 1989	subjective	?	√						
Olshavsky and Miller 1972	subjective	√	√				√		
Parasuraman, Zeithaml, and Berry 1988	derived	√			√				
Patterson 1993	derived	√	√	√					
Prakash and Lounsbury 1984	derived	√		√				√	√
Richins and Bloch 1991	subjective		√	√					
Spreng and Olshavsky 1993	subjective	√	√	√	√				
Swan and Martin 1985	derived	√		√					
Tse and Wilton 1988	subjective		√	√*			√		
Westbrook 1980	subjective	√		√					
Westbrook and Reilly 1978	subjective	√	√	√					

* predictive and equitable expectations (2 measures)

Table 7
Specific Measures of Disconfirmation

	Number of Items	Scale Pts. per Item	Question	Scale
Anderson and Sullivan 1993	1	10	N/A	"Quality much worse/better than expected"
Babin, Darden and Griffin 1993	3	?	e.g., "The product materials improved my score by about as much as I expected it to."	"Likert scales"
Barbeau 1984	8	7	(perfomance minus standard) for 8 attributes	"Extremely well - Extremely poorly"
	1	?		"Better than - Worse than"
Bearden and Teel 1983				
Bitner 1990	?	?	assumed constant; verified, but scales not provided	
Bolfing and Woodruff 1988	3	?	Asked once for each standard.	"Much better than -- Much worse than" each standard
Brown and Swartz 1989	65	5	(performance minus expectation) for each attribute	"Agree -- Disagree"
Cadotte, Woodruff, and Jenkins 1987	1	5	Asked once for each standard.	"Much better - better - about the same - worse - much worse"
Cardozo 1965			Assumed to be manipulate; not measured.	
Churchill and Surprenant 1982	II-I2	7	Asked for 11 attributes re: plant and 12 attributes re: player and once for overall	
			E.g. for cost:	"Too high: Worse than I thought -- Accurate: Just as I expected -- Too low: Better than I thought"
			E.g. for overall: "My expectation regarding the performance of the product was...."	"Worse than I thought -- just as I expected -- better than I thought"
Cronin and Taylor 1992				
Dröge and Halstead 1991	5	3	Asked regarding carpet (appearance, durability, stain resistance) and service (warranty, retailer service)	"not as good as expected -- better than expected"
Oliver 1980	2	7	Asked of innoculation recipients:	
			Problems encountered	"Much more serious than expected -- Much less serious than expected"
			Benefits received	"Much less than expected -- Much greater than expected"
			Asked of non-recipients:	
			"Decision not to get vaccine made me ...."	"Much worse off than expected--As well off as expected--Much better off than expected"
Oliver 1993	3	?	asked of benefits, problems and overall	"better than expected--worse than expected"

Table 7, continued

	Number of Items	Scale Pts. per Item	Question	Scale
Oliver and Bearden 1983	4	?	Asked re: overall, benefits only, problems only, and positive/negative surprise over performance	"Greater than expected-Worse than expected"
Oliver and Desarbo 1988			Two levels were experimentally manipulated.	
Oliver and Swan 1989	3			"Better than expected - Worse than expected"
Olshavsky and Miller 1972	8	8	Asked to rate recorder "compared to an ideal or perfect recorder." * NOTE: They claimed to be measuring performance. 7 attributes were frequency response, freedom from distortion, background noise level, flutter, speed control, fidelity for voice, fidelity for music. Also asked re: overall.	"Worst possible -- Best possible"
Patterson 1993	10	5	(performance - std) for 10 attributes	(perf * imp) - (exp * imp)
Parasuraman, Zeithaml, and Berry 1988	22	7	(performance minus desires), both measured on Likert scales	"Agree -- Disagree"
Prakash and Lounsbury 1984	11 - 7	7	(performance minus standard) All measured on semantic differential scales Labelled normative standards as "normative expectations" and "comparative expectations" 11 attributes for restaurants, 7 for beer	
Richins and Bloch 1991	2	7	"Thinking about the benefits you have experienced with this car, would you say these benefits wer "Thinking about any problems you have had with this car since you purchased it, would you say these problems were...."	"Much less than expected -- Much greater than expected" "Much less serious than expected -- Much more serious than expected"
Spreng and Olshavsky 1993	4	7	"In comparison w/ the quality level you expected, how would rate the performance of this camera with regard to (clarity, sharpness, color, and ovrall quality) of the picture?" (asked for each)	"worse than I expected" - "better than I expected"
Swan and Martin 1981	12	7	(performance ratings minus expectations) for 12 attributes (e.g., prestige, room of interior, fun to drive, engine power, etc.) Expectations and performance measured on sematic differential scales	
Tse and Wilton 1988	1	5	"....overall....how close did the [product] come to your expectations."	"Very much poored than expected -- Very much better than expected"
Westbrook 1980	2*	5	* Subjects first asked to list good and bad points of products. Asked once for each benefit: Asked once for each drawback:	"Much less than I expected -- About what I expected -- Much greater than I expected" "Much more serious than I expected -- About what I expected -- Much less serious than expected"
Westbrook and Reilly 1978	2*	5	* Subjects first asked to list good and bad points of products. Asked once for each benefit: Asked once for each drawback: Asked once for overall/all aspects:	"Much better than I expected -- About as I expected -- Much worse than I expected" "Much better than I expected -- About as I expected -- Much worse than I expected" "Much better than I expected -- About as I expected -- Much worse than I expected"

Table 8
Classification of Studies which Include Disconfirmation

DISCONFIRMATION STANDARD	CALCULATION METHOD: Subjective	CALCULATION METHOD: Derived
Predictive Expectation	Anderson and Sullivan 1993 Babin, Darden, and Griffin 1993 Bearden and Teel 1983 Bolfing and Woodruff 1988 Cadotte, Woodruff, & Jenkins 1987 Churchill and Suprenant 1982 Dröge and Halstead 1991 Oliver 1980 Oliver 1993 Oliver and Bearden 1983 Richins and Bloch 1991 Tse and Wilton 1988 Westbrook 1980 Westbrook and Reilly 1978	Barbeau 1984 Brown and Swartz 1989 Oliver and DeSarbo 1988 Patterson 1993 Prakash and Lounsbury 1984 Swan and Martin 1981
Desire	Spreng and Olshavsky 1993	Barbeau 1984 Parasuraman, Zeithaml, and Berry 1988
Ideal	Olshavsky and Miller 1972 Tse and Wilton 1988	
Product Type Norm	Bolfing and Woodruff 1988 Cadotte, Woodruff, and Jenkins 1987	Prakash and Lounsbury 1984
Best Brand Norm	Bolfing and Woodruff 1988 Cadotte, Woodruff, and Jenkins 1987	Prakash and Lounsbury 1984

exposure to the product or service; after exposure, the subject is asked to rate performance, usually for the same attributes and using scales identical to those used to measure the standard. Disconfirmation is then calculated as the simple difference between performance and the standard. Positive differences indicate performance exceeded the standard and thus were positively disconfirmed. The reverse holds for negative differences. A few scholars have suggested that derived disconfirmation measures should be operationalized as the ratio of performance/standard rather than as a difference score (e.g., Bonoma 1987; Lele and Sheth 1987). Cooper, Cooper, and Duhan (1989) tested whether the ratio operationalization outperformed the difference operationalization, and found the latter to be superior according to a number of validity related criteria. Thus, derived disconfirmation is rarely operationalized as a ratio.

Subjective disconfirmation has been criticized for one major reason. This measure allows subjects to alter their remembered standards or performance evaluations or both in a manner consistent with dissonance theory (Festinger 1957) or assimilation-contrast theory (Sherif and Hovland 1961). Such measures may include a significant amount of bias (Prakash and Lounsbury 1984), and thus may not accurately reflect the degree to which performance met or failed to meet some pre-experience standard.

Derived measures have also been criticized for several reasons. First, such measures typically do not account for disconfirmation of standards of salient attributes for which no prior measurements were obtained. For example, if a study of satisfaction with an airline flight neglected to obtain pre-flight expectations regarding how smooth the flight is, post flight measurements of performance likewise would not capture customer evaluation

of this attribute.

Second, derived measures are difference scores, which have been strongly criticized for problems of reliability, discriminant validity, and spurious correlations (Peter, Churchill, and Brown 1993).

Another problem with the derived disconfirmation measure is empirical: such measures are only weakly related to satisfaction. This criticism appears to hold true even when the reliability problem is controlled (Prakash and Lounsbury 1984). The only studies which have found strong relationships between derived disconfirmation and satisfaction are those which do not include an independent construct for perceived performance in the model (e.g., Swan and Trawick 1981).

The second dimension of Table 6 is the standard actually disconfirmed. Numerous standards have been proposed and tested. The following is a list of major disconfirmation standards proposed in the marketing literature: predictive expectations (e.g., Miller 1976), normative expectations (e.g., Granbois, Summers and Frazier 1977), deserved expectations (Miller 1977), ideal expectations (e.g., Tse and Wilton 1988), comparative expectations (LaTour and Peat 1980), best brand expectations (e.g., Prakash and Lounsbury 1984), etc.

Although most researchers seem to agree that disconfirmed expectations are what explains satisfaction, consensus has not been reached on this issue. For example, Woodruff, Cadotte, and Jenkins (1983) propose that performance norms play an important role in disconfirmation; the subject compares product performance with a normative ideal. According to that article, norms may be either brand-based or product-based. If product performance falls within a "zone of indifference," the normative explanation

is confirmed; if it falls outside the zone, disconfirmation occurs and leads to satisfaction or dissatisfaction. The degree to which expectations and norms relate, or whether one should be used rather than the other is open to debate (Hunt 1977). A related idea is proposed in LaTour and Peat (1979); they propose the Thibaut and Kelly concept of using a "comparison level" (C.L.) for calculating disconfirmation. The C.L. is based on all salient outcomes of the same or similar occurrences or products in the past; the C.L. is continually updated based on new experiences. Satisfaction thus becomes a relative, not absolute, emotional state.

A few studies have focused on directly comparing the performance of various standards of disconfirmation. These studies, and their results, are summarized next. Prakash and Lounsbury (1984) compared predictive expectations, normative expectations and comparative expectations in two different usage situations (fast food hamburger restaurants and beer). All disconfirmation constructs were operationalized as computational measures (i.e., differences between the pre usage and the post usage evaluation of performance). They concluded that normative and comparative expectation measures outperformed predictive expectations as predictors of satisfaction, though the evidence for the observed differential performance is weak.

Barbeau (1984) compared predictive expectations, desires, and past experience as comparison standards in derived disconfirmation measures. Disconfirmation measures using desires and past experience were found to be a significant antecedent of satisfaction, while disconfirmation of predictive expectations was not.

Swan and Trawick (1981) directly compared the explanatory power of derived ("inferred") versus subjective ("perceived") disconfirmation. Using a

series of regression equations, they concluded that both types of disconfirmation were significant, though derived disconfirmation appeared to outperform subjective disconfirmation in terms of explanatory power. However, it should be noted that the derived measure implicitly accounted for perceived performance; it is impossible to determine whether the operationalization of disconfirmation or the inclusion of performance accounted for the superior explanatory power of the derived versus subjective disconfirmation measure.

Cadotte, Woodruff, and Jenkins (1987) compared predictive expectations, product type norms and best brand norms as predictors of satisfaction in three different restaurant situations (fast food, family, and atmosphere). Disconfirmation constructs were operationalized as overall subjective measures. They concluded that product norm and best brand norms outperformed predictive expectations as a predictor of satisfaction; however, it should be noted that the evidence is equivocal given that none of the models estimated fit the data well. They also concluded that different standards may be relevant in different use situations or among different individuals in the same usage situation.

Spreng and Olshavsky (1993) compared an expectations-based disconfirmation measure with a desires-based measure, desires congruency. Building on the work of Westbrook and Reilly (1983) and Barbeau (1984), they demonstrated, and theoretically supported, the superiority of the desires congruency measure as an antecedent of satisfaction. In their model, the effects of disconfirmation of expectations on satisfaction was not significant.

As we have seen, the traditional model of satisfaction formation depends heavily on the concept of disconfirmation. At its most basic level, disconfirmation is the difference between what a person expects (expectation) and what he or she receives (performance). Logically, only three things can vary in this definition: the definition of expectancy, the definition of performance, and the operationalization of the concept of "difference."

The four most-commonly referred to theories in the satisfaction literature are utilized in an attempt to explain the relationship among these three constructs. Anderson (1973) examines what the four theoretical approaches say about the relationship of disconfirmed expectancy and perceived performance:

1) Cognitive dissonance theory specifies that a consumer will alter the perception of performance to make it more congruent with expectations. Therefore, low expectations will yield perceptions of lower performance; high expectations will yield perceptions of higher performance.

2) Contrast theory specifies that a consumer will intensify the disparity resulting from disconfirmed expectations. Therefore, negatively disconfirmed expectations will yield perceptions of higher performance; positively disconfirmed expectations will yield perceptions of lower performance.

3) Generalized negativity theory states that any deviation from expectations will result in a negative disconfirmation.

4) Assimilation-contrast theory specifies that slight-to-moderate deviations will result in perception of slightly higher or lower performance (higher for positive and lower for negative disconfirmation) as predicted by cognitive dissonance. However, as disconfirmation becomes more severe, the perceived difference between expectations and performance is magnified, and

the results predicted by contrast theory appear to hold. Anderson's own experiment supported assimilation-contrast theory.

Oliver (1980) acknowledges that adaptation level theory appears to apply to the process of disconfirmation. The theory states that perception occurs in relation to an "adapted standard." Once established, this adaptation level serves as a standard for future evaluations. Oliver states that expectations, "however created" (p. 461), function as an adaptation level. Disconfirmation results when actual performance is compared to the adaptation level.

Those few studies which have examined results in relation to these underlying theories have consistently found support for cognitive dissonance explanations (Festinger 1957) and for the assimilation explanations offered by assimilation-contrast theory (Sherif and Hovland 1961). For example, Olson and Dover (1979) express a fairly typical conclusion when they report that their results ".... support a dissonance theory prediction" and later, that their results "....indicate a consistent pattern of assimilation-like effects...." (p. 186).

In summary, predictive expectation has been the most commonly used standard for the operationalization of disconfirmation. In addition, subjective measures have generally been found to be superior to derived measures of disconfirmation. Single-item measures of disconfirmation, either overall or at the attribute level, have been most commonly used in previous research.

In this dissertation, consistent with previous research, a single item, 7-point scale measurement of subjective disconfirmation will be used; the standard disconfirmed will be predictive expectations.

II-4. Principle relationships among constructs

In Sections II-2 and II-3, we examined individually the principle constructs utilized in traditional satisfaction models. In this section, relationships among the constructs are examined in detail. The section is organized around the direct relationships between possible antecedent variables and possible dependent variables. In Section II-4.1, the relationships between perceived performance and its possible antecedents are examined. In Section II-4.2, the relationships between disconfirmation and its possible antecedents are examined. Finally, in Section II-4.1, the relationships between satisfaction and its possible antecedents are examined.

II-4.1. Antecedents of perceived performance: Expectations, Desires, and Attitudes

Researchers have been aware that the perception of performance (or product quality) can be affected by prior expectations. For example, Anderson (1973) demonstrates that the rating of product quality of a particular item is higher if expectations of quality are high and lower if expectations of quality are low. Olshavsky and Miller (1972) demonstrate similar results using a different product. However, the link to customer satisfaction was not made. This may be because the researchers think the link is obvious, or it may be due to a lack of interest in customer satisfaction until the early 1970's (Hunt 1977).

Table 9 lists the studies which modeled antecedents of performance along with the product/service context, sample composition and analytical methods. Columns to the right of the Method column refer to possible antecedents of perceived performance. The numbers in these columns indicated the relative strength of relationship between the antecedent and

Table 9
Antecedents of Performance--Relative Importance

Study	Context	Sample	Method	Predictive Expectation	Other Expectation	Desire	Attitude	Actual Performance
(Anderson and Sullivan 1993)	multiple products	Swedish consumers	regression	1				
(Barbeau 1984)--Model 1	course eval.	students	regression	1		0		
(Barbeau 1984)--Model 2	course eval.	students	regression					
(Cadotte, Woodruff, and Jenkins 1987)--Model 1	fast food rest.	customers	cov. struct.	1 (cov)				
(Cadotte, Woodruff, and Jenkins 1987)--Model 2	fast food rest.	customers	cov. struct.	1 (cov)				
(Cadotte, Woodruff, and Jenkins 1987)--Model 3	fast food rest.	customers	cov. struct.	1 (cov)				
(Cardozo 1965)--Model 1	pens	students	dif. means	1				
(Cardozo 1965)--Model 2	pens	students	dif. means	1				
(Churchill and Surprenant 1982)--Model 1	plant	shoppers	cov. struct.	1				
(Churchill and Surprenant 1982)--Model 2	video player	shoppers	cov. struct.	1				
(Olshavsky and Miller 1972) Note: authors claimed to measure performance evaluation but really measured disconfirmation	tape player	students	ANOVA	2 (Note: manipulated expectation on perceived performance)				1 (Note: manipulated performance on perceived performance)
(Patterson 1993)	home heater	recent purchasers	path analysis	1				
(Prakash and Lounsbury 1984)--Model 1, 3, 5	fast food rest.	students	correlations	1	2 and 3			
(Prakash and Lounsbury 1984)--Model 2, 4, 6	beer	students	correlations	1	2 and 3			
(Tse and Wilton 1988)--Model 4	record player	student	path	3	2			1 (manipulation)

performance. If a relationship was tested and reported to be not significant, a "0" appears in the appropriate column.

The following observations can be made regarding Table 9.

1) Studies which examined the expectations-perceived performance relationship found the relationship to be significant. It should be noted that in Cadotte, Woodruff, and Jenkins (1987), expectations was reported to be a significant covariate of performance; it was not hypothesized to be an antecedent in that study. Also, Olshavsky and Miller (1972) report a significant effect of expectation on perceived performance, but the dependent variable they actually measured was disconfirmation. Still, the evidence linking expectations and performance presented in the table is strong.

2) Two studies examined the strength of predictive expectations on performance relative to the strength of other potential antecedents on performance. Prakash and Lounsbury (1984) investigated the relative importance of predictive expectations versus other types of expectations. Only in the case of Tse and Wilton (1988) was expectations found not to be the most important antecedent. Not surprisingly, Tse and Wilton found that manipulated performance was a more powerful antecedent of perceived performance than was expectations.

3) Barbeau (1984) is the only study which examines the relationship between desires and performance, and the relationship is reported to be nonsignificant. It is difficult to make any generalizations about the desires - performance relationship given that it has been tested so infrequently in the literature.

In this dissertation, perceived performance is measured in one of the models and, consistent with the satisfaction literature, predictive expectation is included as a potential antecedent.

II-4.2. Antecedents of disconfirmation: Expectations, Desires, Attitudes, and Perceived Performance

Table 10 illustrates exactly which standards are being disconfirmed in each of the studies reviewed. Table 11 illustrates how expectations compare with desires, attitudes, and performance as antecedents of disconfirmation in the studies reviewed. Table 11 lists studies which model antecedents of disconfirmation along with the product/service context, sample composition and basic analytical methods used. Columns to the right of the Method column contain possible antecedents of disconfirmation. The numbers in these columns indicates the relative strength of relationship between the antecedent and disconfirmation. Thus, for example, in Churchill and Surprenant (1982)--Model 1 (plant), expectation had a stronger relationship with disconfirmation than did perceived performance, yet both relationships were statistically significant. If a relationship was tested and reported to be not significant, a "0" is used in the appropriate column.

The following observations can be made from Table 10 and Table 11.

1) With the exception of Churchill and Surprenant (1982)-Model 1, whenever expectations and perceived performance appeared in a model together, the relationship between expectations and disconfirmation was weaker than the relationship between perceived performance and disconfirmation. Given that disconfirmation is an evaluative response to performance, this finding should not be surprising.

Table 10
Antecedents of Disconfirmation -- Standards Disconfirmed

	STANDARD DISCONFIRMED					
Study	Predictive Expectatio	Desire	Ideal	Experience/ Product Type Norm	Best Brand Norm	Other
(Anderson and Sullivan 1993)	√					
(Barbeau 1984)	√	√		√		
(Bolfing and Woodruff 1988)				√	√	√
(Cadotte, Woodruff, and Jenkins 1987)--Model 1	√					
(Cadotte, Woodruff, and Jenkins 1987)--Model 2					√	
(Cadotte, Woodruff, and Jenkins 1987)--Model 3				√		
(Churchill and Surprenant 1982)--plant	√					
(Churchill and Surprenant 1982)--video player	√					
(Oliver 1980)--Model 1	√					
(Oliver 1980)--Model 2	√					
(Oliver and Bearden 1983)--Model 1	√					
(Oliver and Bearden 1983)--Model 2	√					
(Olshavsky and Miller 1972) Note: authors claimed to measure performance evaluation but really measured disconfirmation			√			
(Patterson 1993))	√					
(Prakash and Lounsbury 1984)--Model 1	√					
(Prakash and Lounsbury 1984)--Model 2	√					
(Prakash and Lounsbury 1984)--Model 3					√	
(Prakash and Lounsbury 1984)--Model 4					√	
(Prakash and Lounsbury 1984)--Model 5				√		
(Prakash and Lounsbury 1984)--Model 6				√		
(Spreng and Olshavsky 1993)	√	√				
(Swan & Trawick 1981)-DV is derived discon.						
(Swan & Trawick 1981)-DV is subjective discon. 1 (derived)						
(Tse and Wilton 1988)--Model 4	√		√			√

Table 11
Antecedents of Disconfirmation--Relative Importance

Study	Context	Sample	Method	Pre-performance Antecedents: Predictive Expectation	Pre-performance Antecedents: Other Expectation	Pre-performance Antecedents: Desire	Pre-performance Antecedents: Attitude	Perceived Performance
(Anderson and Sullivan 1993)	multiple products	Swedish consumers	regression	2				1
(Cadotte, Woodruff, and Jenkins 1987)--Model 1	fast food rest.	customers	cov. struct.	2				1
(Cadotte, Woodruff, and Jenkins 1987)--Model 2	fast food rest.	customers	cov. struct.		2 (best brand)			1
(Cadotte, Woodruff, and Jenkins 1987)--Model 3	fast food rest.	customers	cov. struct.		2 (norm)			1
(Churchill and Suprenant 1982)--Model 1	plant	shoppers	cov. struct.	1				2
(Churchill and Suprenant 1982)--Model 1	video player	shoppers	cov. struct.	2				1
(Oliver 1980)--Model 1	flu vaccine	consumers	path	0			0	
(Oliver 1980)--Model 2	flu vaccine	students	path	0			0	
(Oliver and Bearden 1983)--Model 1	diet pill	users	path	0			0	
(Oliver and Bearden 1983)--Model 2	diet pill	non-users	path	0			0	
(Olshavsky and Miller 1972) Note: authors claimed to measure performance evaluation but really measured disconfirmation	tape player	students	ANOVA	2 (Note: manipulated expectation on disconfirmation)				1 (Note: manipulat· performance or disconfirmation
(Patterson 1993)	heaters	purchasers	path	2				1
(Prakash and Lounsbury 1984)--Model 1	fast food rest.	students	correlations	1				
(Prakash and Lounsbury 1984)--Model 2	beer	students	correlations	1				
(Prakash and Lounsbury 1984)--Model 3	fast food rest.	students	correlations		1 (norm)			
(Prakash and Lounsbury 1984)--Model 4	beer	students	correlations		1 (norm)			
(Prakash and Lounsbury 1984)--Model 5	fast food rest.	students	correlations		1 (norm)			
(Prakash and Lounsbury 1984)--Model 6	beer	students	correlations		1 (norm)			
(Spreng and Olshavsky 1993)--expectations	camera	students	cov. struct.	2				1
(Spreng and Olshavsky 1993)--desires	camera	students	cov. struct.			2		1
(Swan and Trawick 1981)--DV is derived discon.	restaurant	gen. pop.	regression		1			
(Swan and Trawick 1981)--DV is subjective discon.	restaurant	gen. pop.	regression		2			
(Tse and Wilton 1988)--Model 4	record player	student	path	0	0			1

The Churchill and Surprenant (1982)-Model 1 (plant) finding that expectation had a larger impact on disconfirmation than did performance may be due to the magnitude of manipulations used in that experiment. In the artificial environment in which the authors had complete control over both the magnitude of expectation and performance, it is reasonable to believe that expectations could be manipulated to dominate performance in the relationship. The absence of similar findings in any field study or in any other experiment indicates such is probably the case.

On the other hand, Cadotte, Woodruff, and Jenkins (1987) find a significant causal path from expectation to disconfirmation for all three restaurant settings they examine (p. 312), though it should be pointed out that all of the LISREL models they constructed resulted in poor goodness of fit measures for the entire model.

2) In most models tested, expectations were significantly related to disconfirmation. Those studies which tested for this relationship but failed to find it were Oliver (1980), Oliver and Bearden (1983), Bearden and Teel (1983) and Tse and Wilton (1988). These three studies appear to differ from the others in two regards. First, they are the only three studies to use path analysis as the major analytical method. It is unclear why this particular analytical method should be so strongly associated with this particular result. Second, all three of these studies used presumably highly-involving products/services as the study context. It may be possible that for highly involving targets, expectations and disconfirmation are independent. However, two other studies, Churchill and Surprenant (1982) and Olshavsky and Miller (1972), also used durable goods as product contexts. (It should be pointed out that in the later study, the authors claimed to measure "perceived performance" as the

dependent variable, not "disconfirmation.")

One observation is clear: none of the studies which used one-time services or non-durable goods as study contexts failed to find a relationship between expectation and disconfirmation. It may be that for product/service contexts in which involvement is likely to be relatively low, expectations become a significant antecedent of disconfirmation. If involvement is low, actual performance may be less important relative to expectations in affecting disconfirmation because there is less perceived variance in performance or because people care less about performance.

3) Note that desires is never modeled as an antecedent of disconfirmation, probably because desires have seldomly appeared at all in satisfaction models until recently. Desire is included in Spreng (1992), Spreng and Olshavsky (1993) and Spreng, Dixon, and Olshavsky (1993). In all these studies, desire is modeled as an antecedent of desires congruity rather than expectation disconfirmation.

4) Attitude is tested in only two models as an antecedent of disconfirmation. In both models, it is found not to be significantly related to satisfaction.

In this dissertation, expectations will be modeled as an antecedent of disconfirmation in both models. Perceived performance will be modeled as an antecedent in one model. Despite its absence in previous satisfaction models, desires will be modeled as an antecedent of disconfirmation for reasons discussed in Chapter III. Attitude will not be included as an antecedent of disconfirmation.

II-4.3. Antecedents of satisfaction: Expectations, Desires, Attitudes, Perceived Performance, and Disconfirmation

Tables 12, 13, and 14 illustrates the direct effects of all modeled antecedents on satisfaction. In Table 12, the first four columns indicate study, product/service context, sample composition, and analytical method, respectively. In Table 13, the first column again refers to the study. The next three columns indicate the pre-performance antecedents: predictive expectations, other expectations, and desires. The next column refers to perceived performance. The next four columns all refer to disconfirmation, with a separate disconfirmed standard listed for each column. As in previous tables demonstrating relationships between constructs, numbers in columns for each study indicate the relative strength of relationship between that antecedent and satisfaction. A "0" indicates that the relationship between that antecedent and satisfaction was examined and found to be non-significant. In Table 14, following the column indicating study, the next two columns indicate whether the disconfirmation measure used was derived or measured subjectively. In the last column, other independent variables included in the model are listed.

The following observations may be made with regard to direct antecedents of satisfaction.

1) <u>It appears that perceived performance is consistently found to have the largest impact on satisfaction.</u> In all but four of the studies which examined the relationship between perceived performance and satisfaction, perceived performance had the largest direct effect on satisfaction. The three studies in which perceived performance had the second strongest impact on satisfaction were all experiments in which performance was manipulated. The reduced

Table 12
Characteristics of Studies Testing Antecedents of Satisfaction

Study	Context	Sample	Method
(Anderson and Sullivan 1993)	multiple products	Swedish consumers	regression
(Barbeau 1984)–Model 1	course eval.	students	regression
(Barbeau 1984)–Model 2	course eval.	students	regression
(Bearden and Teel 1983)–Model 1	auto repair	gen. pop.	cov. struct.
(Bearden and Teel 1983)–Model 2	auto repair	gen. pop.	cov. struct.
(Bitner 1990)	travel agent	gen. pop.	path
(Bolfing and Woodruff 1988)	wine	gen. pop.	regression
(Cadotte, Woodruff, and Jenkins 1987)–Model 1	fast food rest.	gen. pop.	cov. struct.
(Cadotte, Woodruff, and Jenkins 1987)–Model 2	fast food rest.	gen. pop.	cov. struct.
(Cadotte, Woodruff, and Jenkins 1987)–Model 3	fast food rest.	gen. pop.	cov. struct.
(Cardozo 1965)–Model 1	pens	students	dif. means
(Cardozo 1965)–Model 2	pens	students	dif. means
(Churchill and Surprenant 1982)–Model 1	plant	gen. pop.	cov. struct.
(Churchill and Surprenant 1982)–Model 2	video player	gen. pop.	cov. struct.
(Cronin and Taylor 1992)–Model 1	banking	gen. pop.	cov. struct.
(Cronin and Taylor 1992)–Model 2	pest control	gen. pop.	cov. struct.
(Cronin and Taylor 1992)–Model 3	dry cleaning	gen. pop.	cov. struct.
(Cronin and Taylor 1992)–Model 4	fast food	gen. pop.	cov. struct.
(Cronin and Taylor 1992)–Model 5	banking	gen. pop.	cov. struct.
(Cronin and Taylor 1992)–Model 6	pest control	gen. pop.	cov. struct.
(Cronin and Taylor 1992)–Model 7	dry cleaning	gen. pop.	cov. struct.
(Cronin and Taylor 1992)–Model 8	fast food	gen. pop.	cov. struct.
(Dröge and Halstead 1991)–Model 1	carpet	non-complainers	cov. struct.
(Dröge and Halstead 1991)–Model 2	carpet	complainers	cov. struct.
(Fisk and Young 1985)–Model 1	air travel	gen. pop.	ANOVA
(Fisk and Young 1985)–Model 2	air travel	gen. pop.	ANOVA
(Fisk and Young 1985)–Model 3	air travel	student	ANOVA
(Fisk and Young 1985)–Model 4	air travel	student	ANOVA
(Garland and Westbrook 1989)	library svc.	students	cov. struct.

Table 12, continued

Study	Context	Sample	Method
(Oliver 1980)--Model 1	flu vaccine	gen. pop.	path
(Oliver 1980)--Model 2	flu vaccine	students	path
(Oliver 1993)--Model 1	automobile	gen. pop.	cov. struct.
(Oliver 1993)--Model 2	class	student	cov. struct.
(Oliver and Bearden 1983)--Model 1	diet pill	users	path
(Oliver and Bearden 1983)--Model 2	diet pill	non-users	path
(Oliver and Desarbo 1988)	stock returns	students	ANOVA
(Oliver and Linda 1981)--Model 1	pajamas	gen. pop. - males	path
(Oliver and Linda 1981)--Model 2	pajamas	gen. pop. - males	path
(Oliver and Linda 1981)--Model 3	pajamas	gen. pop. - females	path
(Oliver and Linda 1981)--Model 4	pajamas	gen. pop. - females	path
(Oliver and Swan 1989) (same data as Swan and Oliver, 1991 - see below)			
(Olshavsky and Miller 1972)	tape player	students	ANOVA
(Patterson 1993)	home heaters	recent purchasers	path
(Prakash and Lounsbury 1984)--Model 1	fast food rest.	students	correlations
(Prakash and Lounsbury 1984)--Model 2	beer	students	correlations
(Prakash and Lounsbury 1984)--Model 3	fast food rest.	students	correlations
(Prakash and Lounsbury 1984)--Model 4	beer	students	correlations
(Prakash and Lounsbury 1984)--Model 5	fast food rest.	students	correlations
(Prakash and Lounsbury 1984)--Model 6	beer	students	correlations
(Richins and Bloch 1991)--Model 1	automobile	gen. pop./hi involv.	correlations
(Richins and Bloch 1991)--Model 2	automobile	gen. pop./lo involv.	correlations
(Richins and Bloch 1991)--Model 3	automobile	gen. pop./hi involv.	correlations
(Richins and Bloch 1991)--Model 4	automobile	gen. pop./lo involv.	correlations

Table 12, continued

Study	Context	Sample	Method
(Spreng and Olshavsky 1993)	camera	students	cov. struct.
(Swan and Martin 1981)	automobile	student	regression
(Swan and Oliver 1991)	automobile	new purchasers	correlations
(Swan and Trawick 1981)	restaurant	gen. pop.	regression
(Tse and Wilton 1988)—Model 4	record player	student	path
(Westbrook 1980)—Model 1	automobiles	student	regression
(Westbrook 1980)—Model 2	footware	student	regression
Note: author claimed to measure expectation but really measured disconfirmation			
(Westbrook 1981)	stores	gen. pop.	factor analysis
(Westbrook and Newman 1978)	shopping process	gen. pop.	regression
(Westbrook and Reilly 1983)	automobile	students	cov. struct.

Table 13
Antecedents of Satisfaction--Relative Importance

	Pre-perfomance Antecedents					STANDARD DISCONFIRMED			
Study	Predictive Expectation	Other Expectation	Desire	Attitude	Perceived Performance	Predictive Expectation	Desire	Experience/ Product Type Norm	Best Brand Norm
(Anderson and Sullivan 1993)					1	2			
(Barbeau 1984)--Model 1	0		0		1				
(Barbeau 1984)--Model 2						0	1	2	
(Bearden and Teel 1983)--Model 1	1					2			
(Bearden and Teel 1983)--Model 2	1					2			
(Bolfing and Woodruff 1988)-Hi invol. prod. norm	0				1			2	
(Bolfing and Woodruff 1988)-Hi invol. fav. brand	0				2				1
(Bolfing and Woodruff 1988)-Hi invol. focal brand	0				1			2	
(Bolfing and Woodruff 1988)-Lo invol. prod. norm	0				2			1	
(Bolfing and Woodruff 1988)-Lo invol. fav. brand	0				1				0
(Bolfing and Woodruff 1988)-Lo invol. focal brand	0				0			1	
(Cadotte, Woodruff, and Jenkins 1987)--Model 1						1			
(Cadotte, Woodruff, and Jenkins 1987)--Model 2									1
(Cadotte, Woodruff, and Jenkins 1987)--Model 3								1	
(Cardozo 1965)--Model 1									
(Cardozo 1965)--Model 2									
(Churchill and Surprenant 1982)--plant	3				2	1			
(Churchill and Surprenant 1982)--player	0				1	0			

Table 13, continued

Study	Pre-performance Antecedents: Predictive Expectation	Other Expectation	Desire	Attitude	Perceived Performance	STANDARD DISCONFIRMED: Predictive Expectation	Desire	Experience/ Product Type Norm	Best Brand Norm
(Dröge and Halstead 1991)--Model 1	0					1			
(Dröge and Halstead 1991)--Model 2	2					1			
(Halstead 1993)	1								
(Fisk and Young 1985)--Model 1					1				
(Fisk and Young 1985)--Model 2					1				
(Fisk and Young 1985)--Model 3					1				
(Fisk and Young 1985)--Model 4					1				
(Garland and Westbrook 1989)					2 of 4 sig. (simultaneous test)				
(LaBarberra and Mazursky 1983)									
(Maddox 1981)									
(Oliver 1993) - auto						1			
(Oliver 1993) - classroom						1			
(Oliver 1980)--Model 1	0			2		1			
(Oliver 1980)--Model 2	2			0		1			

Table 13, continued

	Pre-performance Antecedents					STANDARD DISCONFIRMED			
Study	Predictive Expectation	Other Expectation	Desire	Attitude	Perceived Performance	Predictive Expectation	Desire	Experience/ Product Type Norm	Best Brand Norm
(Oliver 1993)--Model 1						1			
(Oliver 1993)--Model 2						1			
(Oliver and Bearden 1983)--Model 1	0			0		1			
(Oliver and Bearden 1983)--Model 2	0			0		1			
(Oliver and Desarbo 1988)	3				2	1			
(Oliver and Linda 1981)--Model 1	2					1			
(Oliver and Linda 1981)--Model 2	2					1			
(Oliver and Linda 1981)--Model 3	2					1			
(Oliver and Linda 1981)--Model 4	2					1			
(Oliver and Swan 1989) (same data as Swan and Oliver, 1991 - see below)									
(Olshavsky and Miller 1972)									
(Patterson 1993)					1	2			

Table 13, continued

	Pre-perfomance Antecedents					STANDARD DISCONFIRMED			
Study	Predictive Expectation	Other Expectation	Desire	Attitude	Perceived Performance	Predictive Expectation	Desire	Experience/ Product Type Norm	Best Brand Norm
(Prakash and Lounsbury 1984)--Model 1	2				1	3			
(Prakash and Lounsbury 1984)--Model 2	2				1	3			
(Prakash and Lounsbury 1984)--Model 3		3 (norm)			1				2
(Prakash and Lounsbury 1984)--Model 4		3 (norm)			1				2
(Prakash and Lounsbury 1984)--Model 5		3 (comp.)			1			2	
(Prakash and Lounsbury 1984)--Model 6		3 (comp.)			1			2	
(Richins and Bloch 1991)--Model 1						1/2			
(Richins and Bloch 1991)--Model 2						1/2			
(Richins and Bloch 1991)--Model 3						2/1			
(Richins and Bloch 1991)--Model 4						1/2 (benefits/problems)			
(Spreng and Olshavsky 1993)	0		3		2	0	1		
(Swan and Martin 1981)	1					2		3	
(Swan and Oliver 1991)					seller inputs: 1 buyer outputs: 2 seller outputs: 3 buyer inputs: 4				

Table 13, continued

	Pre-perfomance Antecedents					STANDARD DISCONFIRMED			
Study	Predictive Expectation	Other Expectation	Desire	Attitude	Perceived Performance	Predictive Expectation	Desire	Experience/ Product Type Norm	Best Brand Norm
(Swan and Trawick 1981)	2					1 3			
(Tse and Wilton 1988)--Model 4	3	0			1	2			
(Westbrook 1980)--Model 1						1			
(Westbrook 1980)--Model 2 Note: author claimed to measure expectation but really measured disconfirmation						1			
(Westbrook and Reilly 1983)	2					3	1		

Table 14
Characteristics of Disconfirmation and Satisfaction Measures Used in Satisfaction Models

Study	DISCONFIRMATION CALCULATION		SATISFACTION				Other IV's
			Use Sat/Dissat		# of items		
	Subjective	Derived	Yes	No	Single	Multi	
(Anderson and Sullivan 1993)	√			√	√		
(Barbeau 1984)--Model 1							
(Barbeau 1984)--Model 2	√			√		√	
(Bearden and Teel 1983)--Model 1	√			√		√	
(Bearden and Teel 1983)--Model 2	√			√		√	
(Bitner 1990)				√	√		control/stability attributions
(Bolfing and Woodruff 1988)	√			√		√	involvement
(Cadotte, Woodruff, and Jenkins 1987)--Model 1	√			√		√	
(Cadotte, Woodruff, and Jenkins 1987)--Model 2	√			√		√	
(Cadotte, Woodruff, and Jenkins 1987)--Model 3	√			√		√	
(Churchill and Surprenant 1982)--plant							
(Churchill and Surprenant 1982)--video player							

Table 14, continued

Study	DISCONFIRMATION CALCULATION		SATISFACTION				Other IV's
			Use Sat/Dissat		# of items		
	Subjective	Derived	Yes	No	Single	Multi	
(Cronin and Taylor 1992)—Model 1			√		√		service quality
(Cronin and Taylor 1992)—Model 2			√		√		service quality
(Cronin and Taylor 1992)—Model 3			√		√		service quality
(Cronin and Taylor 1992)—Model 4			√		√		service quality
(Cronin and Taylor 1992)—Model 5			√		√		service quality
(Cronin and Taylor 1992)—Model 6			√		√		service quality
(Cronin and Taylor 1992)—Model 7			√		√		service quality
(Cronin and Taylor 1992)—Model 8			√		√		service quality
(Dröge and Halstead 1991)—Model 1							
(Dröge and Halstead 1991)—Model 2							
(Fisk and Young 1985)—Model 1			?	?	?	?	
(Fisk and Young 1985)—Model 2			?	?	?	?	
(Fisk and Young 1985)—Model 3			?	?	?	?	
(Fisk and Young 1985)—Model 4			?	?	?	?	
(Garland and Westbrook 1989)				√	√		
(LaBarberra and Mazursky 1983)			√		√		sat -> intentions only
(Maddox 1981)							sat. factor analysis only
(Oliver 1980)—Model 1	√			√		√	intentions (n.s.)
(Oliver 1980)—Model 2	√			√		√	intentions (n.s.)

Table 14, continued

Study	DISCONFIRMATION CALCULATION		SATISFACTION				Other IV's
			Use Sat/Dissat		# of items		
	Subjective	Derived	Yes	No	Single	Multi	
(Oliver 1993)--Model 1	√			√		√	positve/negative affects; attribute sat./dissat.
(Oliver 1993)--Model 2	√			√		√	positve/negative affects; attribute sat./dissat.
(Oliver and Bearden 1983)--auto	√			√		√	
(Oliver and Bearden 1983)--classroom	√			√		√	
(Oliver and Desarbo 1988)		manipulated	?	?	?	?	attribution/equity
(Oliver and Swan 1989) (same data as Swan and Oliver, 1991 - see below)							
(Patterson 1993)	√		√		√		
(Prakash and Lounsbury 1984)--Model 1		√	√		√		
(Prakash and Lounsbury 1984)--Model 2		√	√		√		
(Prakash and Lounsbury 1984)--Model 3		√	√		√		
(Prakash and Lounsbury 1984)--Model 4		√	√		√		
(Prakash and Lounsbury 1984)--Model 5		√	√		√		
(Prakash and Lounsbury 1984)--Model 6		√	√		√		
(Richins and Bloch 1991)--Model 1	√		√			√	
(Richins and Bloch 1991)--Model 2	√		√			√	
(Richins and Bloch 1991)--Model 3	√		√			√	
(Richins and Bloch 1991)--Model 4	√		√			√	

Table 14, continued

Study	DISCONFIRMATION CALCULATION		SATISFACTION				Other IV's
			Use Sat/Dissat		# of items		
	Subjective	Derived	Yes	No	Single	Multi	
(Singh 1991)							
(Spreng and Olshavsky 1993)	√		√			√	desires, desires congruency
(Swan and Martin 1981)		√	√		√		
(Swan and Oliver 1991)				√		√	
(Swan and Trawick 1981)		√		√		√	
(Tse and Wilton 1988)--Model 4	√		√		√		
(Westbrook 1980)--Model 1	√		√		√		numerous affective state and generalized attitude va
(Westbrook 1980)--Model 2	√		√		√		(mostly n.s.; exceptions are "discontent" and "life sa
Note: author claimed to measure expectation but really measured disconfirmation							in Model 1)
(Westbrook 1981)			√			√	
(Westbrook and Newman 1978)				√		√	
(Westbrook and Reilly 1983)	√		√			√	

impact of perceived performance in these instances may have been due to either 1) an artificially attenuated range of actual performance (making other variables relatively more important) or 2) a lower than usual level of involvement among respondents leading them to care less about actual performance.

Note that in none of the studies was perceived performance found to have a nonsignificant impact on satisfaction, except for the low involvement, focal brand treatment of Bolfing and Woodruff (1988). However, also note that in every study except one the objective level of performance is difficult or impossible to assess. In other words, measuring perceived performance is a highly subjective endeavor as the scale anchors often imply (see II-5). It seems logical, therefore, that the subjective evaluation of performance and satisfaction with performance should be highly related. One definition of satisfaction as "....an emotional response to the experience provided by, or associated with, particular products or services...." (Westbrook and Reilly 1983, p. 256) clearly illustrates why the two should be closely linked.

Oliver and DeSarbo (1988) was the one study for which performance could be unambiguously assessed. In that study, performance of a stock investment was stated in terms of percentage return on investment; the performance level was manipulated in the experiment, but not measured.

2) <u>The second most influential direct antecedent of satisfaction appears to be disconfirmation.</u> For those models in which perceived performance was not included, some form of disconfirmation was rated as the first or second most influential variable. For those models which did include perceived performance, expectations disconfirmation was still found to be significant in all studies except for Churchill and Surprenant (1982)--Model 2 (video player),

and Spreng and Olshavsky (1993). However, in both Churchill and Surprenant (1982)--Model 1 and Oliver and DeSarbo (1988), disconfirmation was found to have a stronger relationship with satisfaction than perceived performance had. Some studies tested multiple standards of disconfirmation and found at least one to be significant (e.g., Barbeau 1984).

Churchill and Surprenant (1982) suggested that the reason for finding no disconfirmation - satisfaction relationship in their Model 2 may be because disconfirmation is less important in predicting satisfaction of durable goods. However, numerous studies involving automobiles (Oliver 1993; Richins and Bloch 1991; Swan and Martin 1981; Westbrook 1980; Westbrook and Reilly 1983) and other durable goods (e.g., Dröge and Halstead 1991) found the relationship to be significant.

It does not appear to matter which disconfirmation standard is used. Disconfirmation of predictive expectations, desires, product type and best brand norms all proved to be significant antecedents of satisfaction.

In summary, with few exceptions (e.g., Barbeau 1984, Spreng and Olshavsky 1993), it appears that the empirical evidence in support of disconfirmation as an antecedent of satisfaction is quite strong, regardless of the product/service context, sample composition, or standard used.

It is important to note that for several studies, examining the disconfirmation-satisfaction relationship is of secondary importance. For example, in Oliver and Swan (1989), the primary focus is on the importance of perceived equity and fairness on exchange satisfaction. Thus the study is designed to highlight the effects of these variables. Likewise, Bolfing and Woodruff (1988) focus on the situational context of product usage, and Brown and Swartz (1989) focus on dyadic relationships and "gaps" between expected

and perceived performance using a 65 item instrument. In these studies, too, disconfirmation is found to compete with or exceed the explanatory power of the primary study variable.

Interestingly, in both studies reviewed which do not examine satisfaction as the primary dependent variable (Anderson 1973; Olshavsky and Miller 1972), disconfirmation is shown to significantly effect the perceived performance or perceived quality of the product being evaluated.

3) The role of expectations in satisfaction formation has received extensive attention in the literature. Empirical support has been found for direct effects and indirect effects, via disconfirmation and perceived performance. The indirect effects of expectations on satisfaction are especially complex as each route (via disconfirmation and perceived performance) are thought to have opposing impacts on satisfaction. As Yi (1990) succinctly states, "Thus, raising consumer expectations may yield both an increase (due to the increase in perceived product performance) and a decrease in CS (due to the increase in disconfirmation)" (p. 79).

Predictive expectation was frequently modeled as an antecedent of satisfaction. At times it was found to have no direct effect on satisfaction, though it usually was found to have at least a moderate direct positive impact on satisfaction. In two studies, Swan and Martin (1981) and Bearden and Teel (1983), it was found to be the antecedent most strongly related to satisfaction. In one study, Dröge and Halstead (1991), retrieved expectations was found to be negatively related to satisfaction.

There is no apparent pattern in these results. Among the studies which found expectations to be significant, some involved durable goods and others involved non-durable goods or services. Some of these models included

perceived performance as an antecedent, and others did not. In some, expectations "outperformed" disconfirmation, while in others the reverse occurred. No patterns based on how expectations were measured are apparent either (see Table 3 and Table 4).

On the other hand, all the studies which found expectations not to be an antecedent of satisfaction involved either a durable product or an ongoing service with the exception of the Bolfing and Woodruff (1988) study involving wine. In several studies involving durables or ongoing services, expectations was a significant antecedent. In two cases (Dröge and Halstead 1991; Oliver 1980) the same study found expectations to be significant in one model but not in another model. One thing is clear: in no studies involving non-durable goods or short-lived services has expectations been found to be unrelated to satisfaction, except for Bolfing and Woodruff (1988).

In addition, five of the eight models in which expectations was found not to be a significant antecedent occurred in field studies, the exceptions being Churchill and Surprenant (1982)--Model 2 (video player), Spreng and Olshavsky (1993), and Bolfing and Woodruff (1988).

In short, when non-durables and short-duration services provide the context, expectations are always directly related to satisfaction. When the context is durable goods or ongoing services, sometimes expectations is unrelated to satisfaction and sometimes it is not. There are two obvious questions raised. First, what differences between durable versus non-durable goods and between ongoing versus short-lived services may be relevant to the role of expectations in satisfaction formation? Second, under what circumstances in durable good/ongoing service contexts does the expectations- satisfaction relationship become important?

To summarize, the important direct antecedents of satisfaction are perceived performance, disconfirmation and expectations. Attitude has been found to be significant in one model; desires is found to be directly related to satisfaction in one model, and its use as a disconfirmation standard has proven to be significant.

In this dissertation, all major antecedents will appear in at least one of the two models to be used for testing the hypotheses developed in Chapter III. The major deviation from the traditional satisfaction literature is the omission of perceived performance as an antecedent in one of the models; the reasons for this unique specification is that the objective measure of performance is universally known and accepted, thus obviating the need for a measure of perceived performance.

II-5. Other relevant topics

In addition to the constructs and relationships comprising the traditional satisfaction formation model, additional factors regarding model complexity are discussed next. It is precisely because these complexities have not been well integrated into the traditional model that the research hypotheses offered in this dissertation can make a contribution to the literature. The complexities fall into two categories and are discussed below, structural (Section II-5.1) and process-related (Section II-5.2).

II-5.1. Model complexity -- Structural

Several researchers have noted that current models of satisfaction formation are structurally simplistic. They generally conclude that additional constructs are required to adequately model satisfaction formation. Such

observations usually result from a combination of theoretical and empirical evidence linking other variables to the traditional model. The following sections discuss some of these crucial issues.

Need for additional complexity in the dependent variable

As indicated in Chapter II-2 above, different targets of satisfaction have been successfully used in satisfaction models. For example, Churchill and Surprenant (1982) measured satisfaction with the product itself, Cadotte, Woodruff and Jenkins (1987) measured satisfaction with the consumption experience, and Oliver (1980) measured satisfaction with the purchase decision itself. Yi (1990) enumerates a complete list of targets. In their review of satisfaction literature, Peterson and Wilson (1992) summarize the situation as follows: "Without reiterating the specific findings reported above, it would appear that satisfaction ratings observed to date likely represent more than satisfaction with the product or service being studied" (p. 68). Indeed, in Chapter I, it was demonstrated that cognitive dissonance theory (Festinger 1957) and regret theory (Loomes and Sugden 1981) support the notion that both choice and nonchoice alternatives are relevant satisfaction targets.

In short, using a single, specific target of satisfaction appears to be overly simplistic given the realities of consumer decision-making within a competitive environment. Rather, satisfaction with each of multiple specific targets (both choice and nonchoice alternatives) and overall satisfaction, a summary evaluation or judgment of the relevant consumption experience, appear to be necessary to model satisfaction formation processes in a realistic manner.

In this dissertation, satisfaction with multiple specific targets as well as overall satisfaction are included.

Need for additional complexity in antecedent variables

Numerous potential antecedent variables have been found to be related to satisfaction other than those presented here as comprising the traditional model. Some have been studied in conjunction with traditional antecedents, such as those listed in the final columns of Table 14 (e.g., "attributions" in Bitner 1990, "service quality" in Cronin and Taylor 1992, etc.). Peterson and Wilson (1992) review literature indicating that there are weak relationships between demographic variables and satisfaction, there are moderate but inconsistent relationships between size of choice set and satisfaction, and significant relationships between satisfaction and "life satisfaction."

Other researchers have mentioned "non-traditional" antecedent possibilities. For example, Swan and Trawick (1981) state " .... we feel strongly that the observation of what other people received is part of the satisfaction process ...." (p. 56). (Despite this clear indication that what B experiences has an effect on A's satisfaction, the authors did not explicitly model the impact or in any way pursue the possibility of such a relationship.)

In this dissertation, recognizing that other antecedent variables may be relevant, traditional antecedents of alternatives not selected ("nonchoice") will be included as possible antecedents of satisfaction formation. Thus, in this dissertation, the satisfaction model will be enhanced using additional antecedent constructs and additional satisfaction "targets."

II-5.2 Model complexity -- Processes

With few exceptions, it has been assumed that satisfaction processing is uniform across consumers. In other words, researchers have been searching for the satisfaction formation model without explicitly considering that satisfaction formation processes may differ systematically among groups of consumers. Duhaime (1988) and Kennedy and Thirkell (1988) are two exceptions to this generalization. In addition, Oliver and DeSarbo (1988) mention that consumers may differ with regard to the relative importance of certain antecedent variables. Two other exceptions to the assumption of uniform processing are researchers who find satisfaction processing varies by level of involvement and those who find satisfaction processing varies by level of ultimate satisfaction.

Involvement

Richins and Bloch (1991) hypothesize and find differential decay rates in satisfaction among high versus low involvement automobile owners. They find that among low involvement owners, satisfaction increases over time, while the opposite occurs among high involvement owners. They did not gather pre-purchase data and thus do not analyze pre-experience antecedents such as expectations. However, their logic, that highly involved owners process more intensively, would also be expected to hold for pre-experience variables.

In addition, Westbrook and Newman (1978) concluded that dissatisfied consumers may become more highly involved because they are dissatisfied. This study is discussed in the following section.

Level of Satisfaction/Dissatisfaction

In the satisfaction literature, a few researchers have recognized that consumers who are dissatisfied may process differently than consumers who are satisfied. Westbrook and Newman (1978) found that consumers who are dissatisfied with previous appliance purchases are more likely to be dissatisfied with future appliance purchases. They conclude that some of this tendency may be due to individual personality factors. However, they also conclude that consumers who have been dissatisfied in the past may be more highly involved in a subsequent purchase than are previously satisfied consumers (who have routinized the previously successful purchase process). Significantly, this higher involvement may serve " .... to amplify sensitivity to less favorable experiences in shopping and choosing" (p. 464).

As detailed above in II-2.1, Maddox (1981) also found that dissatisfied consumers appear to process more intensively than do satisfied consumers. Specifically, he finds that dissatisfied consumers are more likely than satisfied consumers to focus on "instrumental" factors, i.e., the details of their negative experience.

Dröge and Halstead (1991) find strong empirical evidence of differential processing among consumers who are dissatisfied ("complainers") versus those who do not complain about their newly purchased carpets. Specifically, they find that complainers are more likely to be expectations-influenced while non-complainers are found to be more disconfirmations-influenced. In fact, they hypothesize that by assuming satisfaction processes are not differentiated, " .... past research may have masked differences in the fundamental interrelationships among these key constructs, leading to contradictory results across studies" (p. 319). Dröge and Halstead (1991)

hypothesize that complainers are more expectations-driven because of significantly greater cognitive processing than non-complainers, resulting in suspension of the normal "decay of expectations" (Oliver 1981).

In addition, the theory of cognitive dissonance (Festinger 1957) may once again be relevant. If dissatisfaction results because performance does not live up to desires or expectations, cognitive dissonance results. Dissonance always results in some level of psychological discomfort which the subject tries to reduce. Satisfied consumers experience no dissonance and thus are not driven to dwell on relationships between constructs. On the other hand, dissatisfied consumers attempt to reduce the dissonance by reexamining each construct in each dissonant relationship, looking for a way to reduce the dissonance. Again, the increased processing of dissatisfied consumers may result in stronger paths from preperformance to postperformance constructs.

In this dissertation, dissatisfied subjects are hypothesized to process more extensively than are satisfied subjects, because dissatisfied subjects feel the need to reconcile their pre-performance expectations, desires, and attitudes with the election outcome and their level of satisfaction.

II-6 Summary of literature review

The following is a summary of the major points presented for each concept and each relationship utilized by the traditional satisfaction model.

Constructs

- Satisfaction
  - The studies reviewed exhibited wide variation in conceptualization.
  - The studies reviewed exhibited wide variation in scale wording, but

usually included the word "satisfaction" or a variation of that word,

- Satisfaction was generally measured as a unidimensional construct, often using a single item,
- The studies reviewed indicated that satisfaction has been operationalized using a variety of "targets."

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- Expectation
  - Most of the studies reviewed included expectations as a potential antecedent variable.
  - Most studies measured expectations prior to product/service exposure, but three did not.
  - There are three kinds of "targets" of expectations: objective performance, overtly subjective evaluations of performance, level of satisfaction expected.
  - Even commonly used measures of expectations regarding objective performance are flawed.

- Desire
  - Desire has only recently become the focus of serious attention in the satisfaction literature
  - In at least three ways "desires" has indirectly entered the satisfaction literature: as a disconfirmation standard rather than as an independent construct, manipulated as the "ideal" level of an attribute, and through evaluative expectations.

- In the service satisfaction literature, the construct labeled "expectation" usually is measured as desires.
- Desires is conceptualized sometimes as a "more is better" continuum and sometimes as an "ideal point" continuum.
- When scales are evaluative, it is difficult to interpret responses logically.

• Attitude

- Attitude has been used as both an antecedent and consequent construct in satisfaction formation models.
- Only three studies have utilized attitude as an antecedent variable in satisfaction formation models.
- Attitudes are hypothesized to affect expectations and perceived performance judgments; this is thought to be especially true among low involvement consumers, because low involvement consumers are thought to be less attentive to actual performance and thus rely more on pre-performance factors in forming satisfaction.

• Perceived performance

- Operationalizations of perceived performance sometimes appear to be confounded with other constructs.
- In five of the studies reviewed, performance was manipulated; the motivation for manipulating performance was not only to manipulate perceived performance, but also as a way to manipulate disconfirmation.

- The majority of studies measured attribute-specific performance or both attribute-specific and overall performance.

- Disconfirmation
  - All operationalizations can be categorized along two dimensions: 1) subjective versus derived (computational) measures, and 2) standard which is being disconfirmed.
  - Numerous standards have been proposed and tested.
  - Studies have found support for cognitive dissonance explanations and for the assimilation explanations of disconfirmation.
  - Predictive expectation has been the most commonly used standard for the operationalization of disconfirmation.
  - Subjective measures have generally been found to be more strongly related to satisfaction than are derived measures.

Relationships

- Antecedents of perceived performance
  - Studies which examined the expectations-perceived performance relationship found the relationship to be significant; the evidence linking expectations and performance is strong.
  - Only a few studies examined the effects of expectations on performance relative to the effects of other potential antecedents on performance.
  - It is difficult to make any generalizations about the desires - performance relationship given that it has been tested so infrequently in the literature.

- Antecedents of disconfirmation
  - With one exception, whenever expectations and perceived performance appeared in a model together, the relationship between expectations and disconfirmation was weaker than the relationship between perceived performance and disconfirmation.
  - In most models tested, expectations were significantly related to disconfirmation. Those studies which tested for this relationship but failed to find it used presumably highly-involving products/services as the study context. (None of the studies which used one-time services or non-durable goods as study contexts failed to find a relationship between expectation and disconfirmation.)
  - Desires was never modeled as an antecedent of disconfirmation, and attitude was only tested in two models as an antecedent of disconfirmation.

- Antecedents of satisfaction
  - It appears that perceived performance was consistently found to have the largest impact on satisfaction. In none of the studies was perceived performance found not to have a significant impact on satisfaction.
  - The second most influential direct antecedent of satisfaction appears to be disconfirmation, regardless of the product/service context, sample composition, or standard used.

- Empirical support has been found for direct effects and indirect effects (via disconfirmation and perceived performance) of expectations on satisfaction.
- When non-durables and short-duration services provide the context, expectations are always directly related to satisfaction. When the context is durable goods or ongoing services, sometimes expectations is related to satisfaction and sometimes it is not.

The following chapter develops the research hypotheses of the dissertation and makes frequent reference to the material covered in this chapter.

Chapter III
Key Theoretical Issues Addressed

III-1. Introduction

The purpose of this chapter is to develop the research hypotheses and to link the research hypotheses with testable hypotheses. Recall that all proposed enhancements to satisfaction theory presented in this thesis are developed and tested using data collected regarding the 1992 U.S. presidential election. Because most hypothesis testing will be conducted within the context of two models, these models are briefly presented first. Next, each of the four research themes and the associated hypotheses are described. Finally, comprehensive overviews of each model are presented. Specific research methods are described in Chapter IV.

Election Outcome Satisfaction Model -- Overview

The Election Outcome Satisfaction Model (EOSM) describes the relationship between satisfaction with the election outcome and its antecedents. Expectations, desires, and attitude towards the candidate were measured before the election; disconfirmation and satisfaction were measured following the election. Perceived performance was not included because actual performance was unambiguous and widely known (see Chapter II-4.4).

Campaign Process Satisfaction Model -- Overview

The Campaign Process Satisfaction Model (CPSM) describes the relationship between satisfaction with the campaign process and its antecedents. Two elements of the campaign process are included: "advertising

effectiveness" and "running an unfair campaign." These were judged to be two elements (1) which people would recognize as being relevant to the campaign process, and (2) about which people would form expectations and perceptions of performance. Measures of expectations were collected early in the campaign and measures of perceived performance, disconfirmation, and satisfaction with the process were gathered following the election.

III-2. Thesis Themes, Research Hypotheses, and Testable Hypotheses

Each of the thesis themes described in Chapter I corresponds to research hypotheses of importance to the satisfaction literature. First, each research hypothesis is described. Next, it is contrasted with the relevant hypothesis derived from the traditional satisfaction model. Finally, testable hypotheses within the framework of the CPSM and/or the EOSM are presented.

III-2.1. Theme No. 1: Multiple Targets

Marketing scholars appear to be reaching consensus that the appropriate phenomena of study are exchange relationships, consumption experiences, integrated strategies, etc.; that is, broadly defined phenomena (Hunt 1990; Sheth, Gardner, and Garrett 1988). Likewise, satisfaction scholars appear to be moving toward broadly defined targets of satisfaction (see Chapter II-2). The traditional model of satisfaction formation itself appears to be in a transition from focusing on a single, specific target of satisfaction (Figure 4-a) to focusing on an overall target (Figure 4-b). As described in Chapter II-2, some authors have included both targets (Figure 4-c). A few studies have even included satisfaction with specific attributes of the

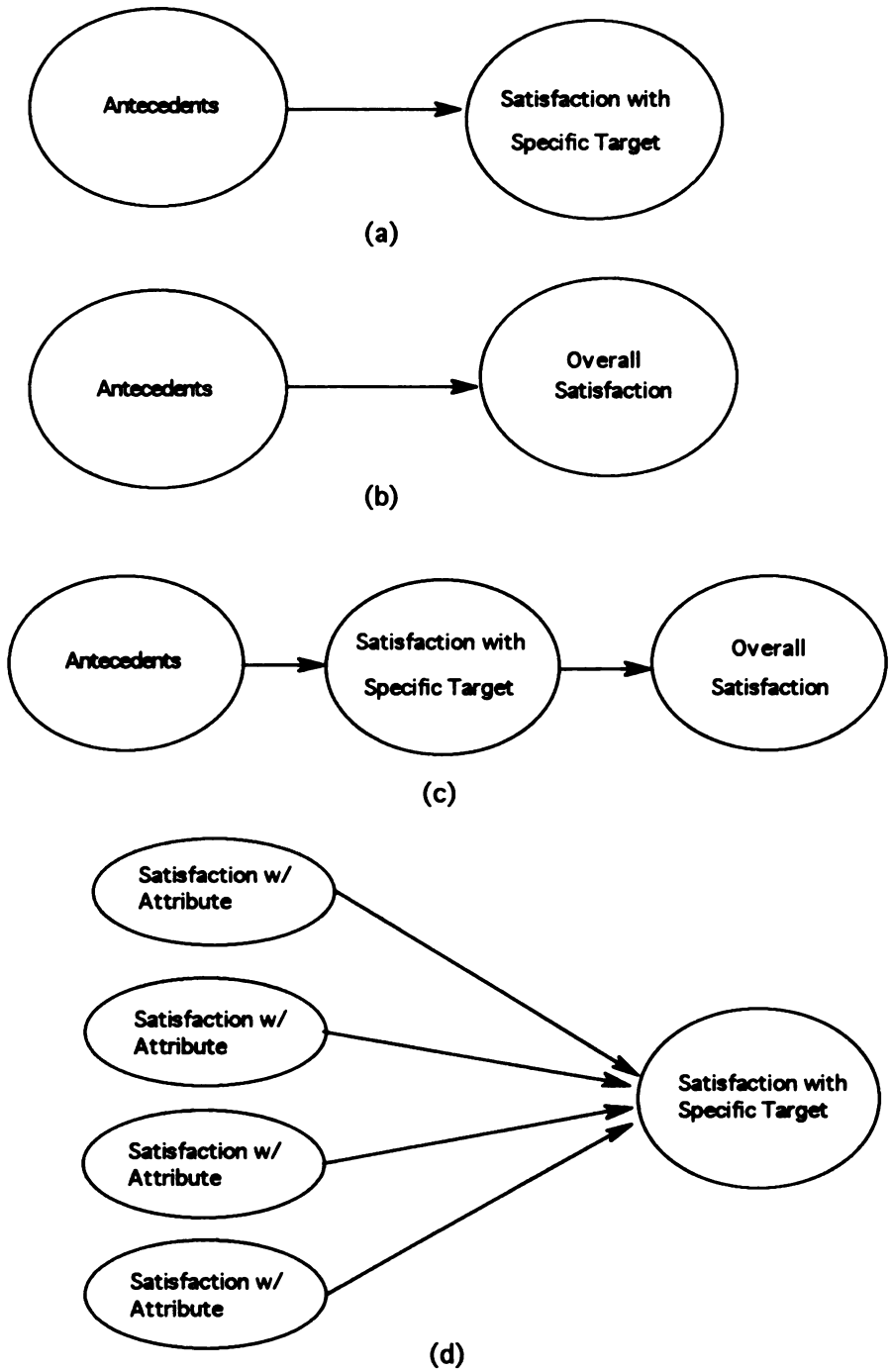


Figure 4
Targets of Satisfaction: Variations in the Traditional Model

The traditional model most commonly utilizes a specific target of satisfaction formation processes (a); examples of other targets include overall satisfaction (b), both specific and overall targets (c), and multiple attributes of a single specific target and an overall target (d).

target as antecedents of overall satisfaction (Figure 4-d).

Given this trend, and the conceptualization of satisfaction formation as being intimately related to consumer decision-making (Chapter I), it seems logical to expand the concept "target of satisfaction" to include both overall satisfaction and multiple targets, where the multiple targets include satisfaction with a choice selected (hereafter, "choice") and satisfaction with alternative members of the choice set which were not selected (hereafter, "nonchoice").

Figure 5 illustrates the research hypothesis in its most basic form: satisfaction with the alternative chosen and satisfaction with an alternative not chosen each contribute independently to overall satisfaction. In other words, an individual experiences some level of satisfaction/dissatisfaction with alternatives not selected and this, too, contributes to overall satisfaction. Not only is this hypothesis a logical extension of trends already evident in the satisfaction literature, it also has theoretical support from decision theory and reflects common experiences (e.g., see example in Chapter I).

This research hypothesis recognizes explicitly that satisfaction formation is a complex process which occurs in a competitive environment. In such an environment, the act of selecting one alternative does not immediately and absolutely remove the alternatives not selected from one's consciousness. It is hypothesized here that ultimately, in some sense, one is satisfied or dissatisfied with nonchoices, alternatives not selected, and that satisfaction/dissatisfaction with these other targets affects overall satisfaction.

It should be noted that although Figure 5 appears to be structurally similar to Figure 4-d, the two are fundamentally distinct. Figure 4-d

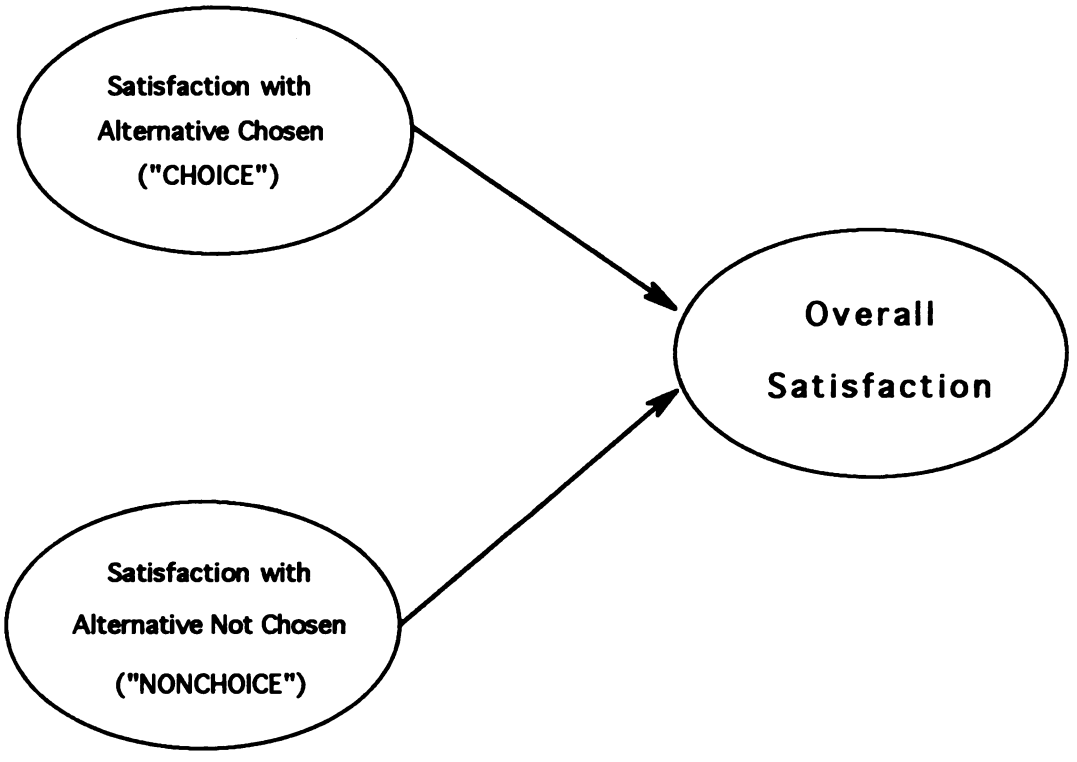


Figure 5
Hypothesized Relationships: Satisfaction with Choice, Satisfaction with Nonchoice, and Overall Satisfaction

Satisfaction with two specific targets, "choice" and "nonchoice" alternatives, are hypothesized to contribute independently to overall satisfaction.

implies that overall satisfaction is somehow the summation of satisfactions with individual attributes of a single target. Figure 5 illustrates that overall satisfaction is the result, at least in part, of satisfaction with different targets.

In the Election Outcome Satisfaction Model, one target of satisfaction is Clinton's performance on election day and another target of satisfaction is Bush's performance. Although an individual could only select one alternative on voting day, it is hypothesized here that satisfaction with the performance of each candidate affects an individual's overall satisfaction with the election outcome regardless of which candidate that individual supported. Figure 6 depicts this research hypothesis among both Clinton and Bush voters. Traditional satisfaction models would predict that satisfaction with the performance of one's own candidate (i.e., the candidate voted for) is the only relevant target of satisfaction.

Specific testable research hypotheses are the following.

H1a: Among Clinton voters, paths from satisfaction with Clinton's performance to overall satisfaction and from satisfaction with Bush's performance to overall satisfaction will each be positive.

H1b: Among Bush voters, paths from satisfaction with Bush's performance to overall satisfaction and from satisfaction with Clinton's performance to overall satisfaction will each be positive.

An alternative conceptual model for investigating the multiple target hypothesis is developed if we omit the satisfaction with target A and satisfaction with target B and focus on the direct effects of traditional antecedent variables on overall satisfaction. Again, as depicted in Figure 4-b, the traditional model specifies that an antecedent variable regarding a

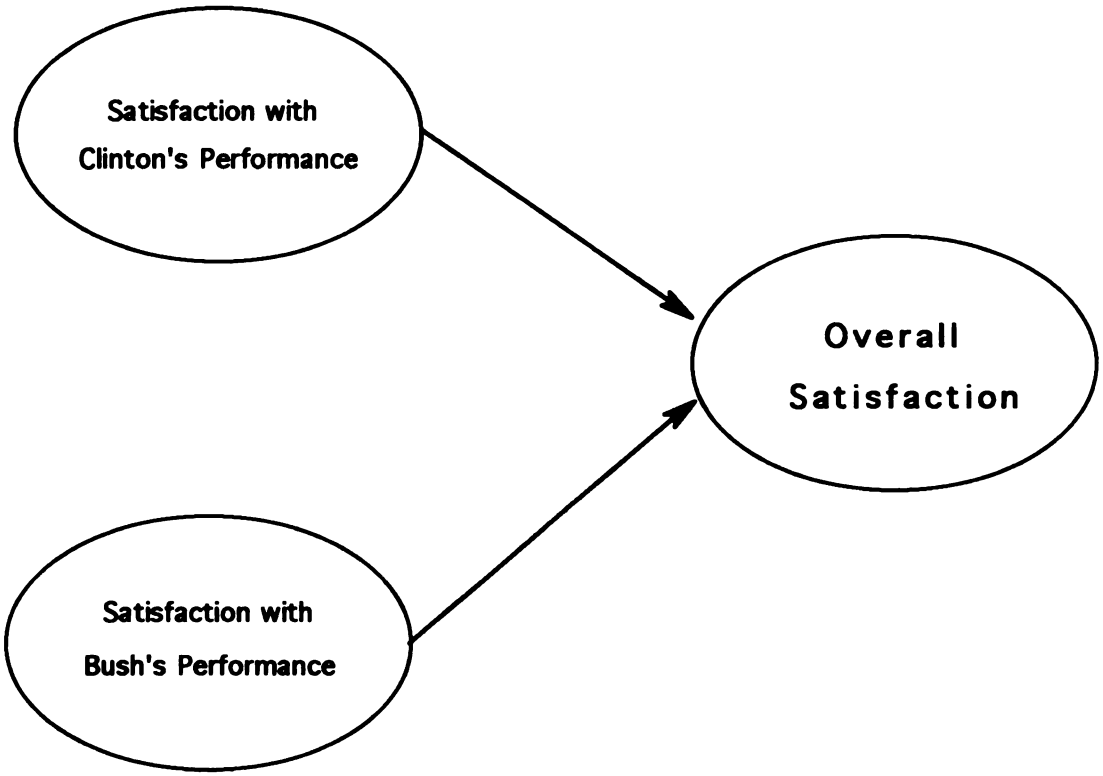


Figure 6
Election Outcome Satisfaction Model:
Theme No. 1 Research Hypothesis

Satisfaction with both Clinton's performance and Bush's performance affects overall satisfaction, regardless of which candidate an individual supported.

single target affects overall satisfaction. As described in Chapter II, such antecedent variables often include expectations, perceived performance, and disconfirmation.

The multiple target research hypothesis advanced here indicates that the antecedent variables related to multiple targets affects overall satisfaction as indicated in Figure 7. Specifically, perceived performance and disconfirmed expectations of multiple targets affect overall satisfaction. Again, the implication is that these variables regarding alternative choices contribute independently to the satisfaction formation process.

The Campaign Process Satisfaction Model provides a forum for testing this hypothesis. Perceived performance and disconfirmed expectations regarding advertising effectiveness and campaign unfairness of both candidates is hypothesized to affect overall satisfaction with the campaign process. Obviously, the performance of both candidates is relevant to satisfaction formation for supporters of either candidate.

The specific paths of interest for testing the hypothesis of multiple targets are illustrated in Figure 8. Previous research has established that disconfirmed expectations and perceived performance each affect satisfaction (Chapter II-4.4). Therefore, both links are hypothesized for both campaign elements and for both candidates. Specific testable hypotheses include the following:

H1c: Both paths from Clinton's perceived performance to overall satisfaction are positive and both paths from Bush's perceived performance to overall satisfaction are negative for Clinton supporters.

H1d: Both paths from Clinton's disconfirmed expectations to disconfirmation are positive and both paths from Bush's disconfirmed

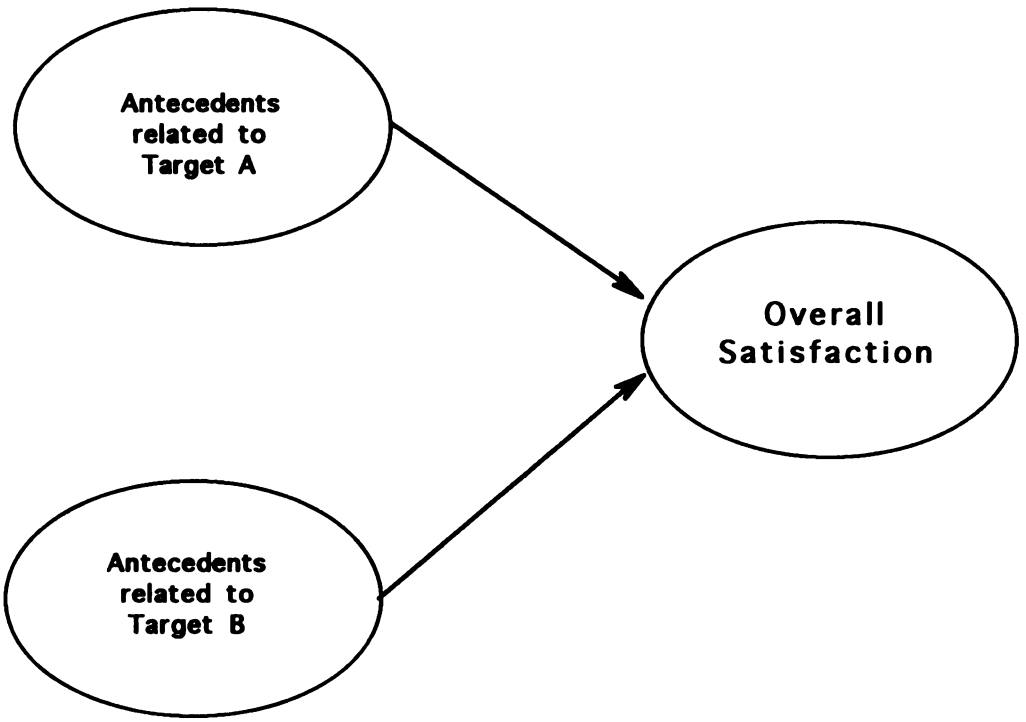


Figure 7
Hypothesized Effects of Satisfaction Antecedents Regarding Separate Targets on Overall Satisfaction

It is hypothesized that antecedents regarding alternative targets contribute independently to overall satisfaction.

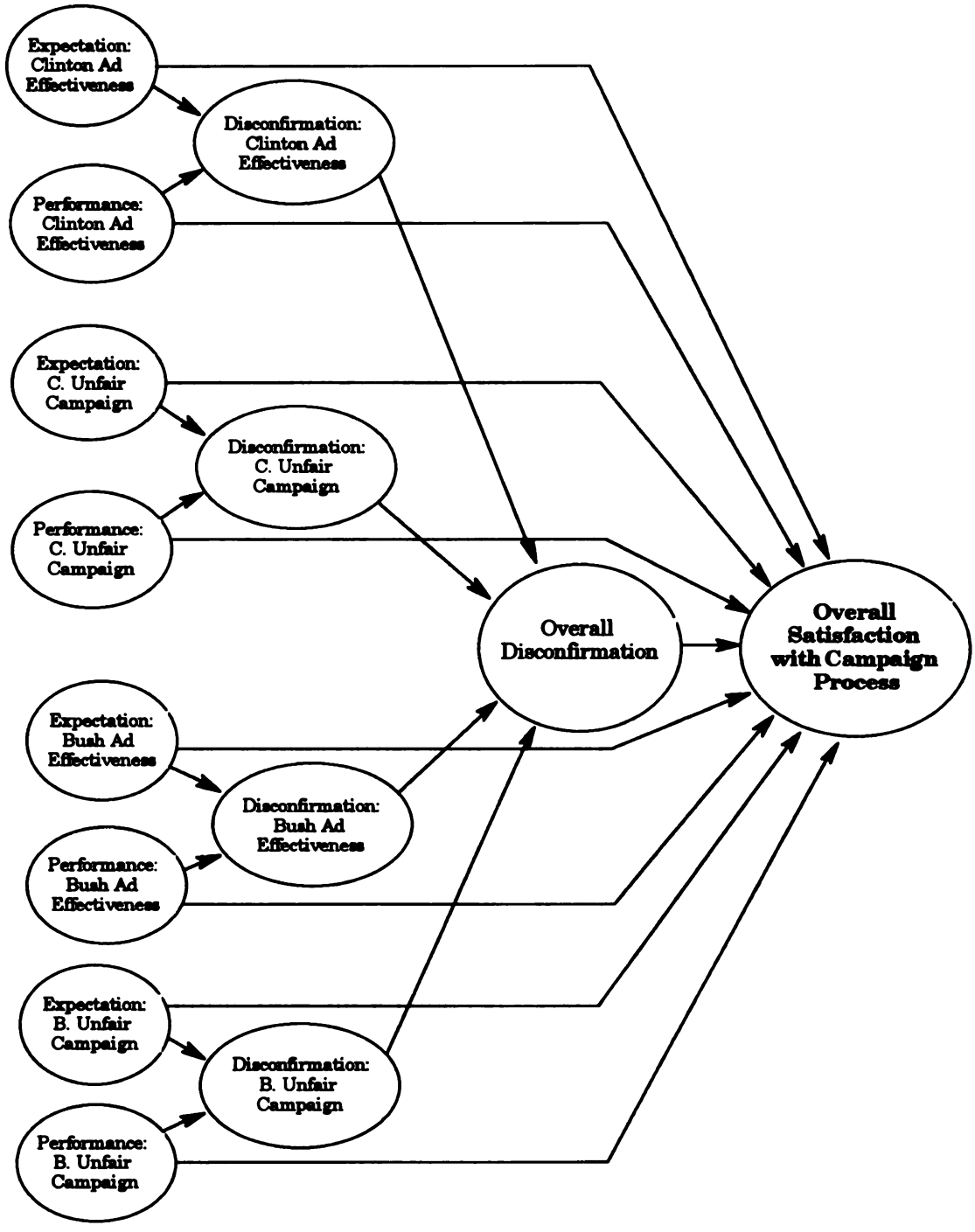


Figure 8
Hypothesized Paths in the Campaign Process Satisfaction Model for Testing the Multiple Targets Research Hypothesis

Expectations, perceived performance and disconfirmation for campaign elements relative to each candidate are hypothesized to affect overall satisfaction, for both Clinton supporters and Bush supporters.

expectations to disconfirmation are negative for Clinton supporters.

H1e: Both paths from Clinton's perceived performance to overall satisfaction are negative and both paths from Bush's perceived performance to overall satisfaction are positive for Bush supporters.

H1f: Both paths from Clinton's disconfirmed expectations to overall satisfaction are negative and both paths from Bush's disconfirmed expectations to overall satisfaction are positive for Bush supporters..

If support for the multiple target hypothesis is found in both the EOSM and the CPSM, it can be argued that such support is especially strong considering the significant differences in the structure of the two models.

III-2.2 Theme No. 2: Parallel Paths with Cross-Over Effects

If satisfaction with the choice and satisfaction with the nonchoice both contribute to overall satisfaction, it is reasonable to consider the processes which lead to satisfaction with each alternative. In addition to assuming a single target of satisfaction, the traditional model literature posits that all relevant antecedents of satisfaction have a single target (though possibly consisting of multiple relevant attributes). The most commonly referred to antecedent of satisfaction is disconfirmation (see Chapter II-3.5). The traditional model, then, would suggest that if one wanted to describe the antecedents of satisfaction with each of two potentially related targets, one would need two independent paths (see Figure 9).

The traditional satisfaction literature has investigated in great detail the impact of external standards on the satisfaction process (Chapter II-3.5), but such standards are assumed to be contained within the concept of disconfirmation. Thus, when Cadotte, Woodruff and Jenkins (1987) talk about

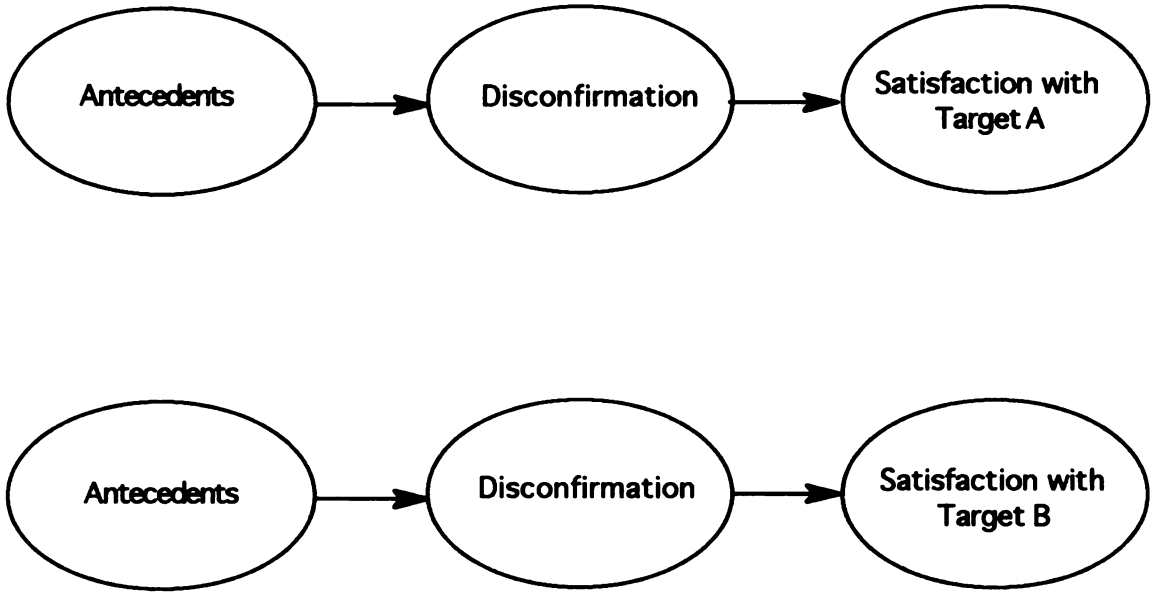


Figure 9
Traditional Model: Different Targets Require Parallel and Unrelated Paths

"best brand norms" or when Tse and Wilton (1988) talk about "ideal standards," they are referring to a set standard against which the person judges the target's performance. While such models recognize that other targets have relevance to the satisfaction process, they are assumed to have relevance at a single, isolated step in the process.

In this thesis, processes relevant to satisfaction formation with each of two competing alternatives are hypothesized to be related structurally. Specifically, as illustrated in Figure 10, disconfirmation of expectations with regard to the choice alternative is hypothesized to affect satisfaction with the nonchoice alternative; the reverse is also hypothesized to hold. In other words, the parallel paths of satisfaction formation processing are expected to exhibit cross-over effects.

The logic for hypothesizing these cross-over effects is straightforward. As others have argued theoretically and demonstrated empirically, non-target standards are relevant in the disconfirmation - satisfaction link. In the special case of directly competing alternatives, the judgment that "target A performed better/worse than expected" affects a person's satisfaction with target B is clear. Judgment of target A's performance as being "better/worse than expected" cannot be isolated from the reality of the expectations or performance of target B, target A's alternative. In the big football game, that the opposing team performed better than expected obviously affects satisfaction with the home team's performance.

Among closely competing alternatives, the term "better than expected" refers not only to the expectations regarding A's performance, but also to the reality that expectations regarding A's performance were formed in conjunction with expectations regarding B's performance. Similarly,

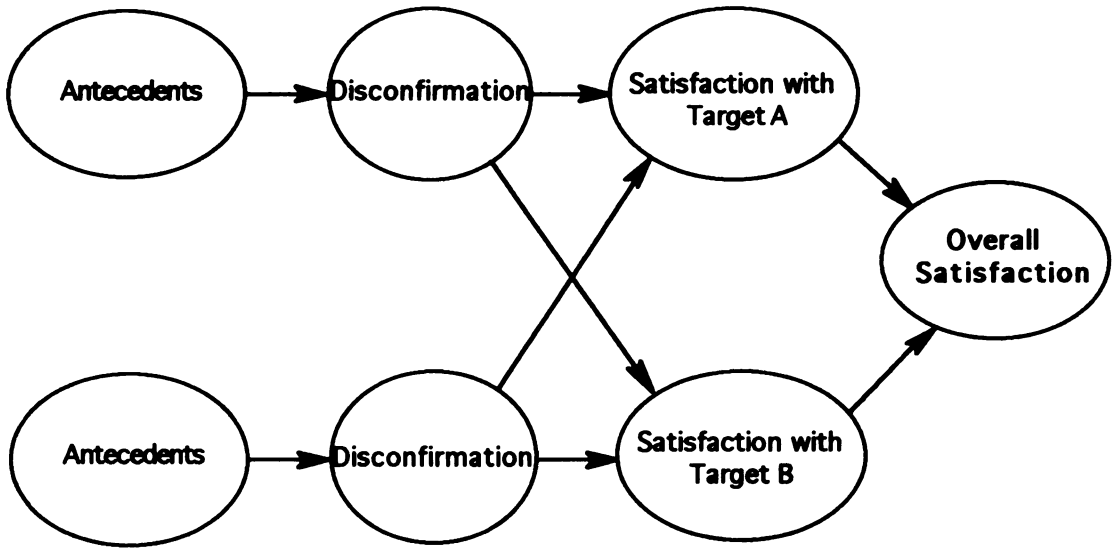


Figure 10
Hypothesized Model: Parallel Paths and Cross-over Effects

Processes relevant to satisfaction formation with each of two competing alternatives are hypothesized to be related structurally as indicated.

judgment of A's performance is made in conjunction with judgments regarding B's performance. So it is logical that disconfirmed expectations regarding A's (B's) performance affects satisfaction with B (A).

Note that the critical point of this hypothesis is that the processes themselves are entwined, not just the individual constructs.

In the Election Outcome Satisfaction Model, disconfirmed expectations regarding Clinton's performance are hypothesized to affect satisfaction with Clinton's performance (in accord with the traditional model) and satisfaction with Bush's performance (due to the hypothesized cross-over effects). Likewise, disconfirmation of Bush's performance is hypothesized to affect satisfaction with Bush's performance and satisfaction with Clinton's performance.

Specific testable research hypotheses, therefore, are the following:

H2a-i: The path from disconfirmed expectations regarding Clinton's performance to satisfaction with Clinton's performance will be positive among Clinton supporters.

H2a-ii: The path from disconfirmed expectations regarding Bush's performance to satisfaction with Clinton's performance will be negative among Clinton supporters.

H2b-i: The path from disconfirmed expectations regarding Bush's performance to satisfaction with Bush's performance will be positive among Clinton supporters.

H2b-ii: The path from disconfirmed expectations regarding Clinton's performance to satisfaction with Bush's performance will be positive among Clinton supporters.

H2c-i: The path from disconfirmed expectations regarding Bush's

performance to satisfaction with Bush's performance will be positive among Bush supporters.

H2c-ii: The path from disconfirmed expectations regarding Clinton's performance to satisfaction with Bush's performance will be negative among Bush supporters.

H2d-i: The path from disconfirmed expectations regarding Bush's performance to satisfaction with Clinton's performance will be positive among Bush supporters.

H2d-ii: The path from disconfirmed expectations regarding Clinton's performance to satisfaction with Clinton's performance will be negative among Bush supporters.

III-2.3. Theme No. 3: Differential Processing Due to Ultimate Level of Satisfaction

The traditional satisfaction model does not differentiate between satisfied and dissatisfied consumers with regard to the satisfaction formation process each follows. Stated another way, consumers are presumed to have arrived at their satisfied/dissatisfied state via the same processing paths regardless of the ultimate level of satisfaction: the strength of the relations between constructs is hypothesized to be the same in the traditional models. Figure 11 illustrates this process in a model which includes expectations, desires, attitudes, and subjective disconfirmation as antecedent variables. Paths are presumed to apply both to those who are ultimately satisfied and to those who are ultimately dissatisfied.

Some researchers have begun to question the traditional model on this point based on inconsistencies observed in empirical studies (e.g., Dröge and

Halstead 1989). Other indications of differential processing among satisfied versus dissatisfied consumers, along with possible theoretical reasons why this may be true, are discussed in Chapter II-5.2.

In this thesis, it is hypothesized that dissatisfied consumers process more extensively than do satisfied consumers. Satisfied consumers do not feel the need to rethink or analyze the factors which are responsible for their largely positive state, probably because there has been "closure" on the process. On the other hand, dissatisfied consumers do not reach closure as easily. They are in a negative affective state and seek to understand why, perhaps because they need to rationalize their feelings (Maddox 1981), or perhaps because they want to avoid being dissatisfied in the future, or perhaps because dissatisfaction somehow "amplifies" their "sensitivity" to the process (Westbrook and Newman 1978). Whatever the motivational source of this increased processing, it is hypothesized to occur among dissatisfied consumers.

The manifestation of increased processing among dissatisfied consumers is expected to be evident in more and stronger links between constructs measured at different points in time. Consider Figure 11, for example. Expectations, desires and attitudes were all measured before exposure to performance while disconfirmation and satisfaction were measured after exposure. Because satisfaction/dissatisfaction occurs only after exposure, the relationship among variables measured pre-exposure should be unaffected by the ultimate satisfied/dissatisfied state. Once exposure occurs, consumers reach some level of satisfaction very shortly after disconfirmation. Therefore, the link between disconfirmation and satisfaction is also expected to be significant for both satisfied and dissatisfied consumers.

The difference between satisfied and dissatisfied consumers is expected

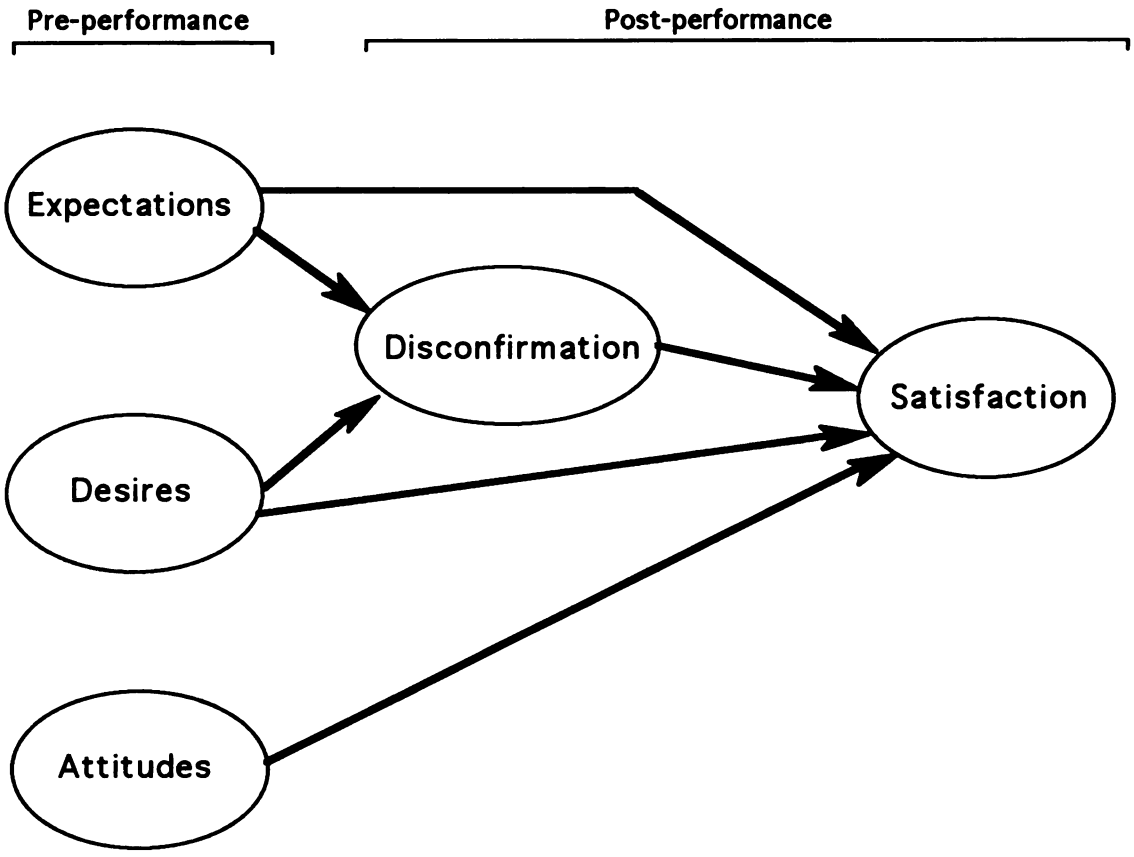


Figure 11
Hypothesized Relationships Among Key Antecedent Variables and Satisfaction

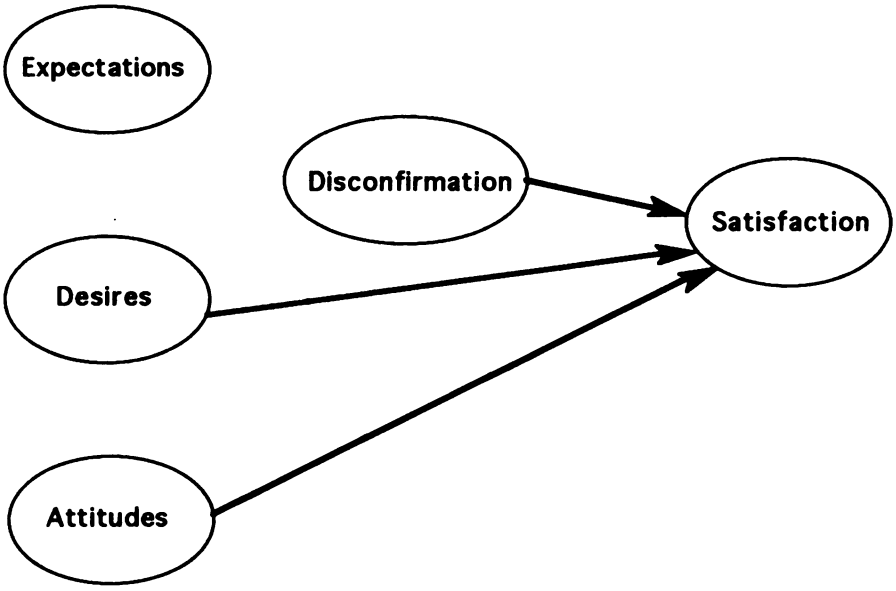
Expectations, desires, and attitudes are formed pre-performance. Expectations and desires are hypothesized to have direct and indirect (via disconfirmation) effects on satisfaction; attitudes are hypothesized to have only direct effects on satisfaction. Disconfirmation and satisfaction are formed post-performance, and disconfirmation is hypothesized to affect satisfaction.

to show up in differential relationships between pre- and post-exposure constructs. Satisfied consumers are hypothesized to not feel the need to reconcile or even examine pre-exposure expectations, desires, and attitudes in light of post-exposure disconfirmation or satisfaction. Dissatisfied consumers are hypothesized to attempt to reconcile their feelings by re-examining pre-exposure expectations, desires and attitudes, and attempting to make them "fit" post-exposure feelings. The only way to do this is by adjusting either subjective disconfirmation, satisfaction, or both. Given that measurement occurs after such attempts at reconciliation have been made, closer relationships between pre-exposure and post-exposure constructs are hypothesized.

In the Election Outcome Satisfaction Model (EOSM), this research hypothesis predicts that the links from pre-election constructs to post-election constructs will be weaker for Clinton voters than for Bush voters (assuming, of course, that Clinton voters are satisfied and Bush voters are dissatisfied with the outcome of the election). Specifically, for Clinton voters, desires and attitude are expected to impact satisfaction directly, as is disconfirmation (see Figure 12-a). These relationships are expected to hold for Bush voters. However, for Bush voters, other relationships will also be significant (see Figure 12-b). The basic rationale for this hypothesis is that satisfied voters are expected to be largely "disconfirmation-driven" while dissatisfied voters are expected to be driven by both expectations and disconfirmation (see Section II-5.2 and Dröge and Halstead 1991).

Though these relationships are expected to hold for both Bush and Clinton as targets among both Bush and Clinton voters, only a single target is presented in these figures for ease of presentation.

Clinton (Satisfied) Voters



Bush (Dissatisfied) Voters

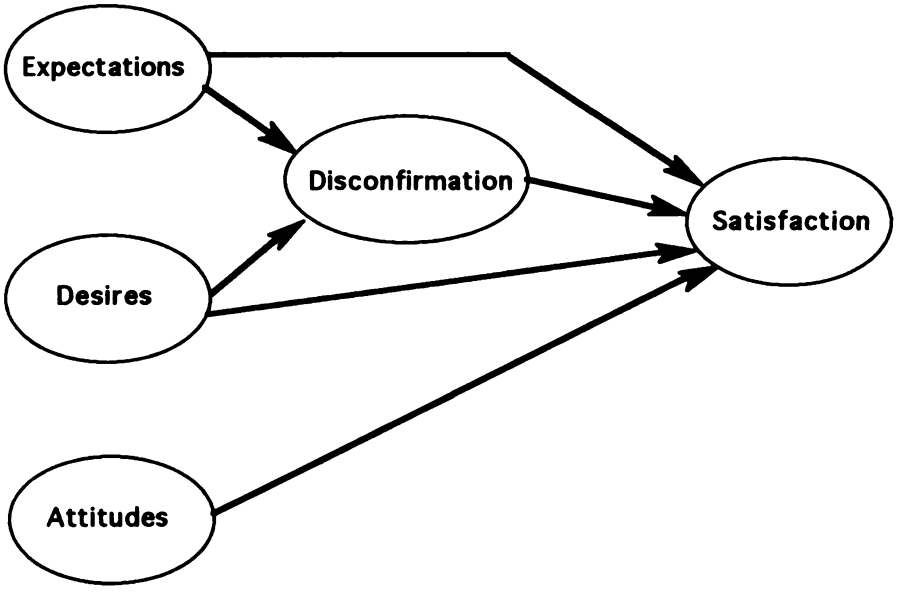


Figure 12
Hypothesized Paths for Satisfied Versus Dissatisfied Voters

It is hypothesized that the links from pre-election constructs to post-election constructs will be stronger for Bush supporters than for Clinton supporters.

The major testable hypothesis, therefore is:

H3a: The total number of significant paths from pre-election to post-election constructs, for both Bush and Clinton as targets, will be greater among Bush voters than among Clinton voters.

Specific testable hypotheses are:

H3b: Among Clinton voters, the following paths will be significant and positive in explaining satisfaction with Clinton: Desires -> Satisfaction, Attitude -> Satisfaction, and Disconfirmation -> Satisfaction.

H3c: Among Clinton voters, the following path will be significant and positive in explaining satisfaction with Bush: Disconfirmation -> Satisfaction.

H3d: Among Bush voters, the following paths will be significant in explaining satisfaction with Clinton: Expectations -> Disconfirmation (negative), Desires-> Disconfirmation (positive), Expectations -> Satisfaction (negative), Desires -> Satisfaction (positive), Attitude -> Satisfaction (positive), and Disconfirmation -> Satisfaction (positive).

H3e: Among Bush voters, the following paths will be significant in explaining satisfaction with Bush: Expectations -> Disconfirmation (negative), Desires-> Disconfirmation (negative), Expectations -> Satisfaction (negative), Desires -> Satisfaction (negative), Attitude -> Satisfaction (negative), and Disconfirmation -> Satisfaction (positive).

In the Campaign Process Satisfaction Model, only one relevant pre-election construct is measured: expectations. Therefore, the research hypothesis prediction is straightforward. Expectations will be significant predictors of disconfirmation only among those from each voter group who are dissatisfied with the process (Figure 13); among those from each voter group who are satisfied with the process, expectations will be unrelated to

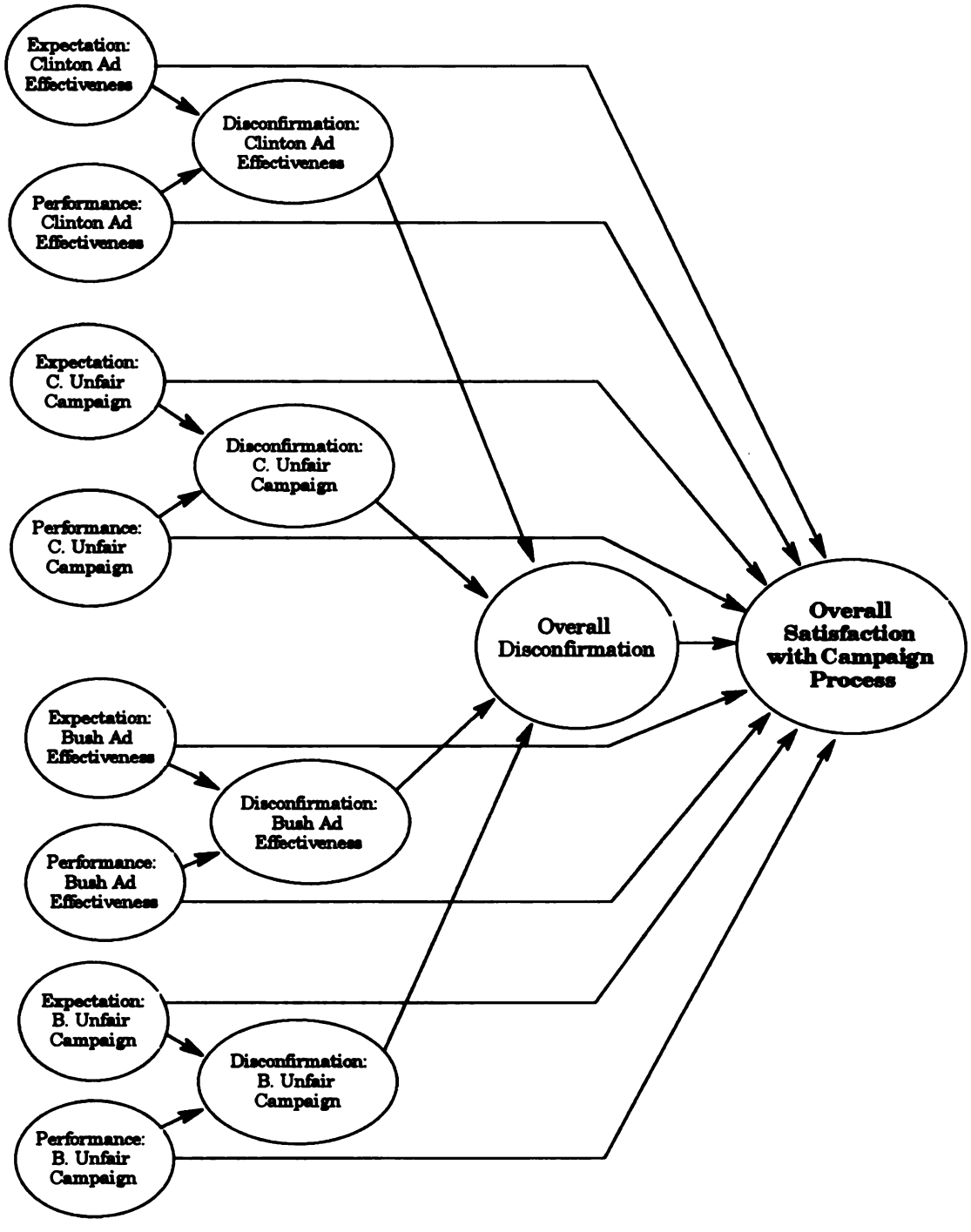


Figure 13
Hypothesized Paths in the Campaign Process Satisfaction Model for Those Dissatisfied with the Process

Expectations, perceived performance and disconfirmation for campaign elements relative to each candidate are hypothesized to affect overall satisfaction, for dissatisfied Clinton supporters and Bush supporters.

post-performance constructs (Figure 14).

Notice that the relevant subgroups to test the research hypothesis are not Clinton versus Bush voters. Unlike the EOSM, in which there should be a close relationship between voting behavior and satisfaction with the outcome, satisfaction with the process is less related to voting behavior. It is quite reasonable for a Clinton supporter to be dissatisfied with Clinton's advertising effectiveness and running an unfair campaign, yet still be satisfied with the outcome of the election. Because the research hypothesis is stated in terms of satisfied versus dissatisfied consumers, it is necessary to test the hypothesis using Clinton versus Bush voters who are satisfied versus dissatisfied with the process as a classification variable.

Specific testable hypotheses using the CPSM, therefore are the following:

H3f: Among those who are satisfied with the process, expectation will not be a significant predictor of perceived performance or subjective disconfirmation for any campaign element of either target's campaign.

H3g: Among those who are dissatisfied with the process, expectation will be a significant predictor of perceived performance (positive path) and subjective disconfirmation (negative path) for both campaign elements of each target's campaign.

Alternatively, if small group sizes preclude analysis based on two two-group analyses as planned, hypotheses will be tested using an analysis of correlation coefficients.

Note that this research hypothesis does not state that it is satisfaction or dissatisfaction per se which causes the increased processing; the question of causation is explicitly addressed in the discussion (Chapter VI), but it is not

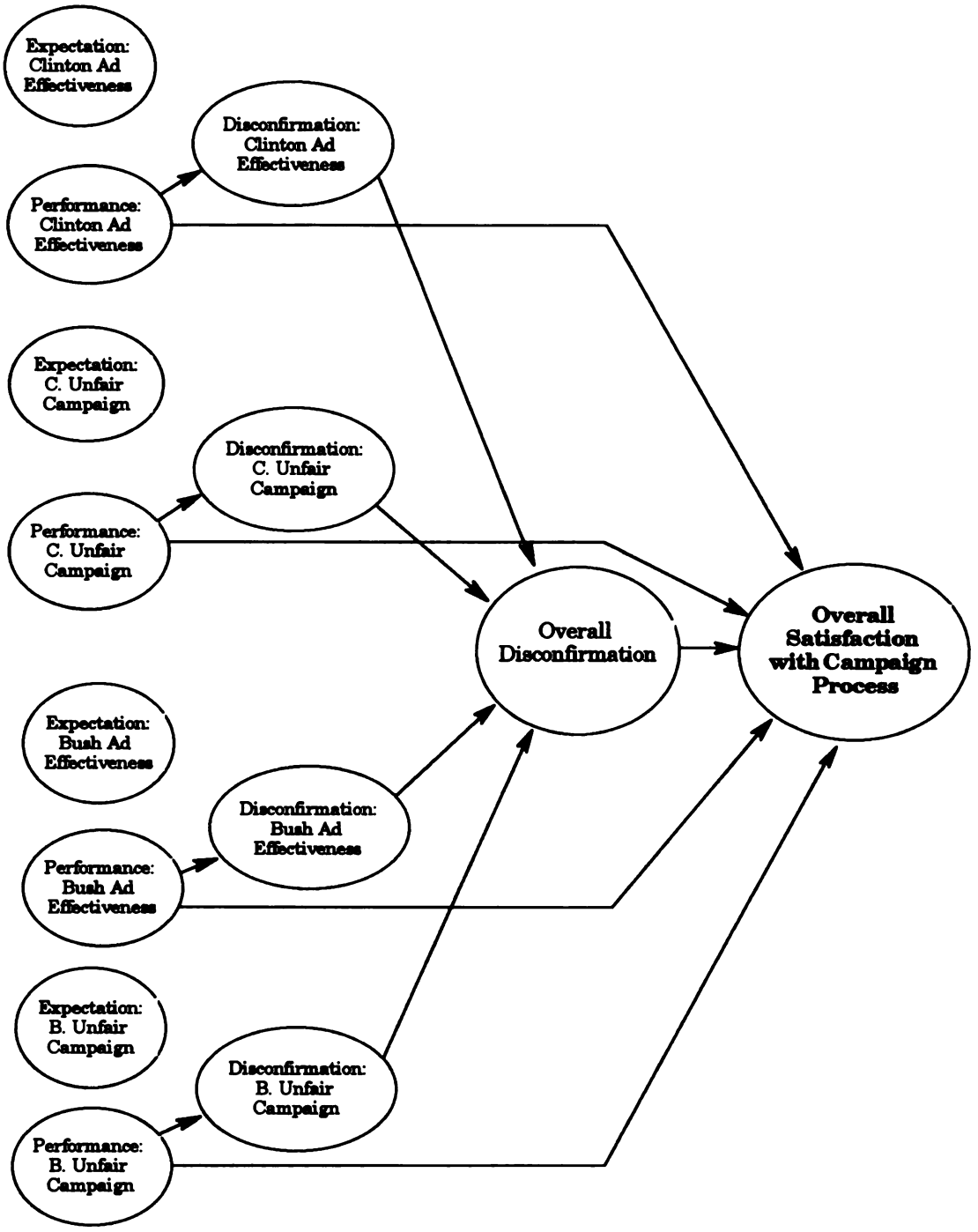


Figure 14
Hypothesized Paths in the Campaign Process Satisfaction Model for Those Satisfied with the Process

Perceived performance and disconfirmation (but not expectations) for campaign elements relative to each candidate are hypothesized to affect overall satisfaction, for satisfied Clinton supporters and Bush supporters.

addressed in this hypothesis. Rather, level of processing is hypothesized to be associated with level of satisfaction. Likewise, the issue of using level of satisfaction for segmentation purposes is not addressed here, as key elements of segments (e.g., stability) are not investigated in this research.

III-2.4 Theme No. 4: Importance of Desires versus Expectations in Satisfaction Formation

Until recently, the traditional satisfaction literature has focused primarily on cognitive antecedents of satisfaction formation. Thus, expectations are hypothesized to affect satisfaction both directly and indirectly through disconfirmation. Recent authors have suggested that desires, too, are important antecedents of satisfaction (see Chapter II-3.2). The conditions under which one or the other might dominate the satisfaction formation process has not been resolved.

It could be argued that on issues of great importance, the effects of desires would exceed the effects of expectations on satisfaction. Individuals have more at stake on issues of great importance and it is logical that performance congruent with desires would be a major antecedent of satisfaction. If someone who has just bought a house wants quiet neighbors but expects to have noisy neighbors, and the neighbors are quiet, the person is likely to be satisfied. If the neighbors are noisy, the person is likely to be slightly dissatisfied even though the expectations are being exactly confirmed. See Chapter II-3.2 for a complete discussion of recent developments on this issue.

Figure 11 illustrates the traditional model modified to include desires. It specifies relationships among expectations, desires, subjective disconfirmation, and satisfaction. It is hypothesized that desires are negatively related to disconfirmation. This hypothesis may appear to be unreasonable because "disconfirmation" is really "disconfirmation of predictive expectations." The question arises of why "desired performance level" can affect the degree to which observed performance was "better/worse than expected performance level." Consider subjective disconfirmation and how it is usually operationalized. If disconfirmation truly was the difference between actual performance and predictive expectation, then the hypothesis would be unreasonable. However, subjective disconfirmation encompasses a judgment of the degree to which remembered predictive expectations are met by perceived performance and an evaluation of any difference perceived. It seems reasonable to think that desires might affect a consumer's memory of what was expected, the perception of performance, and the evaluation of the disparity between perceived performance and expectation. In other words, desires can affect memory, perception, and judgment -- three key elements in how subjective disconfirmation is operationalized.

The research hypothesis proposed in this thesis is that the direct and total effects of desires on satisfaction will exceed the direct and total effects of expectations on satisfaction, given that the target is generally perceived to be important. When individuals have strong desires, it seems obvious that their ultimate level of satisfaction will at least be somewhat dependent on these desires. As demonstrated throughout Chapter II, when expectations is the only pre-performance construct measured, it is found to play a major role in the satisfaction formation process. These findings are especially strong in

laboratory studies in which variance in desires is likely to be minimal, and/or when the target is of relatively slight importance. However when desires are included along with expectations as potential antecedents of satisfaction, the disconfirmation of desires is found to be significant (e.g., Barbeau 1987; Spreng 1990; Spreng and Olshavsky 1993), and disconfirmation of expectations is not significant.

Further, Spreng (1990) has pointed out that one possible reason for failure to find support for the effects of desires on satisfaction is the difficulty involved in attempting to manipulate consumer desires in a laboratory setting. Without the ability to introduce variance in desires, one popular traditional avenue of conducting satisfaction research has been unproductive in investigating this relationship. Likewise in field studies, variance in desires has been difficult to establish in traditional consumer satisfaction studies, probably for reasons similar to those behind finding minimal variance in measures of satisfaction (Peterson and Wilson 1992). Just as there is slight variance in satisfaction measures in empirical studies because most consumers are satisfied with most purchases, there may be slight variance in desires because most people desire the same things: high quality, good service, low price, etc.

For these reasons, the Election Outcome Satisfaction Model provides a uniquely favorable set of circumstances for testing the research hypothesis. Specifically, variance in both satisfaction and desires is virtually guaranteed in a presidential election: large proportions of people are as likely to be dissatisfied as satisfied with the election outcome. Since it is likely that most voters consider the presidential election to be an important event, the research hypothesis indicates that desire should dominate expectation as an

antecedent of satisfaction; this should be true for both supporters of Bush and supporters of Clinton.

Specific testable hypotheses, therefore, are:

H4a: The magnitude of the desires -> satisfaction path will be greater than the magnitude of the expectation -> satisfaction path for both targets among Clinton voters.

H4b: The magnitude of the desires -> satisfaction path will be greater than the magnitude of the expectation -> satisfaction path for both targets among Bush voters.

H4c: The total effects, direct and indirect, of desires on satisfaction will exceed the total effects of expectation on satisfaction for both targets among Clinton voters.

H4d: The total effects, direct and indirect, of desires on satisfaction will exceed the total effects of expectation on satisfaction for both targets among Bush voters.

III-3. Models to test hypotheses

These four research hypotheses are to be tested in one or both of two models. Testable hypotheses for each research hypothesis and each model have been presented throughout Section III-2. An overview of each complete model is presented next. Construct operationalizations appear in Chapter IV.

III-3.1. Election Outcome Satisfaction Model

The complete Election Outcome Satisfaction Model is presented in Figure 15. Where applicable, hypothesized signs of each path are indicated. Also, the related testable hypotheses are identified for each path.

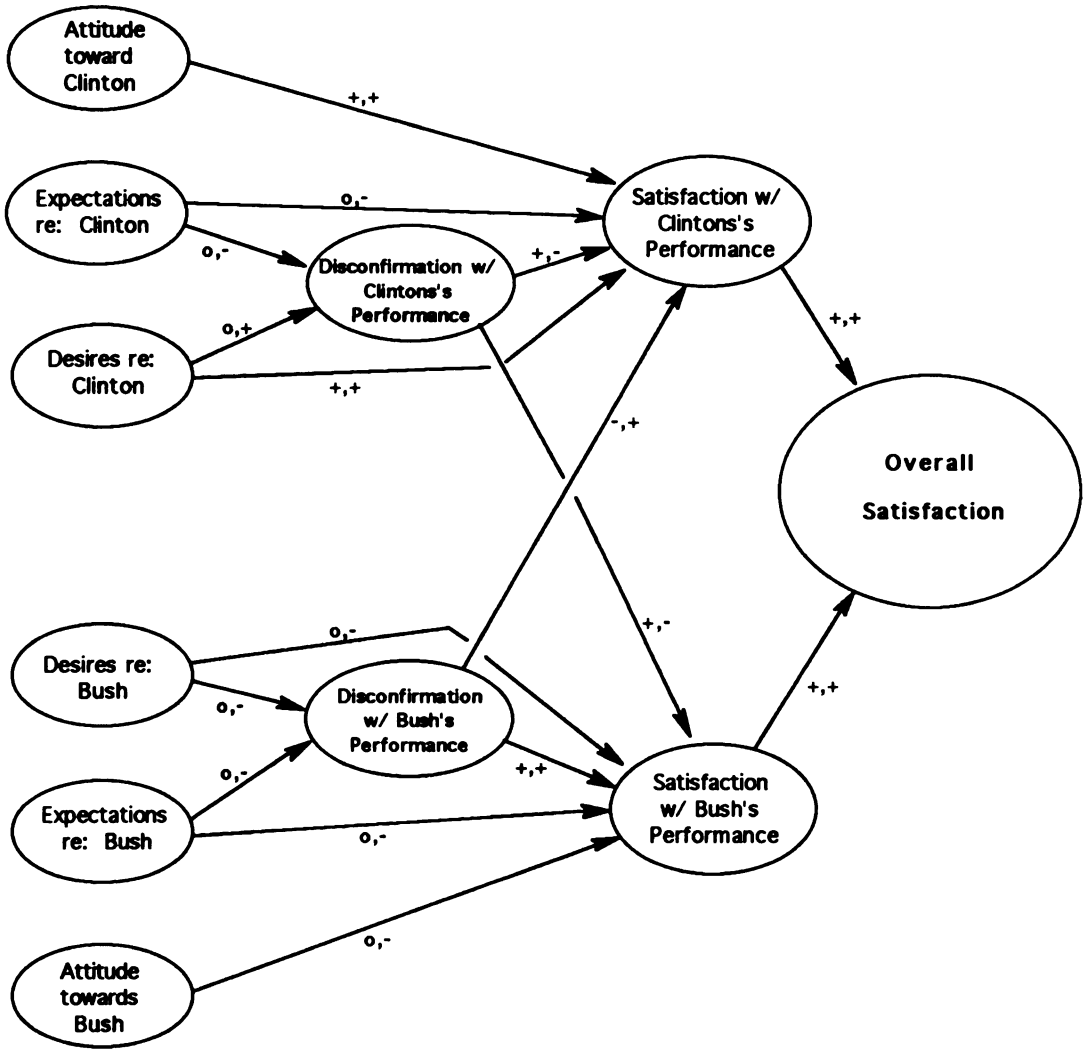


Figure 15
Complete Election Outcome Satisfaction Model

Note: First sign is the hypothesized sign for Clinton supporters and the second sign is the hypothesized sign for Bush supporters.

III-3.2. Campaign Process Satisfaction Model

The complete Campaign Process Satisfaction Model is presented in Figure 16. Where applicable, hypothesized signs of each path have been indicated.

Also, the related testable hypotheses have been identified for each path. Construct operationalizations and complete model specifications are presented in the next chapter.

For ease of reference, the four major research hypotheses are summarized once again:

(1) Multiple targets of satisfaction are relevant to the overall satisfaction formation process.

(2) Processes relevant to the formation of satisfaction with competing alternatives are structurally interrelated.

(3) Dissatisfied consumers process more extensively than do satisfied consumers.

(4) When the target of satisfaction is relatively important, the effects of desires will dominate effects of expectations on the entire satisfaction formation process.

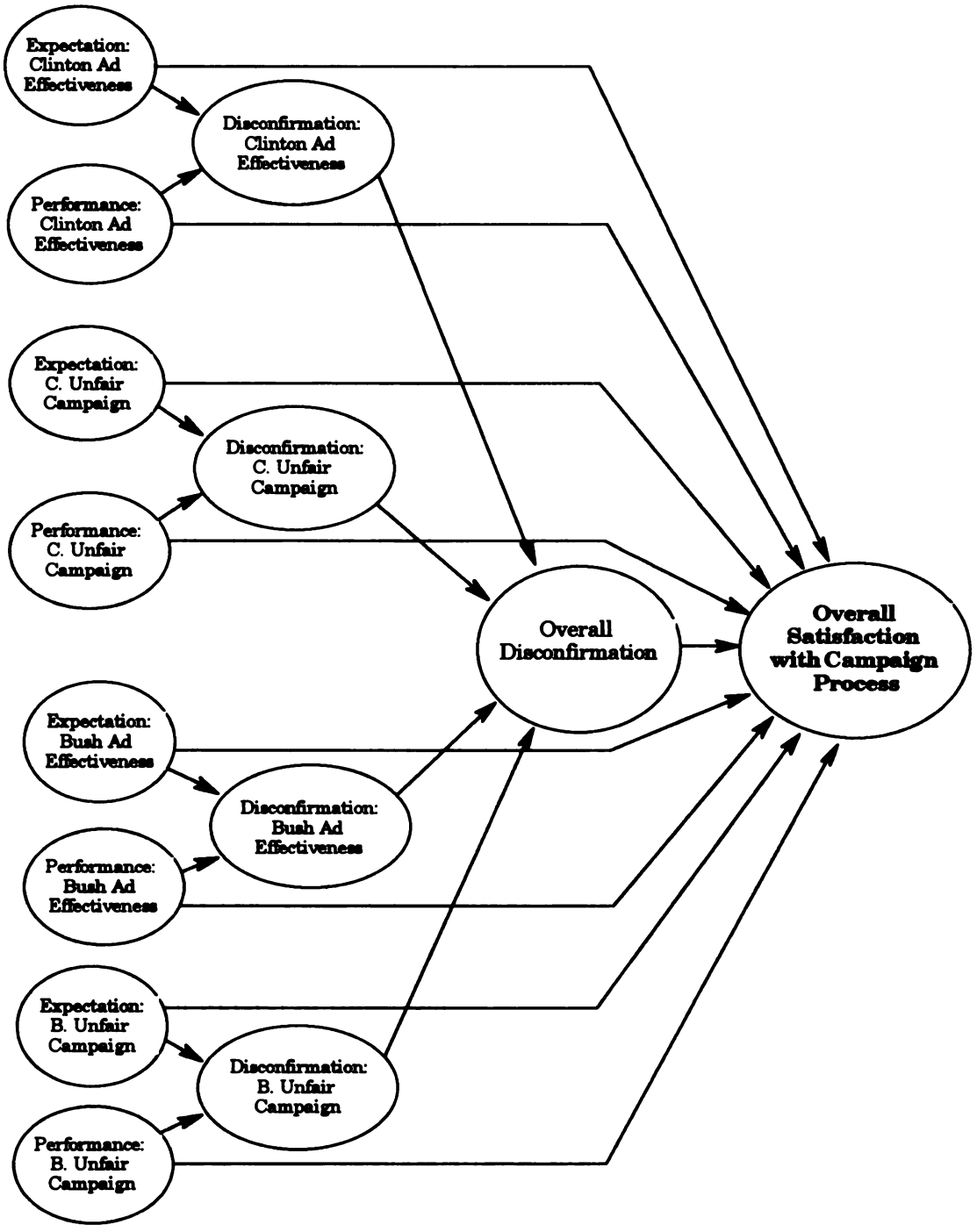


Figure 16
Complete Campaign Process Satisfaction Model

Expectations, perceived performance and disconfirmation for campaign elements relative to each candidate are hypothesized to affect overall satisfaction, for both Clinton supporters and Bush supporters.

Chapter IV
Method

This chapter is divided into three sections. In the first section, data collection methods and the critical issue of timing are discussed. The second section presents operationalizations of key constructs for the Election Outcome Satisfaction Model. The third section contains similar information for the Campaign Process Satisfaction Model.

IV-1. Data Collection and Timing

To test the research hypotheses developed in the previous chapter, data were collected at two points in time: pre-election information was collect in September, 1992, and post-election information was collected in November, 1992, immediately following the election.

Data were collected by MBA students at Michigan State University and the University of Kentucky for course credit and under the supervision of course professors. Each student was directed to contact five acquaintances and administer the pre-election questionnaire in- person or by telephone. Following the election, students recontacted each respondent and administered the post-election questionnaire. A total of 331 pre-election questionnaires were completed while 303 usable post-election questionnaires were completed. The discrepancy of 28 is due to respondents of the pre-election sample not voting in the November election. Only respondents who completed both pre- and post-election questionnaires are included in this analysis.

Although questionnaires administered via personal contact are not new to consumer research in general, they have not been utilized in field studies of

satisfaction formation. For this particular context, personal contact is the preferred method of data collection. In the 1992 presidential campaign process, significant developments occurred weekly and it is likely that history effects could have jeopardized data from a mail-out survey due to the typically wide variance in response times. Personally contacting respondents enabled tight control of the timing of data collection to minimize the chance that respondents would be differentially affected by media stories.

The most obvious illustration of this potential confound is the behavior of candidate Ross Perot. Mr. Perot was a candidate for president throughout early 1992, withdrew from the race in the summer and re-entered the race in September. Had a mailout survey been distributed during the period Mr. Perot was not a candidate, it is almost certain that some respondents would have answered while he was out of the race and some would have responded after he re-entered the race. Measures of expectations and desires would have been rendered noncomparable as the dynamics of the campaign radically shifted with the single event of Mr. Perot's re-entering the race. Similarly, expectations regarding advertising effectiveness and running an unfair campaign would likely change on a weekly basis as the campaign entered it final month. Likewise, the possibility of major events occurring following the election (e.g., increasing U.S. involvement in Somalia or Bosnia) illustrates the need to complete all post-election data collection in a short time period, too. Therefore, minimizing the variance in data collection timing is important to addressing the research questions, and personally contacting respondents to collect data is the most appropriate technique for accomplishing this objective.

Some may question whether the snowball sample selection methodology used here resulted in a "representative sample." Kerlinger (1986) defines a representative sample as one which "....has approximately the characteristics of the population relevant to the research in question" (p. 111). If one was interested in predicting population voting patterns or in describing the demographics of the population of voters, then this sample would not be considered representative. However, testing the research hypotheses in this dissertation does not require a representative sample in this sense. All research hypotheses involve relationships among key constructs and thus the absolute magnitude of population proportion or mean values is not relevant. All that is required is that the relationships between theoretical constructs not vary systematically between the sample and a relevant population, and there is no reason to suspect that such systematic differences might exist here. As long as external validity is of secondary importance in a particular research endeavor, as it is here, convenience samples are considered to be adequate for theory testing purposes (Calder, Phillips and Tybout, 1982).

IV-2. Operationalization of Key Constructs

In this section, the operationalization of key constructs for each model is presented and discussed. Table 15 lists all constructs in a matrix so that the appropriate model and the timing of measurements is clear. Issues related to the operationalizations of constructs are discussed in Section 4.2.1 for the Election Outcome Satisfaction Model (EOSM), and in Section 4.2.2, for the Campaign Process Satisfaction Model (CPSM).

Table 15
Operationalization of Constructs
Timing of Measurements for Each Model

	Measured Before the Election	Measured After the Election
Election Outcome Satisfaction Model	- Expectations of popular vote percentages	- Disconfirmation related to actual election outcome per candidate
	- Desired distribution of 100 points across candidates	- Overall satisfaction with results
	- Beliefs about each candidate on (a) foreign policy, (b) domestic economy, (c) other domestic issues, and (d) personal integrity	- Satisfaction with results obtained by each candidate
	- importance of the four issues listed above	
Campaign Process Satisfaction Model	- Expectations re: advertising effectiveness	- Perceived performance re: advertising effectiveness and unfair campaign
	- Expectations re: unfair campaign	- Disconfirmation re: ad. effectiveness and unfair campaigns
		- Disconfirmation of overall process
		- Satisfaction with overall process

IV-2.1. Election Outcome Satisfaction Model - Operationalization of Key Constructs

The complete EOSM is depicted in Figure 15. Construct operationalizations are presented here in the order in which they appear in the model, from left to right. A table summarizing these operationalizations, Table 16 appears at the end of this section.

Expectations

In Section II-3.1, the range of expectations measurements was described and discussed. It was concluded that the most reasonable operationalization of expectations was "predictive expectations," that is, the level of performance actually anticipated by the respondent as measured before exposure to performance. Further, measurement of expectations appeared to be most consistent with its conceptualization when the evaluative nature of expectations was held to a minimum. Therefore, for the election outcome model, expectations is operationalized as the percent of popular votes each candidate is actually expected to receive on voting day.

Several advantages result from measuring expectations in this manner. First, it guarantees that expectations are measured on exactly the same scale as is the ultimate objective performance of each candidate. Thus, direct and objective comparison of performance with a priori expectations of performance is possible. Second, expectations and desires are also measured on exactly the same "percentage" scale, enabling direct comparisons of expectations and desires. Third, it enhances the competitive dimension of the model by forcing explicit trade-offs among candidates in a zero-sum context (i.e., percentages must add to 100).

Desires

As discussed in Section II-3.2, desires has been infrequently included as a separate antecedent variable. As is true of expectations, desires is most useful when operationalized in terms of objective performance levels rather than evaluative performance levels. Therefore, for the election outcome model, desires are operationalized as the percentage of votes (that is, the number of points out of 100) a subject would want to assign to each candidate on voting day.

There are two major advantages to this operationalization of desires. First, as discussed above with regard to expectations, the measurement for desires is directly comparable with measures of both expectations and ultimate performance. No previously published study has included such directly comparable measures of these three constructs. Second, this operationalization of desires is unambiguous enough to allow responses of either the "more is better" or the "ideal point" variety (see Section II-3.2). Previously used scales left this distinction open to interpretation of both the subject and the researcher.

One possible disadvantage of this operationalization is that it may not match the manner in which voters would normally conceptualize or express their desires in an election context. Specifically, some voters may simply desire that "Bush win" or that "Clinton win," and may not care by how much. A related potential problem is that someone may desire a candidate to receive 35% of the vote and win (in a three way race) while someone else may desire a candidate to receive 49% of the vote and lose.

The second of these potential problems is addressable, in part, through empirical analysis. In a three way race, it is clear that a candidate who receives 32% of the vote or less is a loser and a candidate who receives 51% or more of the vote is a winner. Between 32% and 51%, however, a candidate may be either a loser or a winner. To address this issue, respondents were also asked who they would vote for.

The first potential problem, however, is less easily addressed. If someone only desires that someone win or lose, is that person constrained by the format of the measurement from adequately expressing his or her desires? The answer is "probably not" given the characteristics of the sample. The sample is generally well-educated and it is doubtful that a respondent would be unable to express his or her desires in the format requested. A more serious question may be whether the measurement format imposes an unrealistic level of exactness on the results. In other words, might someone desire only that Bush win, but, because of the format of the question, be forced to assign somewhere between 34 and 100 points to Bush thereby implying more finely-tuned desires than is actually felt? Although this may have occurred to some degree, there is no evidence from interviewers or from response rates to this specific question that any confusion existed. Further, because the analysis is focused on relationships rather than on means, it is unlikely this potential problem has major implications for the analysis proposed here. Though a respondent may have only desired that candidate A win, it is likely that they could rank order the three candidates in some sort of preference order; the assignment of points is a more detailed way of specifying the relative desires associated with each candidate.

Finally, the task of assigning 100 points to reflect desired candidate performance in this particular context seems especially appropriate given that the media presented polling results in a similar format (proportion of likely voters desiring each candidate) almost daily. Thus, in the context of a political election asking respondents to assign 100 points to reflect level of desire for each candidate appears to be a reasonable strategy.

One potential drawback of the operationalization of both expectations and desires is the use of a single item scale to measure each. Although multiple item scales are generally perceived to be superior, it is difficult to imagine how items could be added to the measurement of both constructs which 1) were not simply a reworded version of the current item and 2) would not jeopardize the direct comparability of the two variables with each other and with actual performance.

Attitudes

A subject's attitude towards a satisfaction target has been shown to be an antecedent of satisfaction processing (see Section II-3.3). Attitude is operationalized in a manner consistent with the Fishbein (1967) expectancy-value model, that is, as the summed cross products of beliefs (that the target possesses a specific characteristic) times the importance (of that characteristic) in a manner which is both context-specific and personalized. For the election outcome model, a similar belief times importance operationalization is used, incorporating the following four characteristics: domestic economy, other domestic issues, foreign policy, and personal integrity. These four characteristics were consistently shown in public opinion polls to be salient candidate attributes. Likewise, media coverage of

the election seemed to focus on these candidate attributes. Beliefs were measured on a 10 point scale anchored by "will do an extremely poor job" (= 1) and "will do an extremely good job" (= 10). Importance of each attribute was measured on a 10 point scale anchored by "extremely unimportant" (= 1) and "extremely important" (= 10).

Disconfirmation

The concept of disconfirmation has been central to most of the empirical satisfaction literature since about 1980. Various attempts at conceptualizing and measuring disconfirmation are discussed in detail in Section II-3.5. The two major decisions to make regarding the operationalization of disconfirmation are 1) what standard should be used and 2) whether the measure should be subjective or derived. In order to make the measure of disconfirmation consistent with the measure of expectations, the standard disconfirmed is predictive expectations.

Further, in this dissertation, the measurement of disconfirmation will be subjective rather than derived for two reasons. First, subjective measures appear to be the most consistently significant as antecedents of satisfaction, despite some theoretical shortcomings. Second, given that ultimate performance is objective, it is uniform across all subjects. Any derived measure would require the subtraction of expectations from a "constant" (actual performance), and thus would explain no variance in satisfaction in addition to the variance already explained by expectations. Thus, a derived measure would be completely meaningless in the model proposed here.

Therefore, for the election outcome model, disconfirmation is the subjectively expressed degree to which a candidate's actual performance was

worse (= 1) or better (= 7) than expected. This operationalization is most consistent with other subjective measures of disconfirmed predictive expectations.

Satisfaction

The broad range of satisfaction measures, from non-verbal symbolic scales through complex multiattribute summated scales, is reviewed in detail in Section II-2. Here, satisfaction is measured for the performance of each candidate and for the election outcome overall. In this dissertation, satisfaction with Bush's performance, satisfaction with Clinton's performance, and overall satisfaction with the outcome of the election are each measured on identical scales ranging from "extremely satisfied" (= 7) to "extremely dissatisfied" (= 1).

Table 16
Operationalization of Constructs -- Election Outcome Satisfaction Model

Variable	Wording	Scale
Measured before the election		
Expectations	Regardless of who you personally support, what do you think the outcome of the election will actually be? Please indicate the percent of the popular vote that you expect each candidate will actually get.	0 through 100 to each candidate (summing to 100 across all candidates)
Desires	Suppose for the moment that you could distribute 100 points among the candidates instead of having just one vote. You can give all 100 to one candidate and zero to the others, or you can distribute the points any way you wish. How many points would you give to each candidate?	0 through 100 to each candidate (summing to 100 across all candidates)
Attitudes	Please evaluate the three candidates on (A) foreign policy, (B) the domestic economy, (C) domestic issues excluding the economy, and (D) personal integrity....Give each candidate between 1 and 10 points.	1- "Will do an extremely poor job" though 10- "Will do an extremely good job"
	How important are the above sets of issues to you?	1-"Extremely Unimportant" through 10-"Extremely Important"
	(Note: the belief and importance measurements for each attribute are multiplied then summed across all attributes to create a formative construct)	
Measured after the election		
Disconfirmation per Candidate	Were the results better or worse than you expected? Note that whether your candidate won or lost, he could have done better or worse than you expected he would.	7-pt. semantic differential from "much worse than I expected" to "much better than I expected"
Overall Satisfaction	The actual results of the election were: 38% for Bush, 43% for Clinton, and 19% for Perot. How satisfied or dissatisfied are you with the results?	7-pt. semantic differential from "extremely dissatisfied" to "extremely satisfied"
Satisfaction with Candidate	Please answer the same question for each of the candidates separately.	7-pt. semantic differential from "extremely dissatisfied" to "extremely satisfied"

IV-2.2. Campaign Process Satisfaction Model - Operationalization of Key Constructs

The complete CPSM is depicted in Figure 16. Again, construct operationalizations are presented in the order in which they appear in the model, from left to right. A table summarizing these operationalizations, Table 17 appears at the end of this section.

Expectations

A complete discussion of the range of expectations measurement appears in Section II-3.1. As in the EOSM, expectations is most reasonably operationalized as "predictive expectations." However, unlike the EOSM, measurement of expectations cannot utilize an "objective" scale as there is no widely understood and accepted means of measuring advertising effectiveness or campaign unfairness. Therefore, in this model, expectations regarding each candidate's performance with regard to advertising effectiveness and running an unfair campaign is measured on a "will definitely happen" (= 10) to "will definitely not happen" (= 1) scale.

Perceived Performance

Again, because there are no widely understood and accepted means of measuring advertising effectiveness and/or running an unfair campaign, perceived performance is measured in this model. To maintain comparability with the expectations measure, perceived performance is measured on similar scales. In this model, perceived performance with regard to both advertising effectiveness and running an unfair campaign are measured on a scale anchored with "False--didn't happen" (= 1) to "True--happened a lot"(= 10).

Disconfirmation

As in the EOSM, disconfirmation is measured as a subjective construct in which predictive expectations are the standard disconfirmed. Disconfirmation, therefore, is measured as the degree to which performance is judged to be "more than expected" (= 10) or "less than expected" (= 1) for each of the two included process attributes.

Overall Disconfirmation

Since "overall process satisfaction" is the ultimate target of this model, an intervening, general measure of disconfirmation is included. This is necessary because the term "campaign process" could reasonably include a very large number of possible campaign attributes. Because only two of the possible campaign process attributes are considered in this model, an overall measure of disconfirmation is included so that other non-specified attributes salient to individual respondents (which may be more important than the two included attributes) can contribute to explaining variance in overall process satisfaction. Overall disconfirmation is measured on a seven point "much better than expected" (= 7) to "much worse than expected" (= 1) scale.

Satisfaction

The range of possible satisfaction measures and a discussion of satisfaction "targets" appears in Section II.2. In the CPSM, satisfaction with the campaign process is measured. The scale used is identical to the seven point satisfaction scale used the EOSM, ranging from "extremely dissatisfied" (= 1) to "extremely satisfied" (= 7).

Table 17
Operationalization of Constructs
Campaign Process Satisfaction Model

Variable	Wording	Scale
Measured before the election		
Expectations	Please indicate how you expect the election campaign will be conducted [asked for "advertising will be extremely effective" and "will run an unfair campaign" for each candidate]	1-"No, this will definitely not happen" to 10-"Yes, this will definitely happen"
Measured after the election		
Perceived Performance	We would like you to make two evaluations each on a ten point scale. The first is an evaluation of how true or false a statement is....[asked for "advertising being extremely effective" and "running an unfair campaign" for each candidate]	1-"false (didn't happen)" to 10-"true (happened a lot)"
Disconfirmation	The second is an evaluation of whether something happened more or less that you expected it would. [asked for "advertising being extremely effective" and "running an unfair campaign" for each candidate]	1-"less than I expected" to 10-"more than I expected"
Overall disconfirmation	[Overall] Was the process better or worse than you expected?	7-pt. semantic differential from "much worse than I expected" to "much better than I expected"
Overall Satisfaction	Overall, how satisfied or dissatisfied are you with this year's presidential election campaign process (i.e., the way the campaign was conducted)?	7-pt. semantic differential from "extremely dissatisfied" to "extremely satisfied"

IV-3. Other Relevant Variables

In addition to the variable used in each of the models, other relevant variables were collected and used during data analysis. These variables are enumerated in Table 18. First, both level of certainty and level of involvement were thought to have the potential to compete with the independent variables of interest in the two models; collecting data on them would allow their effects to be controlled for, if needed.

Choice Certainty

Choice certainty was measured to determine whether Bush versus Clinton voters differed in the degree to which they were confident of their selection. This variable was collected because systematic differences in level of certainty could logically be related to amount of processing undertaken by certain respondent groups. Certainty was measured both before and after the election.

Involvement

Involvement was measured using a reduced version of Zaichowsky's (1985) involvement scale. It, too, was measured because differential levels of involvement might be expected to affect processing intensity.

Political Affiliation and Demographics

Political affiliation and demographic variables were collect for classification and comparison purposes. Interviewers were instructed to gather data from acquaintances which reflected the population of adult voters.

Collecting this information allowed comparisons to be made to the general electorate.

In addition, political affiliation variables, including past voting behavior, were collected to determine the extend of "brand switching" which occurred among respondents.

Table 18
Operationalization of Constructs
Other Relevant Variables

Variable	Wording	Scale
Certainty (before election)	How certain are you of your choice? Put a check mark in one of the seven spaces to reflect how certain you are. (asked after determining who subject would vote for "....if the election were held tomorrow....")	1 - Not at all certain to 7 - Extremely certain
Certainty (after election)	How certain were you of your choice? Put a check mark in one of the seven spaces to reflect how certain you were at the time you were voting.	1 - Not at all certain to 7 - Extremely certain
Involvement	How do you feel about the coming presidential election? Please put a check mark in one of the seven spaces to reflect how you feel. (5 semantic differential scales)	1 - unimportant to me -- 7 - important to me 1 - irrelevant to me -- 7 - relevant to me 1 - uninteresting to me -- 7 - interesting to me 1 - boring to me -- 7 - fascinating to me 1 - means nothing in my life- 7 - means a lot in my life
Political Affiliation	Are you a registered voter? Are you a registered Democrat? Are you a registered Republican? Did you vote in the last election? If so, for whom?	Yes - No Yes - No Yes - No Yes - No Bush - Dukakis
Demographics	Sex: Age: Please check the highest level of education you attained: Please check off your total family income per year. By "family" we mean all people related to you and living in your household.	Male - Female ___ years _less than high school _graduated from high school _some college or post high school education _graduate from 4-year college (BA/BS or similar) _Master's level degree or equivalent _Ph.D. _under $5,000 _$5,000 - $9,999 _$10,000 - $14,999 _$15,000 - $19,999 _$20,000 - $24,999 _$25,000 - $29,999 _$30,000 - $ 39,999 _$40,000 - $49,999 _$50,000 - $59,999 _Over $60,000

Chapter V
Results

This chapter is divided into six sections. The first section presents a general description of the Clinton and Bush voter subsamples used in the various two-group analyses. Sections two through five of this chapter each deal with a different analytical tool - subsample combination. The second and third sections each deal with one of the main hypothesized models (Election Outcome Satisfaction Model and the Campaign Process Satisfaction Model) comparing Clinton versus Bush voters. The fourth section presents results of an analysis of satisfied versus dissatisfied voters within the Election Outcome Satisfaction Model. The fifth section contains a correlation analysis of satisfied versus dissatisfied voters on variables collected for the Campaign Process Satisfaction Model. The sixth section summarizes research findings which specifically relate to the four research hypotheses.

Within sections two through five of this chapter, results relating to the four research hypotheses are presented. Table 19 summarizes the research hypotheses and identifies which section contains results related to which research hypothesis.

V-1. General Description of the Subsamples

For each of the two models, a two-group analysis is performed. The two groups analyzed are Clinton supporters and voters versus Bush supporters and voters. "Supporters and voters" are defined as those who reported supporting a particular candidate pre-election and voting for that same candidate: those who supported and voted for Clinton are in the first group, and those who

Table 19
Organization of Chapter 5--Sections Addressing Results Relating to Specific Research Hypotheses

	Analytical Tool			
	Complete Sample		Partial Sample	
	EOSM[1]	CPSM[2]	EOSM[3]	CPSM[4]
Research Hypotheses	Section Number....			
#1: Multiple targets of satisfaction are relevant to the overall satisfaction formation process.	V.2.3	V.3.3	V.4.2	- -
#2: Processes relevant to the formation of satisfaction with competing alternatives are structurally related (via cross-over effects).	V.2.4	- -	V.4.3	- -
#3: Dissatisfied consumers process more extensively than do satisfied consumers.	V.2.5	- -	V.4.1	V.5
#4: Effects of desires will dominate the effects of expectations on the satisfation formation process in high involvement situations.	V.2.6	- -	- -	- -

1) Clinton voters versus Bush voters in 2-group analysis
2) Clinton voters versus Bush voters in 2-group analysis
3) Satisfied Clinton voters versus Dissatisfied Bush voters in 2-group analysis
4) Satisfied Clinton voters versus Dissatisfied Bush voters in correlation analysis

supported and voted for Bush are in the second group. For convenience, these groups will be referred to as "Clinton voters" and "Bush voters" in the remainder of this dissertation. Note that those who supported one candidate before the election but voted for a different candidate are omitted from both groups (as are those who voted for Perot).

Table 20 presents means of the variables for each group and significant differences between the groups on these variables. Differences between the groups with respect to variables used in each model are discussed in the relevant sections to follow.

From Table 20, note especially the following:

1) There is some evidence of allegiance-switching prior to the pre-election measurement. First, over one fourth of Clinton voters (28.2%) voted for Bush in the previous election, though only 3% of Bush voters voted for Dukakis. Second, 14.7% of Bush voters are registered Democrats while 7.7% of Clinton voters are registered Republicans.

2) Voters for each candidate appear to be equally involved in the election as measured by all five involvement items: importance, relevance, interest, fascination, and meaning.

3) Voters for each candidate reported equal levels of certainty about their choice before the election, while Clinton voters reported slightly higher levels of certainty following the election.

4) There is no difference in the age of Clinton versus Bush voters in this sample; Clinton voters have received more education, and Bush voters reported higher household incomes.

5) In this sample, significantly more Bush voters versus Clinton voters are male (52.6% versus 29.5%).

Table 20
Description of the Sample
Differences Between Clinton and Bush Subsamples on Selected Variables

	Clinton Voters[1]	Bush Voters[1]	Significantly Different? (p-value)[2]
Political Background			
Percent registered Democrats	61.5	14.7	<.05[3]
Percent registered Republicans	7.7	64.2	<.05[3]
Voting pattern in 1988 election:			
a) voted for Bush	28.2	68.0	<.05[3]
b) voted for Dukakis	38.5	3.1	<.05[3]
c) did not vote	33.3	29.9	--
Involvement and Certainty of Choice			
Relevance of the 1992 election[4] (7 pt. scales):			
a) "important to me"	6.35	6.41	--
b) "relevant to me"	6.06	6.22	--
c) "interesting to me"	6.06	6.05	--
d) "fascinating to me"	5.55	5.33	--
e) "means a lot in my life"	5.71	5.75	--
Certainty of choice (7 pt. scales)[5]:			
a) before the election	6.14	6.18	--
b) after the election	6.32	6.00	.09
Other Characteristics			
Demographics[6]			
a) age	31.5	29.8	--
b) income category[7]	6.66	7.69	.03
c) education (% college grad or higher)	69.2	50.5	<.05[3]
d) gender (% male)	29.5	52.6	<.05[3]

(1) Includes respondents who supported the candidate before the election and voted for the candidate.
(2) Using a difference of means t-test unless otherwise noted.
(3) Difference of proportions test.
(4) Opposite scale labels were "unimportant to me," "irrelevant to me," "uninteresting to me," "boring to me" and "means nothing in my life." Measurements taken before the election.
(6) Demographic characteristics of all U.S. voters (source: New York Times, November 5, 1992, p. B9)

	Clinton Voters	Bush Voters
median age:	41.3	41.8
median income:	$35,024	$42,407
% college graduate or higher:	40.3	41.6
gender (% male):	43.2	46.7

(5) Endpoints labeled 1 = "not at all certain," 7 = "extremely certain."
(7) Categories:

1 = under $5,000	6 = $25,000 - $29,999
2 = $5,000 - $9,999	7 = $30,000 - $ 39,999
3 = $10,000 - $14,999	8 = $40,000 - $49,999
4 = $15,000 - $19,999	9 = $50,000 - $59,999
5 = $20,000 - $24,999	10 = Over $60,000

V-2. Results of the Election Outcome Satisfaction Model

Results of the two-group analysis using the Election Outcome Satisfaction Model (EOSM) are presented in this section. First, differences between the two groups with respect to the variables included in the model are highlighted. Then, results of the LISREL analysis are presented. Finally, results associated with each of the research hypotheses are described.

V-2.1. Differences Between the Two Groups (EOSM)

Although research questions specifically address the relationships between key variables, means and standard deviations of model variables are presented in Table 21 for completeness and to highlight differences between the groups.

Note that Clinton and Bush voters differ significantly on all variables included in the model (for all differences, p-values < 0.001 for two-tailed difference of means t-tests, except as indicated). Specifically, Clinton voters expressed a higher level of desires, expectations and attitude for Clinton than did Bush voters, while Bush voters indicated higher levels than Clinton voters on these same variables with regard to Bush. Regarding Clinton's performance, Bush voters had a slightly higher level of disconfirmation ($p = 0.124$ for two-tailed t-test) than did Clinton voters. Regarding Bush's performance, Clinton voters indicated higher disconfirmation than did Bush voters. Finally, Clinton versus Bush voters expressed higher levels of satisfaction with Clinton's performance, Bush's performance, and the overall election results.

Table 21
Election Outcome Satisfaction Model
Means and Standard Deviations of Each Group

	Clinton Voters		Bush Voters		p-values from
	Mean	Std. Dev.	Mean	Std. Dev.	t-tests[1]
For Clinton:					
Desires	76.179	18.910	11.381	14.576	0.000
Expectations	49.051	7.243	44.490	7.823	0.000
Attitudes	243.909	44.512	154.660	68.250	0.000
Disconfirmation	4.645	1.334	4.979	1.472	0.124
Satisfaction	5.705	1.250	1.794	1.020	0.000
For Bush:					
Desires	12.808	14.667	78.948	19.325	0.000
Expectations	37.676	6.340	42.552	9.055	0.000
Attitudes	178.779	56.104	266.221	63.918	0.000
Disconfirmation	4.263	1.237	2.854	1.179	0.000
Satisfaction	4.551	1.593	2.010	1.075	0.000
Overall:					
Satisfaction w/ election results	5.910	1.186	1.979	1.118	0.000

1 p-values for t-test for H_0: $\mu_1 = \mu_2$.

When groups are compared on the degree of pre-election desires with regard to "their candidate," a similar level is observed. That is, Clinton voters had a mean desire of 76.2 for Clinton while Bush voters had a mean desire of 78.9 for Bush (p value = .358). However, Bush voters had a more positive attitude towards Bush than Clinton voters had towards Clinton (p value =.008), and Bush voters had a poorer attitude towards Clinton than Clinton voters had towards Bush (p value = .012). The two groups differed on their expectations of the relative performance of each candidate: Clinton voters showed a difference of 11.4 in the expected performance of Clinton over Bush, while Bush voters showed a spread of only 1.9 for Clinton over Bush.

Because attitude towards each candidate is measured by combining the belief times importance of four candidate attributes, a separate table (Table 22) is presented to provide details of this variable. Again, note that the mean values of all importance component variables differ significantly between groups, as do the mean values of all belief component measures. While both groups give highest importance ratings for "domestic economy" and lowest ratings to "foreign policy," there are differences between the groups. Clinton voters rate "domestic economy" and "other domestic issues" as being more important than do Bush voters (p = .069 and p = .020, respectively). Bush voters give "foreign policy" and "personal integrity" higher importance ratings than do Clinton voters (p = .010 and p = .005, respectively). If the attributes are rank-ordered based on these importance ratings, "personal integrity" would rank above "other domestic issues" for Bush voters, while the reverse order would hold for Clinton voters.

Table 22
Election Outcome Satisfaction Model
Components of Attitude Towards the Candidate

	Clinton Voters[1]	Bush Voters[1]	Significantly Different? (p-value)[2]
Importance Component			
Importance to respondents.			
(10 pt. scales)[3]:			
a) foreign policy	7.10	7.88	.010
b) domestic economy	9.36	9.02	.069
c) other domestic issues	8.71	8.16	.020
d) personal integrity	7.85	8.62	.005
Belief Component			
Evaluation of candidate Clinton.			
(10 pt. scales)[4]:			
a) foreign policy	6.45	4.02	.000
b) domestic economy	8.06	5.27	.000
c) other domestic issues	7.77	5.23	.000
d) personal integrity	6.92	3.97	.000
Evaluation of candidate Bush.			
(10 pt. scales)[4]:			
a) foreign policy	7.55	9.05	.000
b) domestic economy	4.30	6.94	.000
c) other domestic issues	4.19	7.01	.000
d) personal integrity	6.16	8.40	.000

(1) Includes respondents who reported supporting the candidate before the election and voted for the candidate.
(2) Using a difference of means t-test with H_o: $\mu_1 = \mu_2$.
(3) Endpoints labeled 1 = "extremely unimportant" to 10 = "extremely important to me."
(4) Endpoints labeled 1 = "will do an extremely poor job" to 10 = "will do an extremely good job."

V-2.2. Results of the EOSM Two-Group LISREL Analysis

First, the correlation matrix for each group is presented. Then, overall and group-specific indicators of fit are provided.

The top half of Table 23 contains the correlation matrix for Clinton voters. The bottom half of Table 23 presents results for Bush voters in a similar format. Covariance matrices were used as input for the analyses.

Overall, the model fit the data moderately well. The appropriate fit index of the two group model overall is chi square goodness-of-fit. For EOSM, the chi square value is 75.60 with 46 degrees of freedom ($p = .004$). In addition, the comparative fit index (CFI) is .95.

Within group indicators of fit are provided in Table 24. The goodness of fit (GFI) index for Clinton and Bush voters are .938 and .927, respectively. Squared multiple correlations for endogenous variables in the Clinton voter group range from .001 to .232, the total coefficient of determination of the structural equations is 0.127. These statistics are all higher for the Bush voter group: squared multiple correlations range from .024 to .415, and the total coefficient of determination for the structural equation is .330.

There are two modification indices greater than five for the Clinton voter group and five for the Bush voter group. A total of five standardized residuals lie outside the -2.0 to 2.0 range for the Clinton voters, while eleven lie outside that range for the Bush voters. Although there are several standardized residuals outside the -2 to +2 range in each group, an examination of their distribution indicates they are roughly normally distributed (see Figure 17).

Of the five high modification indices indicating the need for additional structural paths, four of the suggested paths lead directly to "overall

Table 23
Election Outcome Satisfaction Model
Correlation Matrices

Clinton Voters

	1	2	3	4	5	6	7	8	9	10	11
1	----										
2	-0.225	----									
3	0.426	-0.194	----								
4	0.237	-0.034	0.494	----							
5	0.210	-0.234	0.376	0.329	----						
6	0.030	0.151	0.177	0.209	-0.003	----					
7	-0.043	0.091	0.036	0.004	-0.083	0.080	----				
8	-0.026	-0.170	0.092	0.020	0.262	-0.093	0.333	----			
9	-0.007	0.179	-0.061	-0.078	-0.360	0.135	-0.113	-0.827	----		
10	-0.173	-0.139	-0.096	0.008	0.087	-0.200	-0.372	-0.027	0.105	----	
11	0.123	0.244	0.075	0.057	-0.106	0.508	-0.230	-0.518	0.519	-0.178	----

Bush Voters

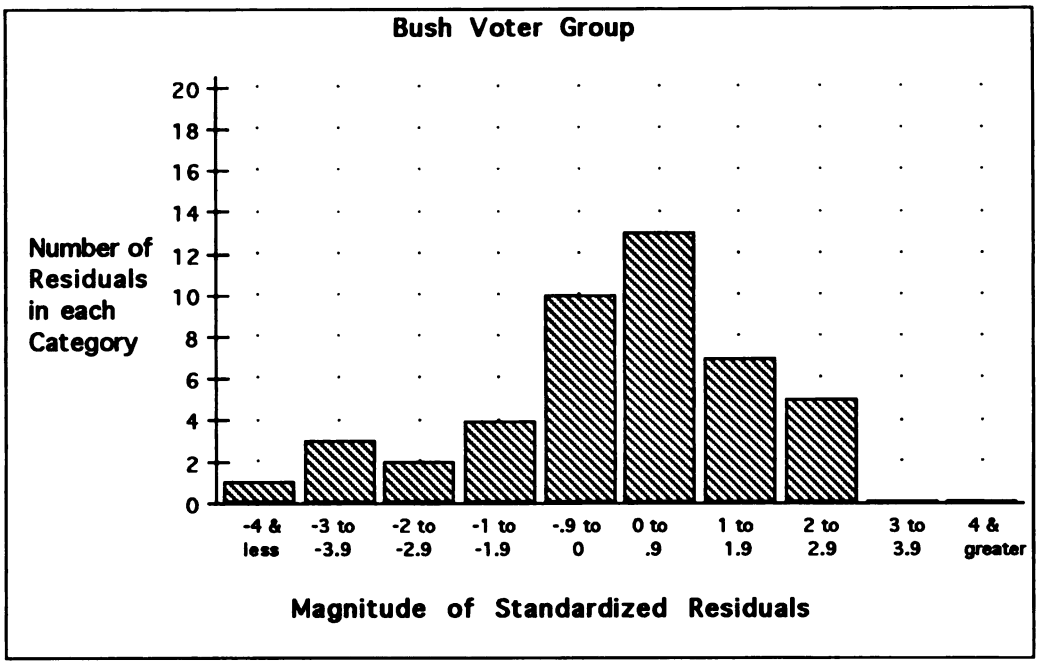
	1	2	3	4	5	6	7	8	9	10	11
1	----										
2	-0.231	----									
3	-0.031	0.375	----								
4	0.000	0.324	0.467	----							
5	-0.026	0.260	0.617	0.477	----						
6	0.130	0.075	0.355	0.303	0.353	----					
7	-0.142	0.170	0.085	0.062	0.049	0.198	----				
8	0.012	0.178	0.405	0.440	0.442	0.507	0.160	----			
9	0.050	-0.134	-0.363	-0.432	-0.459	-0.282	-0.120	-0.786	----		
10	-0.001	-0.230	-0.333	-0.112	-0.175	-0.181	-0.623	-0.114	0.224	----	
11	0.105	-0.237	-0.207	-0.194	-0.343	0.114	-0.056	-0.242	0.446	0.069	----

Endogenous Variable		Exogenous Variables	
1	Clinton Disconfirmation	6	Clinton Attitude
2	Bush Disconfirmation	7	Clinton Expectations
3	Clinton Satisfaction	8	Clinton Desires
4	Bush Satisfaction	9	Bush Desires
5	Overall Satisfaction	10	Bush Expectations
		11	Bush Attitude

Table 24
Election Outcome Satisfaction Model
Within Group Indicators of Fit

	Clinton Voters	Bush Voters
Goodness of Fit Index	0.938	0.927
Total Coefficient of Determination for the Structural Equations	0.127	0.330
Squared Multiple Correlations for:		
Clinton Disconfirmation	0.001	0.024
Bush Disconfirmation	0.073	0.064
Clinton Satisfaction	0.232	0.269
Bush Satisfaction	0.083	0.277
Overall Satisfaction	0.170	0.415
Modification Indices Over 5	two[1]	five[2]
Standardized Residuals:		
less than -2	two[3]	six[4]
greater than 2	three[5]	five[6]
Root Mean Square Residual	2.851	4.729

1 Both of them are for structural paths: C. Desire -> Overall Sat. (5.007) and B. Desire -> Overall Sat. (9.948).
2 Three of them are for structural paths: B. Desire -> Overall Sat. (5.914), B. Expectation -> C. Sat. (12.049), and B. Attitude -> Overall Satisfaction (6.201).
3 They are: B. Disconfirmation - Overall Sat. (-2.023) and B. Desires - Overall Sat. (-3.225).
4 They are: B. Disconfirmation - B. Attitude (-2.235), B. Desires - C. Sat. (-3.225), B. Expectations - C. Sat. (-4.076), B. Attitude - B. Sat. (-2.023), B. Desire - Overall Sat. (-3.275), and B. Att - Overall Sat. (-3.080).
5 They are: B. Attitude - C. Sat. (2.431), C. Attitude - B. Sat. (2.452), and C. Desire - Overall Sat. (2.274).
6 They are: B. Desire - C. Disconfirmation (2.014), C. Desire - B. Disconfirmation (2.489), C. Desire - B. Sat. (2.323), C. Attitude - Overall Sat. (2.123), C. Desire - Overal Sat. (2.815)



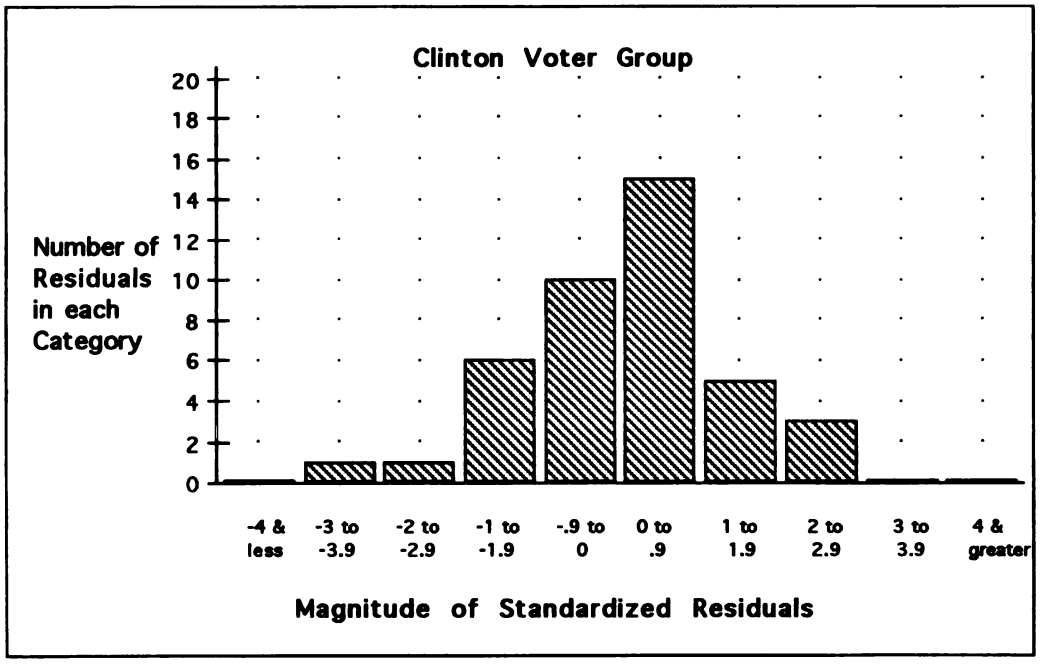


Figure 17
Election Outcome Satisfaction Model
Distribution of Standardized Residuals

satisfaction" from antecedent variables. For Clinton voters, these paths are Clinton Desire to Overall Satisfaction (5.007) and Bush Desire to Overall Satisfaction (9.948). For Bush voters, these paths are Bush Desire to Overall Satisfaction (5.914) and Bush Attitude to Overall Satisfaction (6.201). Likewise, of the sixteen large standardized residuals, nearly half (seven) are associated with overall satisfaction. For Clinton voters, these paths are Bush Disconfirmation - Overall Satisfaction (-2.023), Bush Desire - Overall Satisfaction (-3.225), and Clinton Desire - Overall Satisfaction (2.274). For Bush voters, these paths are Bush Desire - Overall Satisfaction (-3.275), Bush Attitude - Overall Satisfaction (-3.080), Clinton Attitude - Overall Satisfaction (2.123), and Clinton Desire - Overall Satisfaction (2.815). Of the remaining nine, seven are "cross-over paths," that is, the residuals are associated with antecedent variables of one candidate and post-election variables of the other candidate. For Clinton voters, these paths are Bush Attitude - Clinton Satisfaction (2.431) and Clinton Attitude - Bush Satisfaction (2.452). For Bush voters, these paths are Bush Desire - Clinton Satisfaction (-3.225), Bush Expectation - Clinton Satisfaction (-4.076), Bush Desire - Clinton Disconfirmation (2.014), Clinton Desire - Bush Disconfirmation (2.489), and Desire Clinton - Bush Satisfaction (2.323).

V-2.3. EOSM Two-Group Results Related to Research Hypothesis #1

The test of the research hypothesis that multiple targets are relevant is very straight-forward. Paths from satisfaction with each candidate to overall satisfaction were hypothesized to be positive for both Clinton and Bush voters. Because path signs were hypothesized, all significance results reported in this section are for one-tail tests.

Table 25 contains unstandardized path estimates and their associated standard errors for Clinton versus Bush voters. Note that paths from satisfaction with each candidate to overall satisfaction are significant for both groups. For Clinton voters, the path estimate from Clinton Satisfaction to Overall Satisfaction is .269 (significant at .05) and the path from Bush Satisfaction to Overall Satisfaction is .141 (significant at .10). For Bush voters, the path estimate from Clinton Satisfaction to Overall Satisfaction .554 and the path estimate from Bush Satisfaction to Overall Satisfaction is .250 (both paths significant at the .01 level).

The two paths of special interest are those which would not be modeled in the traditional satisfaction model, namely Clinton Satisfaction to Overall Satisfaction for Bush voters and Bush Satisfaction to Overall Satisfaction for Clinton voters. Note that among Bush voters, the path from Clinton Satisfaction (i.e., the non-choice) to Overall Satisfaction is of greater magnitude than the path from Bush satisfaction (i.e., the choice) to Overall Satisfaction. This difference was not hypothesized but is extremely interesting because it clearly demonstrates the importance of satisfaction formation processes relative to the non-choice among Bush voters. Among Clinton voters, there is no significant difference between the two paths. Thus, research hypothesis #1 is strongly supported by the EOSM two-group analysis, as the path from satisfaction with the non-choice is as important (Clinton voters) or more important (Bush voters) than is the path from satisfaction with the choice.

It is possible to compare differences between Clinton voters and Bush voters in terms of the relative magnitudes of these paths. To make such a comparison, the common metric standardized paths must be compared (see

Table 25
Election Outcome Satisfaction Model
Unstandardized Estimates and Standard Errors of Structural Paths

Structural Path	Clinton Voters Unstd. Estimates	Clinton Voters Std. Errors	Bush Voters Unstd. Estimates	Bush Voters Std. Errors
To Overall Satisfaction from:				
Clinton Satisfaction	.269**	.116	.554***	.098
Bush Satisfaction	.141*	.091	.250***	.090
Clinton Disconfirmation →				
Clinton Satisfaction	.376***	.095	.009	.066
Bush Satisfaction	.297**	.132	.066	.070
Bush Disconfirmation →				
Clinton Satisfaction	-.101	.112	.288***	.077
Bush Satisfaction	.054	.158	.307***	.085
Clinton Desire →				
Clinton Disconfirmation	-.001	.009	.006	.010
Clinton Satisfaction	.008	.007	.017***	.007
Clinton Expectation →				
Clinton Disconfirmation	-.005	.023	-.028*	.019
Clinton Satisfaction	.001	.018	-.007	.012
Clinton Attitude →				
Clinton Satisfaction	.003	.003	.003**	.001
Bush Desire →				
Bush Disconfirmation	.016**	.009	-.004	.006
Bush Satisfaction	-.018	.014	-.024***	.006
Bush Expectation →				
Bush Disconfirmation	-.040**	.021	-.031**	.014
Bush Satisfaction	.025	.028	.014*	.011
Bush Attitude →				
Bush Satisfaction	.003	.004	.001	.002

* Signifcant at .10 for 1-tail tests
** Significant at .05 for 1-tail tests
*** Significant at .01 for 1-tail tests

Table 26). The common metric standardized solution produces parameter estimates which have been standardized across the two groups so that direct comparisons of path magnitude are possible. First, the Clinton Satisfaction to Overall Satisfaction path for Bush voters is of greater magnitude than the Clinton Satisfaction to Overall Satisfaction path for Clinton voters (difference significant at .05 level, two tail test). Second, the Clinton Satisfaction to Overall Satisfaction path for Bush voters is also significantly greater than the Bush Satisfaction to Overall Satisfaction path for Clinton voters (difference significant at the .01 level, two tail test). Third, the path magnitudes related to each group's choice, i.e., Clinton Satisfaction to Overall Satisfaction for Clinton voters and Bush Satisfaction to Overall Satisfaction for Bush voters, are equal (difference not significant at .10 level, two tail test). Fourth, there is no difference between Clinton voters and Bush voters with regard to the magnitude of the path from Bush Satisfaction to Overall Satisfaction. From this analysis, we can conclude that the single most important determinant of Overall Satisfaction is Clinton Satisfaction among Bush voters, i.e., satisfaction with a non-choice. Figure 18 and Figure 19 also present EOSM results.

V-2.4. EOSM Two-Group Results Related to Research Hypothesis #2

To test the research hypothesis that cross-over effects connect the processes relating to both choice and non-choice, the information in Table 27 is once again examined. It was hypothesized that, in both groups, the cross-over effects would take the form of significant paths from disconfirmation with the choice to satisfaction with the non-choice, and from disconfirmation with the non-choice to satisfaction with the choice.

Table 26
Election Outcome Satisfaction Model
Common Metric Standardized Solution

Path (n.s.=nonsignificant)	Clinton Voters	Bush Voters
Clinton Satisfaction → Overall Satisfaction	.263	.542
Bush Satisfaction → Overall Satisfaction	.165	.293
Clinton Disconfirmation →		
Clinton Satisfaction	.474	.011 n.s.
Bush Satisfaction	.314	.070 n.s.
Bush Disconfirmation →		
Clinton Satisfaction	-.109 n.s.	.312
Bush Satisfaction	.049 n.s.	.278
Clinton Desires →		
Clinton Disconfirmation	-.017 n.s.	.070 n.s.
Clinton Satisfaction	.116 n.s.	.255
Clinton Expectations →		
Clinton Disconfirmation	-.024 n.s.	-.149
Clinton Satisfaction	.008 n.s.	-.050 n.s.
Clinton Attitude →		
Clinton Satisfaction	.170 n.s.	.139
Bush Desires →		
Bush Disconfirmation	.234	-.054 n.s.
Bush Satisfaction	-.228 n.s.	-.315
Bush Expectations →		
Bush Disconfirmation	-.260	-.204
Bush Satisfaction	.147 n.s.	.086
Bush Attitude →		
Bush Satisfaction	.119 n.s.	.068 n.s.

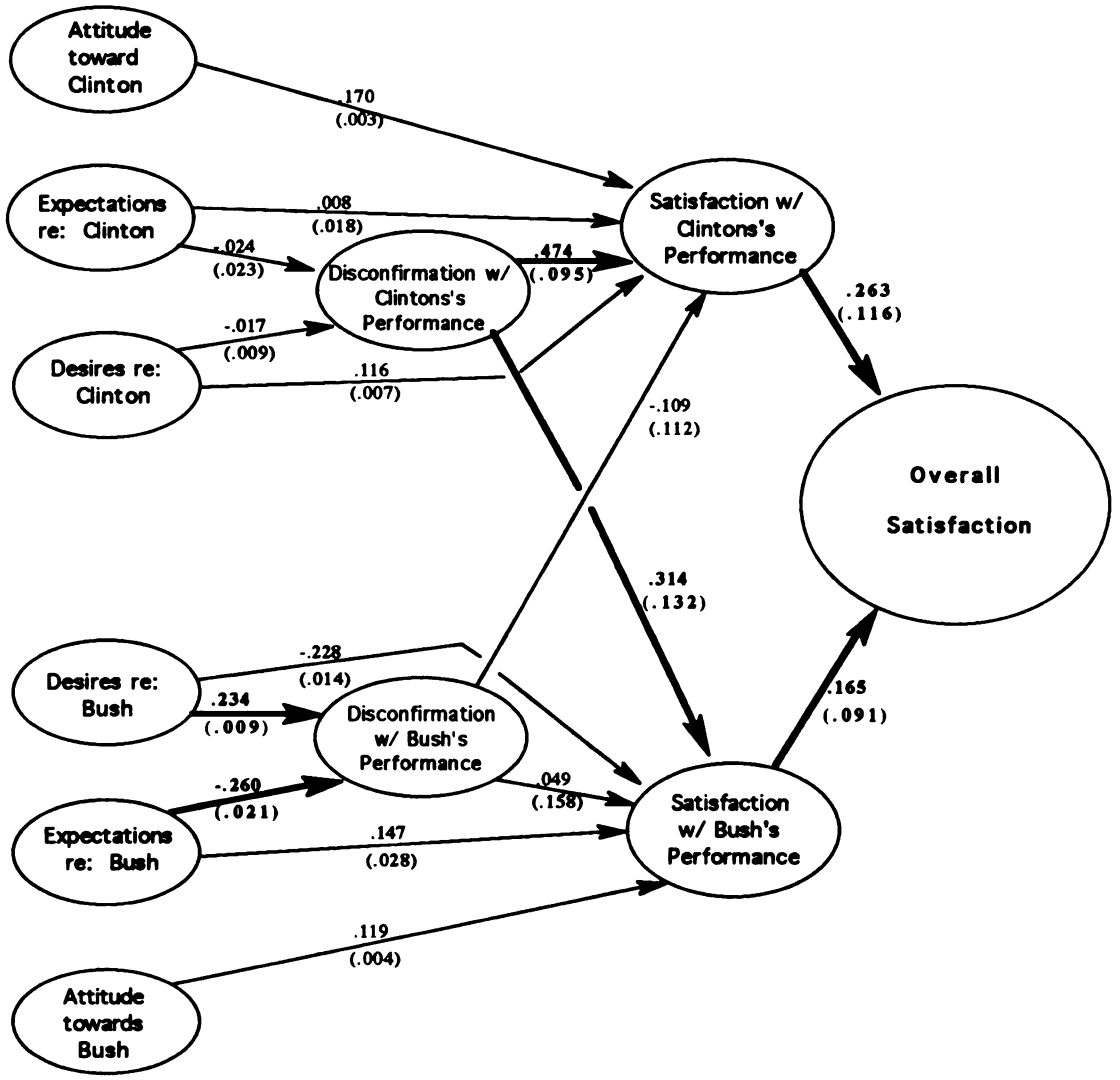


Figure 18
Results: Election Outcome Satisfaction Model
Clinton Voters

The first number for each path is the common metric standardized solution parameter estimate, and the second number is the associated standard error. Significant paths appear in bold.

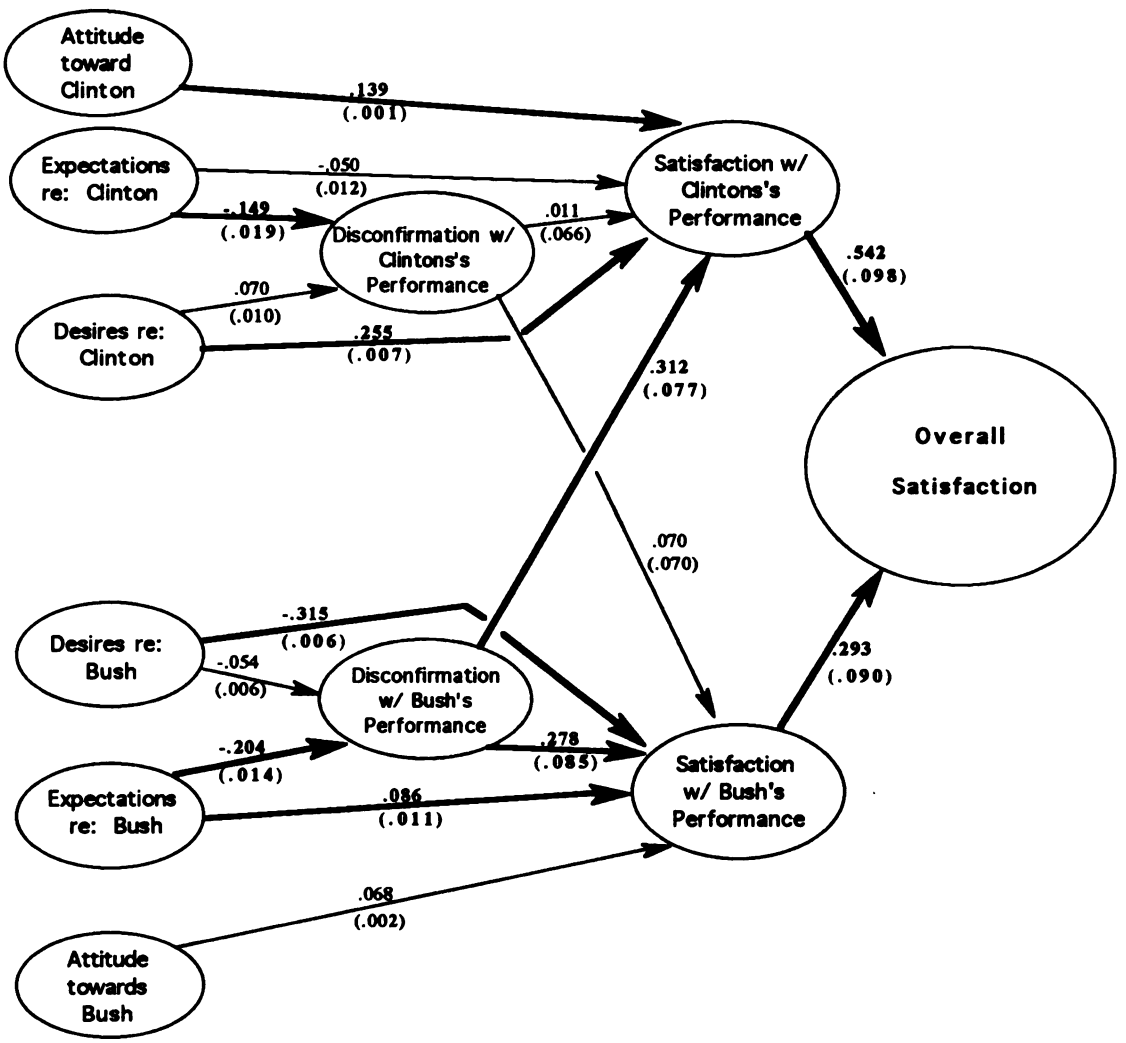


Figure 19
Results: Election Outcome Satisfaction Model
Bush Voters

The first number for each path is the common metric standardized solution parameter estimate, and the second number is the associated standard error. Significant paths appear in bold.

Among Clinton voters, the path from Clinton Disconfirmation to Bush Satisfaction (.297) is significant and positive as hypothesized ($p < .05$, one-tail test); while the path from Bush Disconfirmation to Clinton Satisfaction is negative as hypothesized, it is not of sufficient magnitude to be significant. Among Bush voters, the path from Bush Disconfirmation to Clinton Satisfaction (.288) is significant and positive ($p < .01$, one-tail test), as hypothesized; the path from Clinton Disconfirmation to Bush Satisfaction is neither significant nor negative. Thus, results from the EOSM provide moderate support for research hypothesis #2, as cross-over effects are found from disconfirmation with choice to satisfaction with non-choice for both groups.

To compare differences in path magnitudes between the two groups, we again turn to the common metric standardized solution found in Table 26. Among Clinton voters, the path from Clinton Disconfirmation to Bush Satisfaction is .314, while among Bush voters, the path from Bush Disconfirmation to Clinton Satisfaction is .312. There is no difference in the magnitudes of these two paths. Thus, the cross-over effects appear to be of equal size for both groups.

In addition to the cross-over effects evident in the structural paths, errors between Clinton Disconfirmation and Bush Disconfirmation, and between Clinton Satisfaction and Bush Satisfaction were allowed to covary. These error covariances, along with the error variances associated with the prediction of each of the endogenous variables is reported in the psi matrix results, Table 27. Note that the two covariances along with each of the variances are significant at the .01 level.

Table 27
Election Outcome Satisfaction Model
Psi Matrix Results

Psi Matrix Elements (1)	Unstd. Estimate	Std. Error	Std. Estimate
(A) Clinton Supporters			
Clinton Disconfirmation	1.967***	0.217	0.986
Bush Disconfirmation	1.369***	0.151	0.932
Clinton Satisfaction	1.206***	0.199	0.961
Bush Satisfaction	2.348***	0.388	1.311
Overall Satisfaction	1.169***	0.193	0.895
Disconfirmation: Clinton - Bush	-0.443***	0.184	-0.259
Satisfaction: Clinton - Bush	0.743***	0.215	0.496
(B) Bush Supporters			
Clinton Disconfirmation	1.967***	0.217	0.986
Bush Disconfirmation	1.364***	0.151	0.932
Clinton Satisfaction	0.733***	0.108	0.584
Bush Satisfaction	0.849***	0.125	0.474
Overall Satisfaction	0.717***	0.106	0.549
Disconfirmation: Clinton - Bush	-0.392**	0.168	-0.229
Satisfaction: Clinton - Bush	0.221***	0.086	0.148

(1) All other psi matrix elements were set to zero in both groups.

* Signifcant at .10
** Significant at .05
*** Significant at .01

V-2.5. EOSM Two-Group Results Related to Research Hypothesis #3

Using results of the two group analysis of EOSM, it is possible to perform a weak test of research hypothesis #3, that dissatisfied people process more extensively than do satisfied people. A stronger test of research hypothesis #3 using EOSM and a subsample of voters is provided in Section V.4.3.

As demonstrated in Table 21, Bush voters are less satisfied than Clinton voters on all three satisfaction measures. According to research hypothesis #3, then, one would expect to observe evidence of more extensive processing among Bush voters relative to Clinton voters. The results presented here are a "weak" test of the hypothesis because the samples are confounded: some Clinton voters were not satisfied and some Bush voters were not dissatisfied. In this analysis, amount of processing is indicated by the number of significant paths connecting variables measured pre-election and variables measured post-election (hereafter called "pre-post" paths) in the EOSM two-group analysis.

From Table 25, we see that two such pre-post paths are significant for Clinton voters: Bush Desire to Bush Disconfirmation and Bush Expectation to Bush Disconfirmation. Both paths are significant at the .05 level (one-tail test). On the other hand, six pre-post paths are significant for Bush voters: Clinton Desire to Clinton Satisfaction, Clinton Expectation to Clinton Disconfirmation, Clinton Attitude to Clinton Satisfaction, Bush Desire to Bush Satisfaction, Bush Expectation to Bush Disconfirmation, and Bush Expectation to Bush Satisfaction. We conclude that Bush voters did exhibit more extensive processing than did Clinton voters. Therefore, research hypothesis #3 is supported.

One additional observation is that throughout Table 25, Bush voters in the sample exhibited smaller standard deviations for all but two of the paths than did Clinton voters in the sample. The two exceptions are the Clinton Desire to Clinton Satisfaction path for which the standard errors are equal, and the Clinton Desire to Clinton Disconfirmation path for which Clinton voters had a standard error of .009 while Bush voters had a standard error of .010.

V-2.6. EOSM Two-Group Results Related to Research Hypothesis #4

Finally, to address the issue raised by research hypothesis #4, the relative impact of desires versus expectations on satisfaction, Table 28 is presented. It shows the total direct and indirect effects of expectations and desires on satisfaction with each candidate and on overall satisfaction. We see that only one expectations - endogenous variable path has significant total effects (Bush Expectation to Clinton Satisfaction). However, four desires - endogenous variable paths have significant total effects: Clinton Desire to Clinton Satisfaction and to Overall Satisfaction, and Bush Desire to Bush Satisfaction and to Overall Satisfaction. Therefore, research hypothesis #4 is supported.

Parenthetically, it is worth noting that all five of the significant paths from expectations or desires to endogenous variables occurred among Bush voters (while none occurred among Clinton voters). This is further evidence in support of research hypothesis #3, that dissatisfied people process more extensively than do satisfied people.

Table 28
Election Outcome Satisfaction Model
Total Effects of Expectations versus Desires

	Clinton Voters		Bush Voters	
	Total Effects	Std. Errors	Total Effects	Std. Errors
For Clinton				
Expectation ⟶				
Clinton Satisfaction	-.003	.020	-.008	.018
Bush Satisfaction	-.001	.001	-.002	.004
Overall Satisfaction	-.001	.006	-.005	.010
Desire ⟶				
Clinton Satisfaction	.007	.008	.017***	.007
Bush Satisfaction	.000	.003	.000	.001
Overall Satisfaction	.002	.002	.010***	.004
For Bush				
Expectation ⟶				
Clinton Satisfaction	.004	.005	-.009*	.007
Bush Satisfaction	.023	.027	.005	.028
Overall Satisfaction	.004	.005	.004	.009
Desire ⟶				
Clinton Satisfaction	-.002	.002	-.001	.003
Bush Satisfaction	-.017	.014	-.025**	.015
Overall Satisfaction	-.003	.003	-.007**	.005

* Signifcant at .10 for 1-tail tests
** Significant at .05 for 1-tail tests
*** Significant at .01 for 1-tail tests

V-2.7. Summary of EOSM Results

To summarize, the EOSM appears to fit the data relatively well overall. In the Clinton voter group, there were fewer high modification indices or standardized residuals than in the Bush voter group. However, for the Bush voter group, the proportion of variance explained for each of the endogenous variables was greater than in the Clinton voter group. Most of the large modification indices and standardized residuals could have been eliminated had direct structural paths between antecedent variables and overall satisfaction been specified.

All four research hypotheses were supported to varying degrees. Strong support was found for research hypothesis #1, that multiple targets of satisfaction are relevant in the overall satisfaction formation process. Moderate support was found for research hypothesis #2, that the processing paths associated with each target are structurally related via cross-over paths. Moderate support was found for research hypothesis #3, that dissatisfied voters process more extensively than do satisfied voters. Finally, strong support was found for research hypothesis #4, that desires have greater total effects on satisfaction formation than do expectations.

V-3. Results of the Campaign Process Satisfaction Model

Results of the two-group analysis using the Campaign Process Satisfaction Model (CPSM) are presented in this section. First, differences between the two groups with respect to the variables included in the model are highlighted. Then, results of the LISREL analysis are presented. Next, results associated with research hypothesis #1 are described. Finally, additional observations about the model results are presented.

V-3.1. Differences Between the Two Groups (CPSM)

Although research questions specifically address the relationships between key variables, means and standard deviations of model variables are presented in Table 29 for completeness and to highlight differences between the groups.

Note that Clinton and Bush voters differ significantly on most variables included in the model. Clinton and Bush voters had similar expectations regarding Clinton's running an unfair campaign, and both groups made similar disconfirmation judgments regarding Clinton's performance on both campaign elements. The two groups differed on all measures regarding Bush's campaign except on the perceived performance of Bush's advertising effectiveness.

V-3.2. Results of the CPSM Two-Group LISREL Analysis

This section contains results of the Campaign Process Satisfaction Model (CPSM) two-group LISREL analysis. First, the correlation matrix for each group is presented. Then, overall and group-specific indicators of fit are provided.

The first half of Table 30 contains the CPSM correlation matrix for Clinton voters. Note that levels of significance appear below the correlations. The second half of Table 30 presents results for Bush voters in a similar format.

Overall, the model fit is acceptable. The appropriate overall fit index is chi square goodness-of-fit statistic. For this model, the chi square value was 117.63 with 72 degrees of freedom ($p = .001$)

Table 29
Campaign Process Satisfaction Model
Means and Standard Deviations of Each Group

	Clinton Voters		Bush Voters		p-values from
	Mean	Std. Dev.	Mean	Std. Dev.	t-tests[1]
For Clinton[2]:					
Expectations: ad. effectiveness	7.20	1.67	6.49	1.80	.010
Performance: ad. effectiveness	7.01	2.11	6.27	2.03	.020
Disconfirmation: ad. effectiveness	6.29	2.09	6.18	2.02	.707
Expectations: unfair campaign	4.70	2.26	5.26	2.65	.141
Performance: unfair campaign	3.84	2.38	4.63	2.96	.054
Disconfirmation: unfair campaign	4.55	2.17	4.61	2.20	.854
For Bush:					
Expectations: ad. effectiveness	5.55	2.02	6.53	1.84	.001
Performance: ad. effectiveness	4.26	2.33	4.69	2.20	.212
Disconfirmation: ad. effectiveness	4.17	2.06	3.54	1.96	.042
Expectations: unfair campaign	6.18	2.50	3.16	2.12	.000
Performance: unfair campaign	6.08	2.63	2.84	2.29	.000
Disconfirmation: unfair campaign	5.50	2.70	4.36	2.67	.000
Overall[3]:					
Disconfirmation: overall process	4.50	1.43	3.68	1.33	.000
Satisfaction: overall process	5.80	1.63	3.40	1.62	.001

1 p-values for t-test for H_0: $\mu_1 = \mu_2$.
2 10-point scales.
3 7-point scales.

Table 30
Campaign Process Satisfaction Model
Correlation Matrices

Clinton Voters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1.000													
2	-0.203	1.000												
	(0.079)													
3	0.046	0.276	1.000											
	(0.691)	(0.016)												
4	0.093	0.224	0.069	1.000										
	(0.426)	(0.053)	(0.553)											
5	0.302	-0.269	0.086	-0.375	1.000									
	(0.007)	(0.019)	(0.454)	(0.001)										
6	0.076	-0.142	-0.061	-0.494	0.615	1.000								
	(0.508)	(0.220)	(0.595)	(0.000)	(0.000)									
7	0.004	0.122	0.070	-0.005	0.281	0.374	1.000							
	(0.973)	(0.302)	(0.547)	(0.969)	(0.014)	(0.001)								
8	0.461	-0.062	-0.003	0.028	0.093	0.248	0.303	1.000						
	(0.000)	(0.592)	(0.976)	(0.812)	(0.421)	(0.029)	(0.008)							
9	0.017	0.369	0.043	0.266	-0.200	-0.415	0.122	-0.161	1.000					
	(0.885)	(0.001)	(0.710)	(0.022)	(0.083)	(0.000)	(0.295)	(0.164)						
10	-0.198	0.587	-0.006	0.130	-0.252	-0.270	0.062	-0.294	0.468	1.000				
	(0.087)	(0.000)	(0.958)	(0.263)	(0.028)	(0.018)	(0.601)	(0.010)	(0.000)					
11	-0.308	0.027	0.215	-0.064	0.012	-0.082	0.386	-0.060	0.180	0.009	1.000			
	(0.007)	(0.821)	(0.062)	(0.590)	(0.920)	(0.483)	(0.001)	(0.605)	(0.119)	(0.937)				
12	-0.200	0.235	0.442	-0.075	-0.093	-0.069	0.090	0.134	-0.034	0.087	0.348	1.000		
	(0.080)	(0.041)	(0.000)	(0.520)	(0.416)	(0.546)	(0.439)	(0.243)	(0.770)	(0.453)	(0.002)			
13	0.234	0.052	0.009	0.155	0.023	-0.116	0.157	0.081	0.506	0.184	-0.161	-0.078	1.000	
	(0.042)	(0.659)	(0.940)	(0.187)	(0.844)	(0.317)	(0.175)	(0.489)	(0.000)	(0.116)	(0.165)	(0.501)		
14	-0.056	0.350	0.116	0.644	-0.322	-0.290	0.083	0.028	0.259	0.258	-0.086	0.102	0.318	1.000
	(0.626)	(0.002)	(0.316)	(0.000)	(0.004)	(0.011)	(0.482)	(0.809)	(0.025)	(0.024)	(0.462)	(0.379)	(0.005)	

Endogenous Variables

1 Disconfirmation re: Clinton Advertising Effectiveness
2 Disconfirmation re: Clinton Unfair Campaigning
3 Disconfirmation re: Bush Advertising Effectiveness
4 Disconfirmation re: Bush Unfair Campaigning
5 Overall Disconfirmation
6 Overall Satisfaction with Campaign Process

Exogenous Variables

7 Expectation re: Clinton Ad. Effectiveness
8 Performance re: Clinton Ad. Effectiveness
9 Expectation re: Clinton Unfair Campaigning
10 Performance re: Clinton Unfair Campaigning
11 Expectation re: Bush Ad. Effectivenes
12 Performance re: Bush Ad. Effectiveness
13 Expectation re: Bush Unfair Campaigning
14 Performance re: Bush Unfair Campaigning

Table 30, continued

Bush Voters

1	1.000													
2	-0.062	1.000												
	(0.553)													
3	-0.033	0.115	1.000											
	(0.753)	(0.266)												
4	-0.061	0.259	0.080	1.000										
	(0.558)	(0.011)	(0.443)											
5	-0.113	-0.132	0.112	-0.051	1.000									
	(0.272)	(0.200)	(0.277)	(0.623)										
6	-0.077	-0.117	-0.012	-0.021	0.708	1.000								
	(0.454)	(0.255)	(0.907)	(0.843)	(0.000)									
7	0.070	0.036	-0.151	0.114	0.239	0.227	1.000							
	(0.496)	(0.725)	(0.143)	(0.270)	(0.018)	(0.026)								
8	0.567	0.062	-0.133	-0.005	-0.102	-0.038	0.149	1.000						
	(0.000)	(0.549)	(0.197)	(0.965)	(0.323)	(0.715)	(0.149)							
9	-0.057	0.219	-0.090	0.141	-0.014	-0.152	-0.110	0.135	1.000					
	(0.584)	(0.034)	(0.387)	(0.175)	(0.894)	(0.141)	(0.289)	(0.193)						
10	-0.007	0.351	-0.055	0.263	-0.200	-0.250	-0.065	0.147	0.497	1.000				
	(0.949)	(0.001)	(0.596)	(0.010)	(0.054)	(0.014)	(0.529)	(0.152)	(0.000)					
11	0.209	0.081	-0.015	0.002	-0.045	0.085	0.348	0.301	0.097	0.115	1.000			
	(0.041)	(0.432)	(0.884)	(0.985)	(0.659)	(0.405)	(0.001)	(0.003)	(0.349)	(0.263)				
12	0.112	0.082	0.444	0.181	0.061	0.146	0.086	0.076	-0.079	0.033	0.211	1.000		
	(0.275)	(0.432)	(0.000)	(0.079)	(0.555)	(0.156)	(0.406)	(0.463)	(0.450)	(0.749)	(0.039)			
13	-0.041	0.048	-0.117	0.274	0.096	-0.017	-0.003	0.049	0.302	0.166	-0.165	-0.264	1.000	
	(0.698)	(0.643)	(0.263)	(0.008)	(0.356)	(0.871)	(0.980)	(0.642)	(0.003)	(0.108)	(0.111)	(0.010)		
14	-0.119	0.144	0.087	0.531	0.051	-0.004	0.007	-0.125	0.114	0.408	-0.021	0.006	0.389	1.000
	(0.247)	(0.162)	(0.398)	(0.000)	(0.622)	(0.966)	(0.943)	(0.224)	(0.273)	(0.000)	(0.937)	(0.952)	(0.000)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Endogenous Variables

1 Disconfirmation re: Clinton Advertising Effectiveness
2 Disconfirmation re: Clinton Unfair Campaigning
3 Disconfirmation re: Bush Advertising Effectiveness
4 Disconfirmation re: Bush Unfair Campaigning
5 Overall Disconfirmation
6 Overall Satisfaction with Campaign Process

Exogenous Variables

7 Expectation re: Clinton Ad. Effectiveness
8 Performance re: Clinton Ad. Effectiveness
9 Expectation re: Clinton Unfair Campaigning
10 Performance re: Clinton Unfair Campaigning
11 Expectation re: Bush Ad. Effectivenes
12 Performance re: Bush Ad. Effectiveness
13 Expectation re: Bush Unfair Campaigning
14 Performance re: Bush Unfair Campaigning

Group specific indicators of fit are provided in Table 31. The goodness of fit (GFI) index for Clinton and Bush voters are .893 and .945, respectively. Squared multiple correlations for endogenous variables in the Clinton voter group range from .224 to .531, and the total coefficient of determination of the structural equations is 0.866. In general, these statistics are slightly lower for the Bush voter group: squared multiple correlations range from .049 to .546, and the total coefficient of determination for the structural equation is .697.

There are six modification indices greater than five for the Clinton voter group and two for the Bush voter group. A total of eleven standardized residuals lie outside the -2.0 to 2.0 range for the Clinton voters, while seven lie outside that range for the Bush voters. Although there are several standardized residuals outside the "acceptable" range in each group, an examination of their distribution indicates they are roughly normally distributed, with the exception of one outlier for the Clinton group (see Figure 20). The outlying residual and the large number of high modification indices and residuals indicate that the model may be misspecified for the Clinton group.

V-3.3. CPSM Two-Group Results Related to Research Hypothesis #1

The research hypothesis that multiple targets are relevant to the formation of overall satisfaction may be tested by examining the significant paths in the satisfaction formation process for Clinton and Bush voters. Of particular interest is the number of significant paths relating to candidate Bush among Clinton voters and relating to candidate Clinton among Bush voters. These are paths which would not be modeled in traditional satisfaction models.

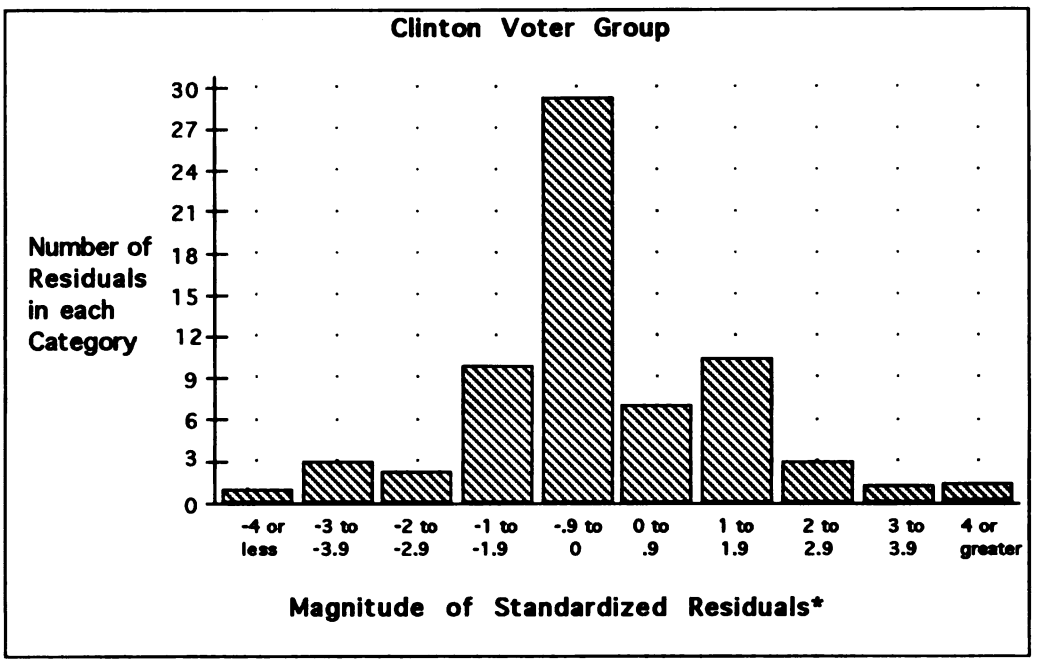
Table 31
Campaign Process Satisfaction Model
Within Group Indicators of Fit

	Clinton Voters	Bush Voters
Goodness of Fit Index	0.893	0.945
Total Coefficient of Determination for the Structural Equations	0.866	0.697
Squared Multiple Correlations for:		
Disconfirmation: Clin. Ad. Effectiveness	0.262	0.326
Disconfirmation: Clin. Unfair Campaign	0.354	0.119
Disconfirmation: Bush Ad. Effectiveness	0.224	0.215
Disconfirmation: Bush Unfair Campaign	0.419	0.292
Overall Process Disconfirmation	0.291	0.049
Overall Process Satisfaction	0.531	0.546
Modification Indices Over 5	six[1]	two[2]
Standardized Residuals:		
less than -2	six[3]	three[4]
greater than 2	five[5]	four[6]
Root Mean Square Residual	0.367	0.230

1 Five were for structural paths: BADDIS -> CADDIS (5.780), BUCDIS -> PROCSAT (12.372), PROCSAT ->BUCDIS (9.736), CADEX -> OVERDIS (9.114), and BADEX -> CADDIS (6.602).
2 They were: CADEX -> OVERDIS (7.637) and BADPER -> BUCDIS (5.069).
3 They were: CADDIS - BADDIS (-3.421), CADDIS - BUCDIS (-3.938), CADDIS - PROCSAT (-3.748), CADDIS - BADEX (-2.206), CADDIS - BADPER (-2.209), and BUCDIS - PROCSAT (-12.022).
4 They were: CADDIS - BADDIS (-5.412), BADDIS - PROCSAT (-3.065), and PROCSAT - CUCPER (-3.288).
5 They were: CUCDIS - BUCDIS (4.393), CUCDIS - PROCSAT (3.446), OVERDIS - PROCSAT (2.569), OVERDIS - CADEX (2.600), PROCSAT - CADEX (2.564).
6 They were: BADDIS - BUCDIS (3.124), OVERDIS - CADEX (2.374), PROCSAT - CADEX (3.950), PROCSAT - BUCEX (2.488).

ABREVIATIONS:

CADEX	Expectation re: Clinton Ad. Effectiveness	BADEX	Expectation re: Bush Ad. Effectiveness
CADPER	Performance re: Clinton Ad. Effectiveness	BADPER	Performance re: Bush Ad. Effectiveness
CADDIS	Disconfirmation re: Clinton Ad. Effectiveness	BADDIS	Disconfirmation re: Bush Ad. Effectiveness
CUCEX	Expectation re: Clinton Unfair Campaign	BUCEX	Expectation re: Bush Unfair Campaign
CUCPER	Performance re: Clinton Unfair Campaign	CUCPER	Performance re: Bush Unfair Campaign
CUCDIS	Disconfirmation re: Clinton Unfair Campaign	BUCDIS	Disconfirmation re: Bush Unfair Campaign
OVERDIS	Overall Disconfirmation re: overall process		
PROCSAT	Overall Process Satisfaction		



*NOTE: Value of residual in "-4 or less" category is -12.02.

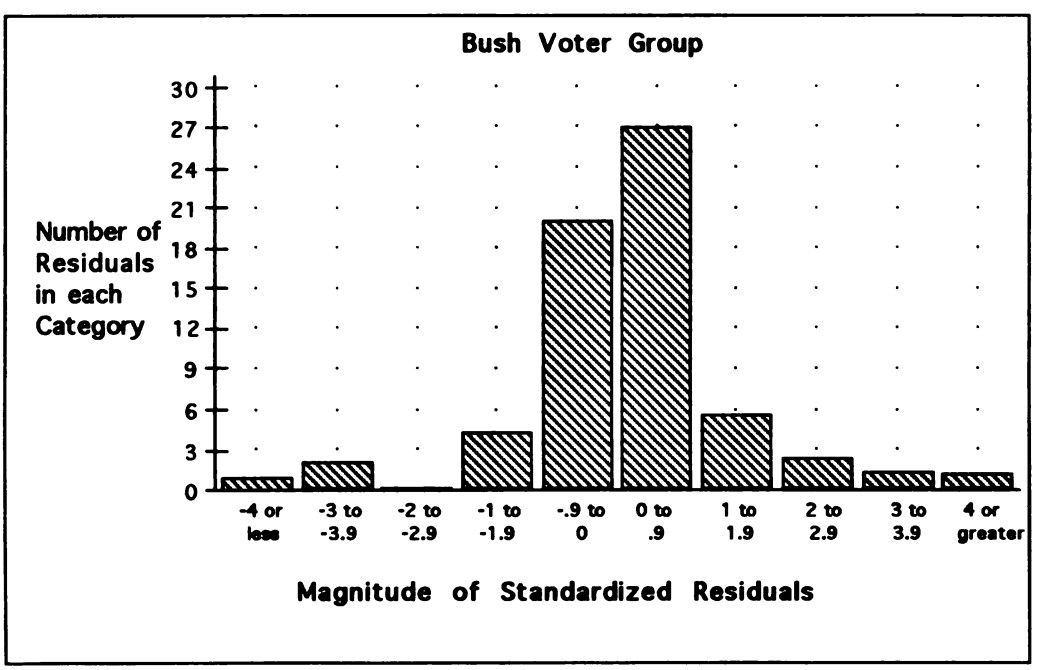


Figure 20
Campaign Process Satisfaction Model
Distribution of Residuals

Table 32 contains unstandardized path estimates and their associated standard errors for Clinton versus Bush voters. Error variances associated with the prediction of each of the endogenous variables is reported in Table 33. In addition, errors were expected to covary among the disconfirmation measures associated with each of the campaign elements. Therefore, the values of these covariances are also included in the table. Note that all the variances in both groups are significant at the .01 level, while 4 of the covariances among Clinton voters and 1 among Bush voters are significant.

Among Clinton voters, two paths from antecedent variables regarding Bush have a direct effect on Overall Satisfaction with the campaign process: Expectations of Bush's Advertising ($p < .01$, one tail test) and Bush's Unfair Campaign Performance ($p < .10$, one tail test). Further, among Clinton voters, both paths from disconfirmation regarding Bush's campaign performance have direct effects on overall disconfirmation: Bush Advertising Disconfirmation ($p < .10$, one tail test) and Bush Unfair Campaign Disconfirmation ($p < .01$, one tail test). Thus, four of six potential paths to overall measures from Bush-related measures are significant for Clinton voters. Among Bush voters, one path from an antecedent variable regarding Clinton has a direct impact on Overall Satisfaction: Expectations of Clinton's Unfair Campaign ($p < .10$, one tail test). In addition, the path from Disconfirmation of Clinton's Unfair Campaign to Overall Disconfirmation is significant ($p < .10$, one tail test). Therefore, two of six potential paths to overall measures from Clinton-related measures are significant for Bush voters. We conclude that research hypothesis #1 receives strong support from the CPSM analysis among Clinton voters, and moderate support among Bush voters.

Table 32
Campaign Process Satisfaction Model
Unstandardized Estimates and Standard Errors of Structural Paths

Structural Path	Clinton Voters Unstd. Estimates	Clinton Voters Std. Errors	Bush Voters Unstd. Estimates	Bush Voters Std. Errors
To Overall Satisfaction from:				
Overall Disconfirmation	.468***	.093	.847***	.086
Expectation: C. Ad. Effectiveness	.363***	.091	-.007	.069
Performance: C. Ad. Effectiveness	.033	.070	.018	.062
Expectation: C. Unfair Campaign	-.206***	.077	-.069*	.054
Performance: C. Unfair Campaign	-.005	.065	-.045	.050
Expectation: B. Ad. Effectiveness	-.155**	.082	.104*	.073
Performance: B. Ad. Effectiveness	-.002	.061	.052	.056
Expectation: B. Unfair Campaign	-.022	.064	-.003	.067
Performance: B. Unfair Campaign	-.075*	.054	.009	.062
To Overall Disconfirmation from:				
Disconfirmation: C. Ad. Effectiveness	.204***	.072	-.079	.068
Disconfirmation: C. Unfair Campaign	-.111*	.070	-.089*	.065
Disconfirmation: B. Ad. Effectiveness	.101*	.072	.086	.070
Disconfirmation: B. Unfair Campaign	-.200***	.053	-.018	.062
To Disconfirmation: C. Ad. Effectiveness from:				
Expectation: C. Ad. Effectiveness	-.155	.124	-.005	.097
Performance: C. Ad. Effectiveness	.542***	.098	.570***	.087
To Disconfirmation: C. Unfair Campaign from:				
Expectation: C. Unfair Campaign	.140*	.095	.027	.091
Performance: C. Unfair Campaign	.472***	.091	.242***	.081
To Disconfirmation: B. Ad. Effectiveness from:				
Expectation: B. Ad. Effectiveness	.153*	.106	-.128*	.101
Performance: B. Ad. Effectiveness	.362***	.091	.423***	.084
To Disconfirmation: B. Unfair Campaign from:				
Expectation: B. Unfair Campaign	-.110	.101	.080	.101
Performance: B. Unfair Campaign	.696***	.096	.502***	.093

* Signifcant at .10 for 1-tail tests
** Significant at .05 for 1-tail tests
*** Significant at .01 for 1-tail tests

Table 33
Campaign Process Satisfaction Model
Psi Matrix Results

Psi Matrix Elements [1]	Unstd. Estimate	Std. Error	Std. Estimate
(A) Clinton Voters			
Disconfirmation: C. Ad. Effectiveness	3.358***	0.558	0.782
Disconfirmation: C. Unfair Campaign	3.098***	0.515	0.647
Disconfirmation: B. Ad. Effectiveness	3.421***	0.568	0.834
Disconfirmation: B. Unfair Campaign	4.300***	0.716	0.699
Overall Disconfirmation	1.451***	0.241	0.764
Overall Satisfaction	1.123***	0.187	0.445
C. Ad. Effect. - C. Unfair Camp.	-0.679**	0.387	-0.150
C. Ad. Effect. - B. Ad. Effect.	0.852**	0.411	0.203
C. Ad. Effect. - B. Unfair Camp.	0.794**	0.456	0.154
C. Unfair Camp.- B. Ad. Effect.	0.890***	0.396	0.201
C. Unfair Camp.- B. Unfair Camp	-0.118	0.429	-0.022
B. Ad. Effect. - B. Unfair Camp.	0.319	0.452	0.064
(B) Bush Voters			
Disconfirmation: C. Ad. Effectiveness	2.755***	0.409	0.642
Disconfirmation: C. Unfair Campaign	4.222***	0.628	0.881
Disconfirmation: B. Ad. Effectiveness	3.029***	0.450	0.738
Disconfirmation: B. Unfair Campaign	3.653***	0.543	0.593
Overall Disconfirmation	1.695***	0.252	0.892
Overall Satisfaction	1.193***	0.177	0.473
C. Ad. Effect. - C. Unfair Camp.	-0.270	0.360	-0.059
C. Ad. Effect. - B. Ad. Effect.	0.057	0.304	0.013
C. Ad. Effect. - B. Unfair Camp.	-0.128	0.334	-0.025
C. Unfair Camp.- B. Ad. Effect.	0.448	0.379	0.101
C. Unfair Camp.- B. Unfair Camp	0.823**	0.422	0.151
B. Ad. Effect. - B. Unfair Camp.	-0.199	0.350	-0.040

(1) All other psi matrix elements were set to zero in both groups.

* Signifcant at .10
** Significant at .05
*** Significant at .01

Not only are more paths to overall satisfaction significant for Clinton voters than for Bush voters, for those paths which are significant in each of the two groups, the absolute value of each significant coefficient is larger for Clinton versus Bush voters. The common metric standardized solution, allowing for direct comparison of path magnitudes between the two groups, is provided in Table 34, Figure 21, and Figure 22. The path from Expectations of Clinton's Unfair Campaign to Overall Satisfaction has a common metric solution value of -.323 among Clinton voters versus a value of -.108 for Bush voters (significant difference at $p < .01$, 2-tail test). The path from Expectations of Bush's Advertising to Overall Satisfaction is -.188 for Clinton voters and .126 for Bush voters (significant difference at $p < .01$, 2-tail test).

In addition, when the expectations - overall satisfaction link is compared for each of the campaign elements in terms of choice versus non-choice candidates, Clinton voters had larger path coefficients in all three of the cases for which differences were significant. For Expectations of Advertising Effectiveness of choice candidate, Clinton voters had a common metric standardized path estimate of .399 with regard to Clinton while Bush voters had a path of .126 with regard to Bush. (significant difference at $p < .01$, 2-tail test). For Expectations of Unfair Campaign by choice, Clinton voters had a path coefficient of -.323 for Clinton while Bush voters had a path coefficient of -.004 (significant difference at $p < .01$). With regard to Expectation of Advertising Effectiveness for the non-choice, Clinton voters had a path coefficient of -.188 while Bush voters had a path coefficient of -.088 (significant difference at $p < .05$, 2-tail test). Expectations regarding unfair campaign are equal for the two groups.

Table 34
Campaign Process Satisfaction Model
Common Metric Standardized Solution

Path (n.s.=nonsignificant)	Clinton Voters	Bush Voters
To Overall Satisfaction from:		
Overall Disconfirmation	.406***	.735***
Expectation: C. Ad. Effectiveness	.399***	-.008
Performance: C. Ad. Effectiveness	.042	.023
Expectation: C. Unfair Campaign	-.323***	-.108*
Performance: C. Unfair Campaign	-.008	-.077
Expectation: B. Ad. Effectiveness	-.188**	.126*
Performance: B. Ad. Effectiveness	-.003	.074
Expectation: B. Unfair Campaign	-.032	-.004
Performance: B. Unfair Campaign	-.116*	.014
To Overall Disconfirmation from:		
Disconfirmation: C. Ad. Effectiveness	.306***	-.119
Disconfirmation: C. Unfair Campaign	-.177*	-.141*
Disconfirmation: B. Ad. Effectiveness	.149*	.127
Disconfirmation: B. Unfair Campaign	-.361***	-.032
To Disconfirmation: C. Ad. Effectiveness from:		
Expectation: C. Ad. Effectiveness	.131	-.004
Performance: C. Ad. Effectiveness	.540***	.568***
To Disconfirmation: C. Unfair Campaign from:		
Expectation: C. Unfair Campaign	.160*	.030
Performance: C. Unfair Campaign	.586***	.300***
To Disconfirmation: B. Ad. Effectiveness from:		
Expectation: B. Ad. Effectiveness	.145*	-.121*
Performance: B. Ad. Effectiveness	.403***	.474***
To Disconfirmation: B. Unfair Campaign from:		
Expectation: B. Unfair Campaign	-.101	.074
Performance: B. Unfair Campaign	.687***	.495***

* Signifcant at .10 for 1-tail tests
** Significant at .05 for 1-tail tests
*** Significant at .01 for 1-tail tests

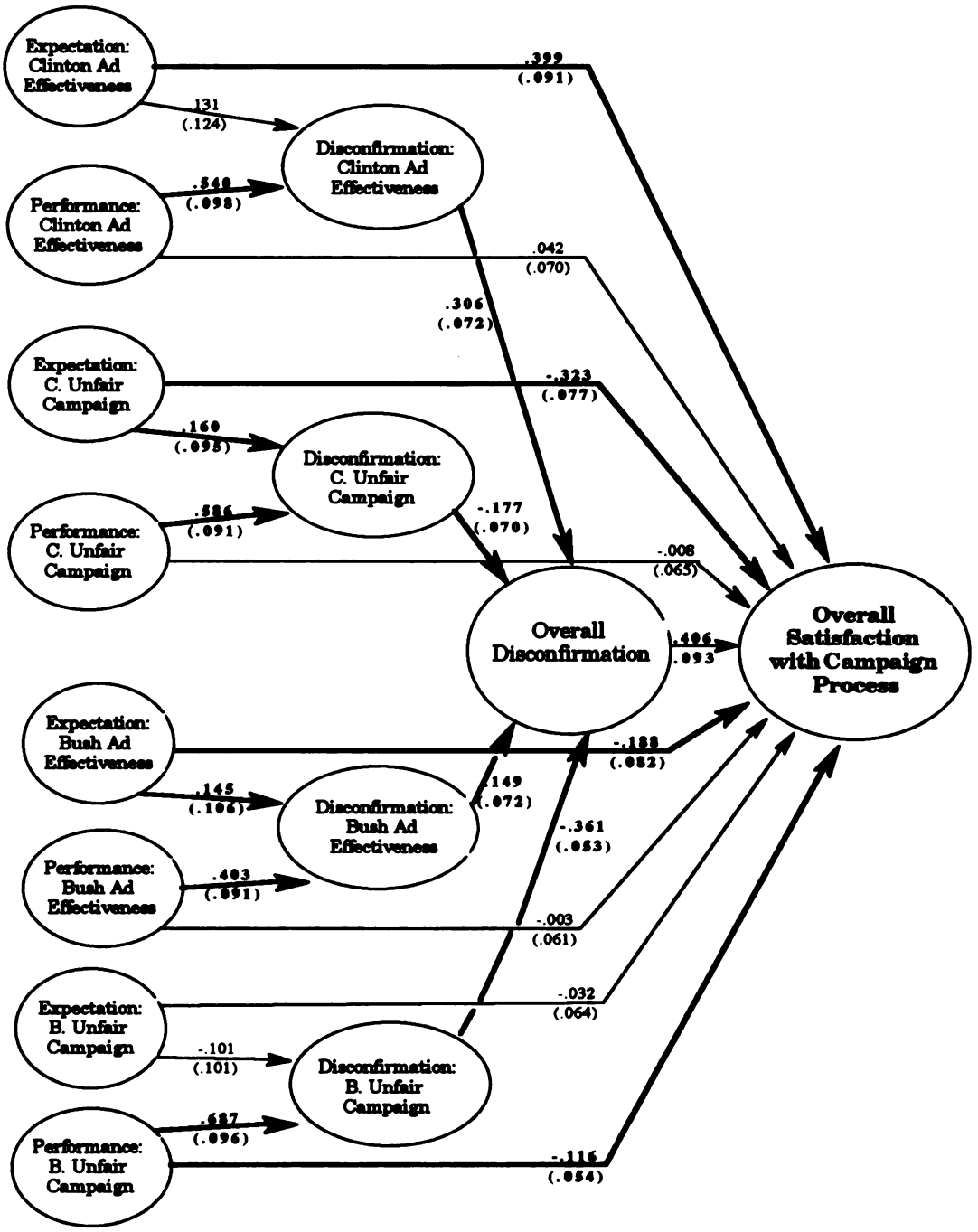


Figure 21
Results: Campaign Process Satisfaction Model
Clinton Voters

The first number for each path is the common metric standardized solution parameter estimate, and the second number is the associated standard error. Significant paths appear in bold.

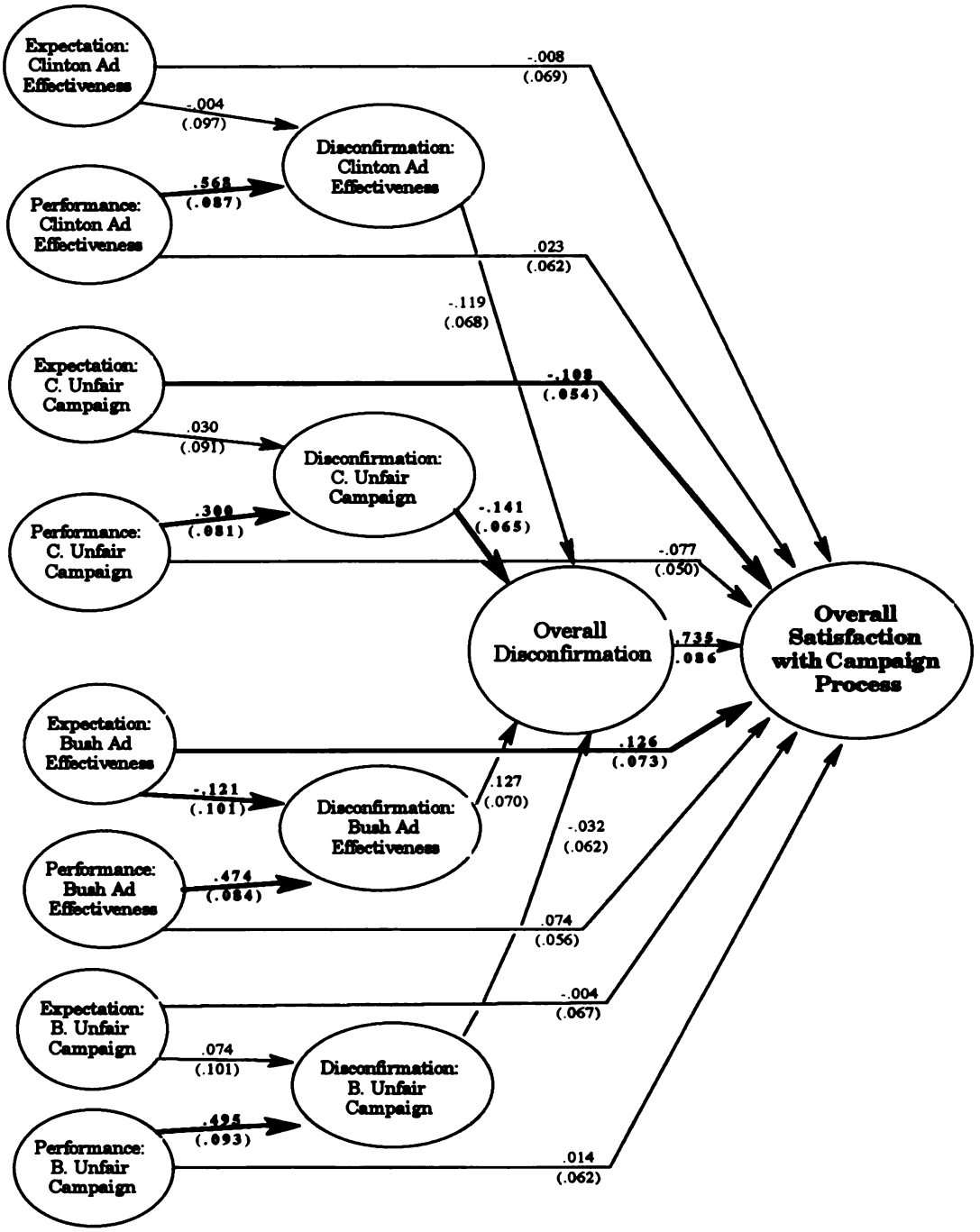


Figure 22
Results: Campaign Process Satisfaction Model
Bush Voters

The first number for each path is the common metric standardized solution parameter estimate, and the second number is the associated standard error. Significant paths appear in bold.

Further, among Clinton voters, there are significant paths from Bush Advertising Performance to Bush's Advertising Disconfirmation ($p < .01$), from Bush's Unfair Campaign Performance to Bush's Unfair Campaign Disconfirmation ($p < .01$) and from Bush's Expectation Advertising to Bush's Advertising Disconfirmation ($p < .10$). Among Bush voters, there are significant paths from Clinton Advertising Performance to Clinton's Advertising Disconfirmation ($p < .001$) and Clinton's Unfair Campaign Performance to Clinton's Unfair Campaign Disconfirmation ($p < .001$). These paths provide additional support for research hypothesis #1 by illustrating that each group processes antecedents related to their non-choice with respect to specific campaign elements.

V-3.4. Additional Observations from the CPSM Two-Group Analysis

In addition to results provided to test research hypothesis #1, the CPSM yielded two results not related to any research hypothesis but which are interesting because they are incongruent with previous satisfaction research findings:

1) The performance - satisfaction path is significant only for Clinton voters and only with regard to Bush's performance with respect to running an unfair campaign. The remaining seven possible performance - satisfaction paths are not significant. This finding is especially surprising given the strong support in the literature for the performance - satisfaction relationship.

2) For Clinton voters, the expectation - disconfirmation path for candidate Clinton is significant and positive with regard to unfair campaigns. The expectation - disconfirmation path for Bush's advertising effectiveness is

positive for Clinton voters. These findings are surprising because positive relationships between expectation and disconfirmation are uncommon empirically and are counter-intuitive. The positive relationship indicates that as expectations rise, the perception that performance exceeds expectations also rises.

Both these findings will be discussed in detail in the next chapter.

V-4. Results of the EOSM LISREL Analysis of Satisfied Clinton Voters and Dissatisfied Bush Voters

In order to test the research hypothesis that satisfied and dissatisfied subjects process differently, the EOSM was reanalyzed using only satisfied Clinton voters (n=70) and dissatisfied Bush voters (n=88). Under ideal circumstances, Clinton voters would have been divided into satisfied versus dissatisfied groups, and Bush voters would have been divided into satisfied and dissatisfied groups, and two separate 2-group analysis would have been performed. However, small sample sizes of dissatisfied Clinton voters (n =6) and satisfied Bush voters (n = 8) precluded such analysis. Comparing satisfied Clinton and dissatisfied Bush voter results is a relatively weak analysis because differences between the two groups may be due to factors relating to voting behavior rather than level of satisfaction. Differences between the entire Clinton voter sample and satisfied Clinton voter sample is of more interest as the effects of removing dissatisfied voters can be examined. Similarly, differences between the entire Bush voter sample and dissatisfied Bush voter sample is of interest as the effects of removing satisfied voters can be examined. Results of such an analysis may provide insight into the question of differential processing based on level of satisfaction by examining the

changes in structural paths which result when the respective samples are made more homogeneous. Therefore, results will be presented in a manner which will facilitate such comparisons.

In order to eliminate the possibility that paths would "disappear" simply because of a reduction in sample size, the analysis was performed with the same sample sizes specified as were used in the original EOSM analysis reported in Section V.2.

Results of the analyses are presented in three tables. In the first, Table 35, unstandardized path estimates and standard errors of the satisfied Clinton voters are presented next to the same information for all Clinton voters. In the next table (Table 36) similar information is provided for dissatisfied Bush voters and all Bush voters. Finally, in Table 37, summary information drawn from the previous two tables is presented. Results of this analysis which relate to research hypothesis #3 are presented in the next section. In addition, it is possible to reexamine research hypothesis #1 and research hypothesis #2 using results from these more homogeneous samples; results of these analyses appear in Sections V.4.2 and V.4.3, respectively.

V-4.1. Analysis of EOSM with Satisfied and Dissatisfied Voters - Results Related to Research Hypothesis #3

If Research hypothesis #3 is true, that is, if satisfied people process less extensively than dissatisfied people, one would expect fewer significant paths from pre-election variables to post-election variables, hereafter referred to as "pre - post paths," for the satisfied Clinton group relative to the total Clinton Group. This is because the total Clinton group includes some dissatisfied Clinton voters. In fact, the reverse is true: three such paths are significant

Table 35
Election Outcome Satisfaction Model
Unstandardized Estimates and Standard Errors of Structural Paths
Satisfied Clinton Voters Versus All Clinton Voters

Structural Path	Satisfied Clinton Voters Unstd. Estimates	Satisfied Clinton Voters Std. Errors	Clinton Voters Unstd. Estimates	Clinton Voters Std. Errors
To Overall Satisfaction from:				
Clinton Satisfaction	.219***	.082	.269**	.116
Bush Satisfaction	.109***	.061	.141*	.091
Clinton Disconfirmation →				
Clinton Satisfaction	.368***	.086	.376***	.095
Bush Satisfaction	.368***	.127	.297**	.132
Bush Disconfirmation →				
Clinton Satisfaction	-.074	.104	-.101	.112
Bush Satisfaction	.044	.154	.054	.158
Clinton Desires →				
Clinton Disconfirmation	.007	.010	-.001	.009
Clinton Satisfaction	-.011*	.007	.008	.007
Clinton Expectations →				
Clinton Disconfirmation	.002	.025	-.005	.023
Clinton Satisfaction	-.008	.017	.001	.018
Clinton Attitude →				
Clinton Satisfaction	.005**	.003	.003	.003
Bush Desires →				
Bush Disconfirmation	.011	.010	.016*	.009
Bush Satisfaction	-.022*	.015	-.018	.007
Bush Expectations →				
Bush Disconfirmation	-.016	.022	-.040*	.021
Bush Satisfaction	.031	.029	.025	.028
Bush Attitude →				
Bush Satisfaction	.003	.003	.003	.004

* Signifcant at .10, 1-tail test
** Significant at .05, 1-tail test
*** Significant at .01, 1-tail test

Table 36
Election Outcome Satisfaction Model
Unstandardized Estimates and Standard Errors of Structural Paths
Dissatisfied Bush Voters Versus All Bush Voters

Structural Path	Dissatisfied Bush Voters Unstd. Estimates	Dissatisfied Bush Voters Std. Errors	Bush Voters Unstd. Estimates	Bush Voters Std. Errors
To Overall Satisfaction from:				
Clinton Satisfaction	.415***	.063	.554***	.098
Bush Satisfaction	.253***	.075	.250***	.090
Clinton Disconfirmation →				
Clinton Satisfaction	.043	.058	.009	.066
Bush Satisfaction	.067	.068	.066	.070
Bush Disconfirmation →				
Clinton Satisfaction	.251***	.068	.288***	.077
Bush Satisfaction	.269***	.083	.307***	.085
Clinton Desires →				
Clinton Disconfirmation	.013	.010	.006	.010
Clinton Satisfaction	.011**	.006	.017***	.007
Clinton Expectations →				
Clinton Disconfirmation	-.032**	.019	-.028*	.019
Clinton Satisfaction	-.001	.010	-.007	.012
Clinton Attitude →				
Clinton Satisfaction	.003**	.001	.003**	.001
Bush Desires →				
Bush Disconfirmation	-.004	.006	-.004	.006
Bush Satisfaction	-.021***	.016	-.024***	.006
Bush Expectations →				
Bush Disconfirmation	-.033***	.013	-.031**	.014
Bush Satisfaction	.012	.011	.014*	.011
Bush Attitude →				
Bush Satisfaction	.001	.002	.001	.002

* Signifcant at .10, 1-tail test
** Significant at .05, 1-tail test
*** Significant at .01, 1-tail test

Table 37
Election Outcome Satisfaction Model
Summary of Differences in Model Results Using
All/Satisfied Clinton Voters and All/Dissatisfied Bush Voters

	Clinton Voters		Bush Voters	
	All	Satisfied Only	All	Dissatisfied Only
Total number of significant paths	6	7	10	9
Total number of paths significant at .01	1	3	6	6
Total number of significant paths from pre-election to post-election variables	2	3	6	5
Total number of significant path from pre-election to post-election variables significant at .01	0	0	2	2

for satisfied Clinton voters versus two significant paths for all Clinton voters. For satisfied Clinton voters, the following paths are significant: Clinton Desire to Clinton Satisfaction, Clinton Attitude to Clinton Satisfaction, and Bush Desire to Bush Satisfaction. For the total Clinton sample, two paths are significant: Bush Desire to Bush Disconfirmation and Bush Expectation to Bush Disconfirmation. Note that no pre-post path which is significant for the entire Clinton group is also significant for the satisfied Clinton group. Thus, removal of dissatisfied Clinton voters significantly altered all pre-post relationships. The implication is that the relationship among pre-post variables is significantly different for satisfied versus dissatisfied Clinton voters. Therefore, although the research hypothesis is not supported in terms of the number of significant paths in each group, the evidence supports the idea that satisfied people and dissatisfied people process differently.

Using similar logic, if research hypothesis #3 is true one would expect to observe more significant paths from pre-election to post-election variables for dissatisfied Bush voters relative to all Bush voters. However, fewer were observed (five versus six). For dissatisfied Bush voters, the following paths are significant: Clinton Desire to Clinton Satisfaction, Clinton Expectation to Clinton Satisfaction, Clinton Attitude to Clinton Satisfaction, Bush Desire to Bush Satisfaction, and Bush Expectation to Bush Disconfirmation. For all Bush voters, these same five paths are significant as is one additional path from Bush Expectation to Bush Satisfaction. That is, all five of the paths significant for the dissatisfied voter group were also significant for the entire voter group. The implication is that satisfied Bush voters are not very different from dissatisfied Bush voters in terms of pre - post variable relationships.

To summarize, we see that the dissatisfied Bush voter group had more significant paths (nine versus seven) and more pre - post variable paths (five versus three) than the satisfied Clinton voter group. Of the three significant pre - post paths for the satisfied Clinton group, one was significant at the .05 level and two were significant at .10. Of the five significant pre - post paths for dissatisfied Bush voters, three were significant at the .05 level and two were significant at .01.

Thus, research hypothesis #3 receives mixed support from this analysis. Strong support is provided by the finding that dissatisfied Bush voters do process more than satisfied Clinton voters while the shifts occurring within the Clinton and Bush voter groups does not support the research hypothesis.

V-4.2. Analysis of EOSM with Satisfied and Dissatisfied Voters - Results Related to Research Hypothesis #1

It is possible to once again to examine research hypothesis #1, that multiple targets are relevant in satisfaction formation, using these more homogeneous subsamples of Clinton and Bush voters. We saw in the previous section that the significant paths connecting pre - post variables differed for satisfied Clinton and all Clinton voters. If research hypothesis #1 is true, we would expect to see paths to overall satisfaction from satisfaction with each target in all subgroups analyzed.

Among satisfied Clinton voters (Table 35), the paths from both satisfaction with Clinton and satisfaction with Bush to Overall Satisfaction are significant ($p < .01$, 1-tail test). The major differences between the satisfied Clinton voter and all Clinton voter groups with regard to these paths are 1) that the path estimates are lower for the satisfied Clinton voters, and 2) that

the standard errors of each path estimate are lower for the satisfied Clinton voters. The net result is that each path is significant at a lower alpha level in the satisfied voter group. These relatively minor differences do not detract from the overall support for research hypothesis #1 provided by these results.

Among Bush voters (Table 36), the same pattern of relationships is evident between dissatisfied Bush and all Bush voters as was true among satisfied Clinton voter versus all Clinton voters. That is, the paths from both Clinton Satisfaction and Bush Satisfaction to Overall Satisfaction are significant for all Bush voters and dissatisfied Bush voters. Once again, the major differences between the two groups are 1) that the path estimates are lower for the dissatisfied Bush voters, and 2) that the standard errors of each path estimate are lower for the dissatisfied Bush voters.

In conclusion, analysis of both pairs of subsamples provides additional evidence in support of research hypothesis #1.

V-4.3. Analysis of EOSM with Satisfied and Dissatisfied Voters - Results Related to Research Hypothesis #2

It is possible to examine research hypothesis #2, that the processing paths related to the two targets are related via cross-over paths, using these relatively homogeneous subsamples of Clinton and Bush voters. As research hypothesis #2 does not specify differences based on level of satisfaction, we would expect to see all subgroups exhibit significant cross-over effects if research hypothesis #2 is true.

For Clinton voters, the cross-over path from Clinton disconfirmation to satisfaction with Bush remains significant ($p < .01$, 1-tail test) in the satisfied Clinton voter group, as it was among all Clinton voters. In addition, the cross-

over path from Bush disconfirmation to satisfaction with Clinton remains nonsignificant for the satisfied Clinton voters as it was with the all Clinton voter group. For Bush voters, too, the cross-over path from Bush disconfirmation to Clinton satisfaction remains significant ($p < .01$, 1-tail test) while the cross-over path from Clinton disconfirmation to Bush satisfaction remains nonsignificant for dissatisfied Bush voters.

In conclusion, analysis of both pairs of subsamples provides additional mixed evidence in support of research hypothesis #2.

Parenthetically, these results also support the contention made by Dröge and Halstead (1991) that, unlike satisfied consumers, dissatisfied consumers appear to be expectations-driven. In this analysis, expectations are not related to other variables for the satisfied Clinton group, while expectations are significantly related to consequent variables for both Clinton and Bush among dissatisfied Bush voters.

V-5. Results of the CPSM Correlation Analysis of Satisfied versus Dissatisfied Voters

To test research hypothesis #3, differential processing of satisfied versus dissatisfied respondents, additional analysis was performed using CPSM data. There was significant variance within each group of the CPSM analysis with regard to overall satisfaction (see Figure 23). Therefore, correlation analysis of satisfied versus dissatisfied respondents within each voter group was performed (small sample sizes precluded the use of structural path analysis, which would have been more appropriate for testing the research hypothesis).

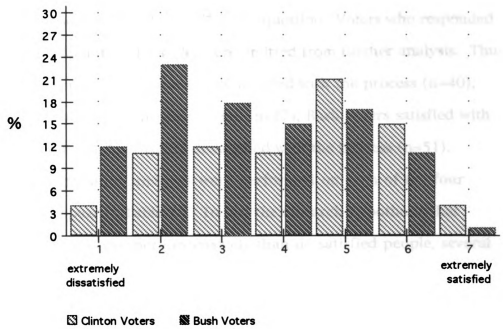


Figure 23
Overall Satisfaction with the Process (CPSM)

Dissatisfied voters were defined as those responding with a "1", "2" or "3" to the overall process satisfaction question. Satisfied voters were defined as those responding with a "5", "6" or "7" to the question. Voters who responded with a "4", the midpoint of the scale, were omitted from further analysis. Thus, four groups were created: Clinton voters satisfied with the process (n=40), Clinton voters dissatisfied with the process (n=27), Bush voters satisfied with the process (n=29) and Bush voters dissatisfied with the process (n=51).

Separate correlation analyses were performed on each of the four groups. Results appear in Table 38. To test the research hypothesis that dissatisfied people process more extensively than do satisfied people, several simple counts of significant correlations (within each of the four groups) were made:

1) Total number of correlations significant at the .10 level;
2) Total number of correlations between any variable and overall satisfaction; and
3) Number of significant correlations between pre-election and post-election variables.

Since simple correlations indicate two variables are linearly related, they are interpreted here as evidence of systematic processing by the relevant homogeneous subsample. A summary of the counts of significant correlations and some proportions based on the counts is presented in Table 39.

Several observations from the table address research hypothesis #3. First, given the hypothesis, we would anticipate that there would be more significant correlations among dissatisfied voters than among satisfied voters. While there are slightly more significant correlations for dissatisfied versus satisfied Bush voters (23 versus 17), the reverse is true among Clinton voters

Table 38

Campaign Process Satisfaction Model
Subgroup Correlation Matrices

Satisfied Clinton Voters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1.000													
2	0.112	1.000												
	(.490)													
3	-0.171	0.396	1.000											
	(0.306)	(0.014)												
4	0.292	0.219	0.426	1.000										
	(0.071)	(0.180)	(0.008)											
5	0.331	-0.089	-0.393	-0.152	1.000									
	(0.037)	0.585	(0.015)	(0.354)										
6	0.327	0.005	-0.266	-0.045	0.614	1.000								
	(0.039)	(0.974)	(0.106)	(0.788)	(0.000)									
7	0.175	0.128	-0.017	0.262	0.389	0.157	1.000							
	(0.285)	(0.437)	(0.921)	(0.112)	(0.014)	(0.339)								
8	0.616	-0.044	-0.180	0.364	0.084	0.114	0.165	1.000						
	(0.000)	(0.789)	(0.280)	(0.023)	(0.607)	(0.486)	(0.315)							
9	-0.187	0.269	0.021	-0.217	0.062	-0.240	0.400	-0.050	1.000					
	(0.255)	(0.098)	(0.903)	(0.191)	(0.709)	(0.141)	(0.012)	(0.762)						
10	-0.236	0.321	0.160	-0.095	-0.308	-0.253	-0.105	-0.010	0.290	1.000				
	(0.143)	(0.043)	(0.338)	(0.567)	(0.053)	(0.115)	(0.524)	(0.953)	(0.073)					
11	0.057	0.142	0.453	0.210	-0.054	-0.167	0.274	-0.111	0.212	-0.181	1.000			
	(0.730)	(0.388)	(0.005)	(0.207)	(0.744)	(0.310)	(0.092)	(0.501)	(0.196)	(0.271)				
12	-0.340	0.083	0.531	0.052	-0.261	-0.194	0.176	-0.500	0.069	-0.018	0.567	1.000		
	(0.034)	(0.615)	(0.001)	(0.754)	(0.109)	(0.236)	(0.290)	(0.001)	(0.681)	(0.913)	(0.000)			
13	0.412	-0.023	-0.020	0.086	0.110	0.051	0.087	0.243	-0.318	-0.179	0.418	0.112	1.000	
	(0.009)	(0.890)	(0.905)	(0.609)	(0.504)	(0.757)	(0.598)	(0.138)	(0.048)	(0.275)	(0.008)	(0.501)		
14	-0.042	0.115	0.498	0.661	-0.327	-0.215	0.089	0.137	-0.362	0.049	0.323	0.294	0.259	1.000
	(0.801)	(0.485)	(0.002)	(0.000)	(0.043)	(0.188)	(0.595)	(0.406)	(0.023)	(0.769)	(0.047)	(0.069)	(0.116)	

Endogenous Variables

1 Disconfirmation re: Clinton Advertising Effectiveness
2 Disconfirmation re: Clinton Unfair Campaigning
3 Disconfirmation re: Bush Advertising Effectiveness
4 Disconfirmation re: Bush Unfair Campaigning
5 Overall Disconfirmation
6 Overall Satisfaction with Campaign Process

Exogenous Variables

7 Expectation re: Clinton Ad. Effectiveness
8 Performance re: Clinton Ad. Effectiveness
9 Expectation re: Clinton Unfair Campaigning
10 Performance re: Clinton Unfair Campaigning
11 Expectation re: Bush Ad. Effectiveness
12 Performance re: Bush Ad. Effectiveness
13 Expectation re: Bush Unfair Campaigning
14 Performance re: Bush Unfair Campaigning

Table 38, continued

Dissatisfied Clinton Voters

1	1.000													
2	0.096	1.000												
	(0.633)													
3	-0.039	0.175	1.000											
	(0.846)	(0.382)												
4	0.110	-0.206	-0.423	1.000										
	(0.591)	(0.313)	(0.031)											
5	0.372	0.303	-0.019	0.015	1.000									
	(0.056)	(0.125)	(0.923)	(0.941)										
6	-0.220	0.141	0.246	-0.457	0.078	1.000								
	(0.270)	(0.484)	(0.215)	(0.019)	(0.698)									
7	0.032	0.101	0.361	0.026	0.059	-0.120	1.000							
	(0.874)	(0.618)	(0.064)	(0.899)	(0.769)	(0.550)								
8	0.512	0.224	0.058	-0.309	0.013	0.089	0.224	1.000						
	(0.006)	(0.261)	(0.773)	(0.125)	(0.949)	(0.658)	(0.262)							
9	-0.336	0.309	-0.080	0.094	0.158	-0.205	0.407	-0.235	1.000					
	(0.087)	(0.117)	(0.693)	(0.683)	(0.432)	(0.305)	(0.035)	(0.239)						
10	0.154	0.833	0.270	-0.353	0.371	-0.002	0.207	0.323	0.290	1.000				
	(0.442)	(0.000)	(0.173)	(0.077)	(0.056)	(0.993)	(0.993)	(0.100)	(0.143)					
11	-0.040	-0.117	0.307	-0.005	0.134	-0.392	0.475	-0.081	0.141	0.100	1.000			
	(0.844)	(0.562)	(0.120)	(0.981)	(0.505)	(0.043)	(0.012)	(0.688)	(0.482)	(0.621)				
12	0.132	0.083	0.531	0.052	-0.261	-0.194	0.203	-0.007	-0.182	0.051	0.226	1.000		
	(0.519)	(0.572)	(0.000)	(0.172)	(0.409)	(0.180)	(0.321)	(0.974)	(0.375)	(0.803)	(0.266)			
13	0.014	-0.064	0.180	0.149	0.077	-0.194	0.562	-0.005	0.202	0.066	0.735	0.195	1.000	
	(0.946)	(0.752)	(0.369)	(0.469)	(0.702)	(0.332)	(0.002)	(0.980)	(0.312)	(0.745)	(0.000)	(0.340)		
14	0.020	0.218	-0.041	0.602	-0.055	-0.286	0.260	-0.143	0.366	0.073	0.042	-0.079	0.433	1.000
	(0.922)	(0.274)	(0.840)	(0.001)	(0.787)	(0.147)	(0.190)	(0.478)	(0.06)	(0.716)	(0.836)	(0.701)	(0.024)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Endogenous Variables

1 Disconfirmation re: Clinton Advertising Effectiveness
2 Disconfirmation re: Clinton Unfair Campaigning
3 Disconfirmation re: Bush Advertising Effectiveness
4 Disconfirmation re: Bush Unfair Campaigning
5 Overall Disconfirmation
6 Overall Satisfaction with Campaign Process

Exogenous Variables

7 Expectation re: Clinton Ad. Effectiveness
8 Performance re: Clinton Ad. Effectiveness
9 Expectation re: Clinton Unfair Campaigning
10 Performance re: Clinton Unfair Campaigning
11 Expectation re: Bush Ad. Effectivenes
12 Performance re: Bush Ad. Effectiveness
13 Expectation re: Bush Unfair Campaigning
14 Performance re: Bush Unfair Campaigning

Table 38, continued

Satisfied Bush Voters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1.000													
2	-0.022 (0.909)	1.000												
3	-0.052 (0.789)	-0.029 (0.883)	1.000											
4	0.311 (0.101)	0.316 (0.095)	0.295 (0.120)	1.000										
5	-0.039 (0.842)	0.006 (0.978)	-0.023 (0.904)	-0.044 (0.821)	1.000									
6	0.030 (0.876)	-0.229 (0.231)	0.080 (0.680)	-0.181 (0.349)	0.350 (0.063)	1.000								
7	0.443 (0.016)	-0.401 (0.031)	-0.050 (0.798)	-0.008 (0.968)	-0.002 (0.992)	0.157 (0.386)	1.000							
8	0.526 (0.003)	-0.150 (0.438)	0.191 (0.320)	-0.023 (0.907)	0.143 (0.460)	0.229 (0.233)	0.617 (0.000)	1.000						
9	-0.012 (0.951)	-0.025 (0.898)	0.092 (0.635)	-0.148 (0.445)	-0.116 (0.551)	-0.013 (0.945)	0.300 (0.114)	0.256 (0.180)	1.000					
10	0.096 (0.62)	0.675 (0.000)	0.145 (0.453)	0.158 (0.415)	0.015 (0.938)	-0.117 (0.547)	-0.127 (0.513)	0.286 (0.133)	0.066 (0.732)	1.000				
11	-0.195 (0.312)	0.113 (0.561)	0.489 (0.007)	0.204 (0.288)	0.305 (0.108)	0.181 (0.347)	-0.131 (0.497)	0.078 (0.689)	0.119 (0.537)	0.107 (0.582)	1.000			
12	-0.143 (0.458)	-0.152 (0.431)	0.382 (0.041)	0.132 (0.496)	0.084 (0.664)	-0.041 (0.831)	-0.021 (0.915)	0.053 (0.786)	0.283 (0.137)	-0.109 (0.572)	0.425 (0.021)	1.000		
13	0.289 (0.128)	-0.291 (0.125)	-0.072 (0.712)	0.200 (0.297)	0.169 (0.381)	0.228 (0.234)	-0.077 (0.691)	-0.024 (0.902)	-0.324 (0.086)	-0.378 (0.043)	0.315 (0.010)	0.178 (0.355)	1.000	
14	0.130 (0.501)	-0.066 (0.733)	0.086 (0.656)	0.335 (0.076)	0.276 (0.147)	0.067 (0.728)	-0.089 (0.648)	0.182 (0.345)	-0.123 (0.526)	-0.019 (0.331)	0.320 (0.090)	0.638 (0.000)	0.563 (0.002)	1.000

Endogenous Variables

1 Disconfirmation re: Clinton Advertising Effectiveness
2 Disconfirmation re: Clinton Unfair Campaigning
3 Disconfirmation re: Bush Advertising Effectiveness
4 Disconfirmation re: Bush Unfair Campaigning
5 Overall Disconfirmation
6 Overall Satisfaction with Campaign Process

Exogenous Variables

7 Expectation re: Clinton Ad. Effectiveness
8 Performance re: Clinton Ad. Effectiveness
9 Expectation re: Clinton Unfair Campaigning
10 Performance re: Clinton Unfair Campaigning
11 Expectation re: Bush Ad. Effectivenes
12 Performance re: Bush Ad. Effectiveness
13 Expectation re: Bush Unfair Campaigning
14 Performance re: Bush Unfair Campaigning

Table 38, continued

Dissatisfied Bush Voters

1	1.000													
2	-0.069	1.000												
	(0.627)													
3	-0.080	0.211	1.000											
	(0.579)	(0.137)												
4	-0.282	-0.125	0.271	1.000										
	(0.045)	(0.382)	(0.052)											
5	-0.229	0.155	-0.086	0.029	1.000									
	(0.103)	(0.273)	(0.546)	(0.837)										
6	-0.180	0.172	0.004	0.265	0.542	1.000								
	(0.202)	(0.222)	(0.975)	(0.058)	(0.000)									
7	-0.112	-0.044	0.116	0.188	0.213	0.152	1.000							
	(0.430)	(0.759)	(0.413)	(0.182)	(0.126)	(0.277)								
8	0.505	-0.050	-0.011	0.079	-0.121	-0.108	0.043	1.000						
	(0.000)	(0.725)	(0.937)	(0.580)	(0.391)	(0.447)	(0.761)							
9	0.317	0.007	0.131	0.094	-0.217	-0.080	0.366	0.382	1.000					
	(0.022)	(0.923)	(0.354)	(0.509)	(0.119)	(0.568)	(0.007)	(0.005)						
10	0.303	0.203	0.175	0.194	-0.135	0.009	0.210	0.078	0.385	1.000				
	(0.029)	(0.149)	(0.219)	(0.173)	(0.341)	(0.948)	(0.136)	(0.581)	(0.005)					
11	0.062	-0.186	0.165	0.101	-0.106	-0.361	-0.089	0.306	0.162	-0.130	1.000			
	(0.667)	(0.196)	(0.251)	(0.484)	(0.461)	(0.009)	(0.533)	(0.031)	(0.258)	(0.367)				
12	0.226	-0.137	0.352	0.271	-0.225	-0.245	-0.052	0.396	0.176	0.121	0.558	1.000		
	(0.106)	(0.334)	(0.010)	(0.052)	(0.106)	(0.077)	(0.711)	(0.004)	(0.206)	(0.395)	(0.000)			
13	-0.255	-0.004	0.072	0.446	0.237	0.184	0.073	0.144	-0.019	-0.179	0.294	0.113	1.000	
	(0.074)	(0.977)	(0.620)	(0.001)	(0.095)	(0.197)	(0.612)	(0.308)	(0.896)	(0.213)	(0.036)	(0.430)		
14	-0.221	0.027	0.227	0.571	0.004	0.219	0.031	-0.078	0.082	0.072	-0.060	0.199	0.339	1.000
	(0.116)	(0.848)	(0.106)	(0.000)	(0.979)	(0.115)	(0.828)	(0.584)	(0.557)	(0.612)	(0.675)	(0.153)	(0.015)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Endogenous Variables

1 Disconfirmation re: Clinton Advertising Effectiveness
2 Disconfirmation re: Clinton Unfair Campaigning
3 Disconfirmation re: Bush Advertising Effectiveness
4 Disconfirmation re: Bush Unfair Campaigning
5 Overall Disconfirmation
6 Overall Satisfaction with Campaign Process

Exogenous Variables

7 Expectation re: Clinton Ad. Effectiveness
8 Performance re: Clinton Ad. Effectiveness
9 Expectation re: Clinton Unfair Campaigning
10 Performance re: Clinton Unfair Campaigning
11 Expectation re: Bush Ad. Effectivenes
12 Performance re: Bush Ad. Effectiveness
13 Expectation re: Bush Unfair Campaigning
14 Performance re: Bush Unfair Campaigning

Table 39
Campaign Process Satisfaction Model
Summary of Correlation Analysis

	Clinton Voters		Bush Voters	
	Satisfied	Dissatisfied	Satisfied	Dissatisfied
Total number of significant correlations	30	19	17	23
Total number of significant correlations between any variable and overall satisfaction	2	2	1	4
Total number of significant correlations between pre-election and post-election variables	8	4	7	10
Proportion of significant correlations accounted for by pre-election and post-electionvariables	.27	.21	.41	.43

(19 for dissatisfied versus 30 for satisfied voters). Second, if research hypothesis #3 is true, we would expect to see more significant correlations of any variable and overall satisfaction for dissatisfied versus satisfied voters. Again, for Bush voters, this is observed (four significant correlations for dissatisfied voters versus one for satisfied voters); also again, Clinton voters did not exhibit the hypothesized pattern (two significant correlations for each voter group). Third, one would expect to see more significant correlations between variables measured pre-election and variables measured post-election ("pre-post" correlations) for dissatisfied voters. This would provide the best indication of additional processing because the time difference between measurements of pre-election and post-election variables reduces the likelihood that factors other than processing are responsible for the correlations. Once again, dissatisfied Bush voters have more significant correlations than do satisfied Bush voters (10 versus 7), while satisfied Clinton voters have more significant correlations than do dissatisfied Clinton voters (8 versus 4). Finally, one might expect that the proportion of significant correlations accounted for by pre-post correlations would be higher for dissatisfied voters. The difference in these proportions between dissatisfied and satisfied Bush voters is very slight (.43 versus .41), while the difference in proportions for satisfied versus dissatisfied Clinton voters is slightly greater but in the opposite direction (.27 versus .21). Thus, these results provide, at best, weak support for research hypothesis #3.

To determine whether the counts observed in Table 39 were due to the differences in sample sizes among the four groups, the smallest significant correlation ($r = .24$) which was significant in the dissatisfied Bush voter group (the largest group) was used as a threshold on all four groups, and the analysis

was repeated. No differences in the pattern of counts or in the general conclusions resulted.

One possible explanation of these results, other than that satisfied and dissatisfied people do not process differently, is that overall campaign process satisfaction is less influential on processing than is the election outcome. Bush voters may be dissatisfied with the outcome of the election and this dissatisfaction, rather than satisfaction or dissatisfaction with the campaign process, may have dominated the determination of processing intensity. The difference between Bush voters and Clinton voters with respect to proportion of all correlations accounted for by pre-post correlations appears at first to support this explanation. If this explanation and research hypothesis #3 were both true, however, then Clinton voters satisfied with the process should have processed the least, which clearly did not occur.

Further discussion of this issue, including another possible explanation for the pattern of findings, appears in the next chapter.

V-6. Summary of Results Relating to the Research Hypotheses

In this section, selected results relating specifically to each research hypothesis are summarized and cross-referenced to other sections of the Results chapter. Note that a complete discussion of the results and their implications appear in the next chapter.

- *Research hypothesis 1: Multiple targets of satisfaction may remain salient post choice during satisfaction formation.*

Support for this hypothesis is found in 1) the EOSM using data from all Clinton and Bush voters (Section V-2.3), 2) the EOSM using data from satisfied Clinton voters and dissatisfied Bush voters (Section V-4.2), and 3) the CPSM using data from all Clinton and Bush voters (Section V-3.3). In both EOSM analyses, paths from both satisfaction with Clinton and satisfaction with Bush to Overall Satisfaction were significant for every group analyzed. Further, antecedent variables significantly impact consequent variables within the paths associated with each target, choice and non-choice, in the EOSM and CPSM analyses.

When one considers that the EOSM and CPSM use different variables and different structural forms, yet yield similar results with regard to this hypothesis, we can conclude that research hypothesis #1 is strongly supported. This finding is probably the most important contribution of this dissertation research as it clearly demonstrates that the traditional CS/D model with its focus on a single target is overly simplistic.

- *Research hypothesis 2: The processing paths associated with each of the multiple targets of satisfaction are interrelated, i.e. there are cross-over effects.*

Support for this hypothesis is found in the EOSM using data for all voters (Section V-2.4) and also using data from satisfied Clinton and dissatisfied Bush voters (Section V-4.3). In all four groups analyzed (Clinton voters, satisfied Clinton voters, Bush voters, dissatisfied Bush voters), the cross-over path from disconfirmation with the choice to satisfaction with the non-choice is significant while the cross-over path from disconfirmation with the non-choice to satisfaction with the choice is not significant. Thus, there is strong support for the existence of a cross-over effect, but the effect is not as extensive as hypothesized (i.e., there is no support for the disconfirmation with non-choice - satisfaction with the choice path).

In addition, there is evidence that cross-over effects not hypothesized specifically may occur elsewhere along the satisfaction formation paths. For example, in the EOSM, the single largest modification index (12.049) is for the non-modeled path Bush Expectation to Clinton Satisfaction among Bush voters (Table 24). In addition, several of the large standardized residuals are for cross-over relationships such as Bush Desire - Clinton Satisfaction (-3.225) and Clinton Desire - Bush Disconfirmation (2.489) among Bush voters, and Bush Attitude - Clinton Satisfaction (2.431) and Clinton Attitude - Bush Satisfaction (2.452) among Clinton voters.

Thus, while there is strong support for a cross-over effect, the exact nature and extent of such an effect cannot be resolved from these results alone.

- *Research hypothesis 3: Dissatisfied subjects process more extensively or completely than do satisfied subjects.*

Support for this hypothesis is found in the EOSM analysis of satisfied Clinton and dissatisfied Bush voters (Section V-4.1) and the EOSM analysis of all Clinton and all Bush voters (Section V-2.4). In both analyses, there are more significant paths associated with Bush voters and dissatisfied Bush voters than with Clinton voters and satisfied Clinton voters. In addition, in both analyses, there are more significant paths connecting variables measured pre-election and variables measured post-election for the dissatisfied groups. However, contrary to what one would expect given research hypothesis #3, the number of significant pre - post paths 1) increased when dissatisfied Clinton voters were removed from all Clinton voters, and 2) decreased when satisfied Bush voters were removed from all Bush voters. In short, the hypothesis is supported in that dissatisfied voters do process more than do satisfied voters, but it is not supported in that the minor changes which occur within each voter group as that group becomes more homogeneous are opposite to that hypothesized.

The CPSM correlation analysis (Section V.5) does not support the hypothesis in its current form, though it does support the idea that satisfied and dissatisfied voters process differently.

- *Research hypothesis 4: Desires have a greater impact on satisfaction formation than do expectations.*

Support was found for research hypothesis #4. Results of the total (direct and indirect) effects of both desires and expectations on the various satisfaction measures of the EOSM were directly compared in Section V-2.6.

Where differences between the two exist, desires appear to have greater effects than expectations on all three satisfaction measures. Further, we saw that a total of three high modification indices indicated relationships between desires and overall satisfaction while only one high modification index indicated a similar expectations - overall satisfaction link (Table 24). Thus, the hypothesis is supported.

Chapter VI
Discussion and Implications

The purpose of this research was to develop and test a model of satisfaction formation which explicitly accounted for the effects of both choice and nonchoice targets. Two models were specified and tested using data from the 1992 U.S. presidential election. Though not all hypothesized path relationships in each model are supported by the data, as a whole, the results provide moderate-to-strong support for each of the four research hypotheses. Detailed results, and brief interpretations, are presented in the previous chapter. In this chapter, the theoretical and practical implications of the findings are discussed, directions for future research are highlighted, and the research limitations are presented.

This chapter is organized as follows. In the next section, VI-1, the results and implications related to the first two research hypotheses are discussed. Together, these two hypotheses provide the framework for the competitive model of satisfaction formation. In Section VI-2, results and implications related to research hypothesis #3, differential processing associated with level of satisfaction, are discussed. In Section VI-3, results and implications related to research hypothesis #4, the relative importance of desires versus expectations, are discussed. In Section VI-4, other findings are discussed in relation to past research including: the relationship of expectations to disconfirmation and to satisfaction (VI-4.1), disconfirmation (VI-4.2), attitudes (VI-4.3), and the context of this research (VI-4.5). Limitations of the research are presented in VI-5. Finally, in VI-6, brief concluding remarks are presented.

VI-1. The Competitive Model of Satisfaction Formation

Because it is impossible to discuss separately the implications of multiple targets (research hypothesis #1) and the nature of their effects (research hypothesis #2), and because these two research hypotheses together provide the competitive model's structure, the discussion in this section addresses both hypotheses. The finding that multiple targets may be relevant to satisfaction formation is probably the most significant result of this dissertation. It implies that satisfaction formation is subject to competitive forces, at least in an election context. Further, it implies that the traditional model of satisfaction formation may be fundamentally flawed in the context of an election and perhaps in other situations.

First, it should be noted that the satisfaction formation model developed here does not require that competitive forces be included. For situations in which competition is not relevant, path values for all but the choice target may be specified as zero. For many applications, therefore, the currently accepted single target model may be utilized. However, for situations in which nonchoices remain salient post-purchase, the proposed model should be used with nonchoice paths estimated.

The multiple targets are relevant to the extent they affect the concept of "overall satisfaction." Consumers are ultimately attempting to satisfy some need or want, i.e., they are attempting to have a satisfying consumption experience. This dissertation has demonstrated that the concept of overall satisfaction is relevant and is the result of satisfaction with multiple competitive targets, at least in the context of head-to-head, zero-sum competition.

One powerful implication of an overall satisfaction construct is that it can account for competition even among competitive choices which are difficult to compare directly, such as "sequenced" choices. For example, assume someone wants to have a nice-looking lawn. He recognizes that he can cut his lawn himself or hire a lawn service to do so. He decides to cut the lawn himself and considers buying one of two lawn mowers, Brand A or Brand B. He selects Brand A. He is satisfied with the performance of his choice mower, especially given that a neighbor bought a Brand B mower and has had several problems with it. But, he is dissatisfied with his choice to select a mower at all, especially given that his other neighbor has hired a lawn service and thus has a better-looking lawn and more leisure time than does our subject.

The traditional satisfaction model would specify that satisfaction is the result of antecedents related only to the Brand A mower. The competitive satisfaction model as discussed thus far would add the antecedents of and "satisfaction" with the Brand B mower as well. However, this same model could be expanded further to include the antecedents of and "satisfaction" with the lawn service, too. Although the subject may be perfectly satisfied with the mower per se, overall he is less satisfied because the lawn service was not chosen.

We see that the model can be specified in a manner which mirrors the competitive reality in which the total consumption experience is occurring. From a managerial perspective, this enhances the usefulness of the model. As discussed earlier, traditional models attempt to incorporate competitive factors through the disconfirmation standard. However, even the most realistic of these, best brand norms and ideal brand norms, are product-related rather than consumption experience related. The Brand A mower manufacturer

using the traditional model would have no way of examining postconsumption processes in a meaningful way. The concept of overall satisfaction, coupled with the recognition that multiple targets can remain salient postchoice, provides a potentially powerful tool both theoretically and managerially. To take full advantage of this potential, future research needs to examine the degree to which non-comparable nonchoices can be included via the concept of overall satisfaction.

Finding support for the hypothesized cross-over effect in the EOSM is also extremely significant. Evidence of this effect suggests that the processes associated with each of the relevant targets are themselves interrelated. The traditional satisfaction literature treats competing products as being irrelevant or as being relevant as a comparison standard at a single point only (see Section II-3.5). For those models in which competing products are used as a comparison standard, the comparison is operationalized in the disconfirmation construct. The evidence here suggests that utilizing competing products in only this manner is overly simplistic. A person's perceived disconfirmation of a choice product may affect satisfaction with the choice and also with the nonchoice. That this is true in a head-to-head competitive situation is relatively easy to accept. For a Bush voter, whether Bush did better or worse than expected is directly tied to whether Clinton did better or worse than expected, so it is not surprising that disconfirmation of Bush's performance affects satisfaction with each candidate.

Awaiting further study is the issue of whether similar cross-over effects may also exist elsewhere along the processing path. For example, an examination of the EOSM modification indices reveals that freeing the path from Bush Expectation to Clinton Satisfaction would greatly improve model fit.

Also, it is likely that if perceived performance were included in a similar model (i.e., one without clear, objective and widely understood performance measures), there may be cross-over paths to or from it. For example, what one expects or desires to occur relative to one's choice may reasonably influence perceived performance of one's nonchoice. Likewise, perceived performance of one's nonchoice may affect satisfaction with one's choice, both indirectly through disconfirmation as well as directly. Obviously, both theoretical and empirical attention is necessary with regard to this issue.

What is the practical meaning of such a cross-over effect in a non-zero-sum competitive context? In Section I-3, an example was used to illustrate the effect. A husband and wife each purchased a car at approximately the same time. They discussed their selection process and each formed expectations and desires regarding their own choice and the choice of the spouse (their "nonchoice"). They each usually drive their own car but occasionally drive (and often ride in) their spouse's car. If the husband is asked his level of satisfaction with his car, it seems reasonable that, in addition to his perceived performance and disconfirmation related to his own car, his disconfirmed expectations of his wife's car would affect his satisfaction with his car.

One might argue that the husband has had extensive direct experience with his wife's car and therefore the situation is not typical of consumer products in general. Other forms of "experience" may provide enough information for a similar process to occur in other situations. Two categories of such experiences may be actual past experience or vicarious experience (Houston, Sherman, and Baker 1991). First, actual past experience with a competing brand may provide a salient nonchoice during satisfaction formation, especially if the current choice is a trial purchase. Second,

vicarious experience may also support powerful nonchoice processing. Seeing others drive a car you almost purchased, reading performance data about the car in Consumer Reports, seeing advertisements about the car, etc., all can reasonably support parallel nonchoice, postpurchase satisfaction processing. Of course, the situations under which interrelated processing occurs can be identified and delineated through empirical testing; however, it seems likely that such processes occur even when direct experience is absent.

Evidence of cross-over effects also has important managerial implications. For firms associated with the customer's choice (choice firms), opportunities for pre-emptive defensive marketing exist. Choice firms can manage customer satisfaction with the choice through customer service and quality control programs. They can also affect their customer's satisfaction with nonchoices. Immediately after making a choice, customers begin attempting to reduce dissonance caused by the act of choosing. Such dissonance occurs because of 1) positive aspects of the nonchoices, and 2) negative aspects of the choice (Festinger 1957). Some firms attempt to capitalize on this consumer tendency, reinforcing the customer's decision by highlighting positive aspects of the choice postpurchase. The opportunity also exists for choice firms to take actions which reduce satisfaction with nonchoices, i.e., a form of "blocking." This topic has not been addressed and is in need of exploration. For example, for some products, providing customers (or specific segments of customers) with comparative information postpurchase may be more effective than simply saying "congratulations with your new purchase" in 1) increasing satisfaction with the choice, and 2) decreasing satisfaction with the nonchoice. Of course, such tactics have significant inherent risks similar to those associated with comparative

advertising; however, the potential payoff as a defensive tactic is significant enough to warrant further investigation.

Similarly, for firms associated with the customer's nonchoices (nonchoice firms) opportunities for offensive marketing may exist. The existence of cross-over paths imply that nonchoice firms should not focus only on competition during the consumer's decision-making period. Instead, competitive actions immediately following purchase of the choice should be considered. The message from this research is "don't wait until the customer is ready to purchase again." Nonchoice firms should attempt to counteract the tendency of consumers to reduce postpurchase dissonance. Specifically, they can try to increase the customer's attention towards negative aspects of the choice and towards positive aspects of the nonchoice. There is evidence that some firms have begun to do this. For example, food retailers have recently begun to offer a service to nonchoice firms at the checkout stand. If a consumer purchases brand A tomato soup, the consumer receives a cents-off coupon for purchasing brand B tomato soup within the next month. Such a strategy may be extended to nonprice elements of the marketing mix. Similarly, activities directed towards reducing satisfaction with the choice are beginning to appear. For example, an American automobile dealership near Flint, Michigan, has begun to market auto maintenance services via direct mail to purchasers of foreign-made automobiles. The featured message is: "foreign car dealers often overcharge for parts and service. Though you recently purchased a foreign car, consider having it serviced at an American car dealership." As relationship marketing arenas become more widespread, competition during postpurchase processes will be likely to increase; the

model presented here provides a framework for analyzing competitive forces during these processes.

Another area for future research is the examination of which nonchoices remain salient post-purchase. It may be possible to investigate empirically the contents of consumer choice sets, or at least those elements of the choice set which were most seriously considered, by identifying those nonchoices which remain salient in post-purchase processes. Knowledge of which nonchoices remain salient post-purchase would lead to questions of why some nonchoices remain important while others do not. Answers to these questions would be of critical interest to managers seeking to devise specific strategies for gaining competitive advantages in this important but under-researched competitive arena.

The extension of the model presented here to multiple nonchoices is theoretically straightforward but raises significant measurement problems. One potential problem with using this type of model is that data collection and analysis may be cumbersome if large numbers of nonchoices remain salient. To add one additional nonchoice increases the volume of basic data required by 50%. Adding two additional nonchoices would double the amount of data required. If multiple measures and/or multiple attributes are included, questionnaire length quickly becomes excessive. Also, as the number of salient nonchoices increases, the sample size required to estimate the model also increases quickly because the number of paths to be estimated increases more than arithmetically (if all theoretically relevant paths are included). For example, adding candidate Perot to the model in this dissertation would have resulted in the estimation of 27 paths for the EOSM (versus the 16 paths

currently estimated). Using the rule of thumb that a minimum sample size should be five times the number of paths to be estimated, the minimum n required for each group would increase from about 80 to about 135. So adding one candidate would have required an additional 110 subjects (assuming we were not also interested in Perot voters) and a questionnaire about 50% longer. Still, collecting sufficient data on one or two nonchoices is feasible and productive, and may be all that is required to address the majority of situations in which the traditional CS/D model is inadequate.

VI-2. Differential Processing

The results presented in Chapter 5 provide support for the research hypothesis that dissatisfied voters process more extensively than do satisfied voters. Strongest support comes from results associated with the EOSM; these results will be reviewed briefly here to introduce the subsequent discussion. Arguably, the number of paths linking pre-election and post-election variables is indicative of amount of processing (see Section III-2.3). Six of ten such paths are significant for Bush voters while two of ten are significant for Clinton voters (Table V-6). Somewhat surprising is the decrease in number of significant paths for Bush voters and the increase in number of significant paths for Clinton voters when each sample is made more homogeneous with regard to overall satisfaction.

Looking first at the Clinton voters, the fact that the Bush desires - disconfirmation and Bush expectation - disconfirmation paths both become nonsignificant when neutral and dissatisfied Clinton voters are removed indicates that these voters were disproportionately influenced by their focus on Bush, and especially by their expectations regarding Bush (note the

change in size of the parameter estimate from -.040 to -.016 in Table V-16). Note also that all pre-post paths shifted for the Clinton voter sample: neither path significant before removal of the neutral/dissatisfied Clinton voters remained significant. All the paths added were related to desires and attitudes, not expectations.

For Bush voters, the removal of satisfied and neutral voters had a different effect. Though one path went from being just significant to being just nonsignificant (the parameter estimate dropped from .014 to .012 while the standard error remained the same), the other two paths involving expectations experience slight increases in their unstandardized estimates and increases in level of significance. All significant paths following removal of satisfied/neutral Bush voters were also significant for the entire Bush sample. The implication is that, if anything, expectations were disproportionately more important to dissatisfied voters.

Collectively, these findings from the EOSM are consistent with the Dröge and Halstead (1991) contention that dissatisfied people are more expectations-driven than are satisfied people. It is also consistent with cognitive dissonance theory which would predict that dissatisfied voters probably experience dissonance and thus are motivated to attempt to reduce the dissonance by processing and reprocessing relevant cognitions. Satisfied voters do not experience dissonance among these cognitions and thus are not motivated to process.

It is tempting to speculate that an elaboration likelihood model (ELM) explanation of this phenomenon is relevant (Petty and Cacioppo 1986). Petty and Cacioppo state that people tend to process peripherally unless they have the ability and motivation to process centrally. It is likely that in the context

of a presidential election and this particular study sample, most respondents possess the ability to process the EOSM variables, so what separates those who do and do not process centrally must be motivation. Thus, from the results presented here, it appears that satisfaction/dissatisfaction may be a determinant of central versus peripheral processing.

The problem with this statement, of course, is that Clinton and Bush voters differ in ways other than simply their level of satisfaction/ dissatisfaction, and it may be one or more of these other differences which account for the differences in processing route. One such interesting difference, the one with the greatest potential to provide a theoretical explanation of differential processing route, is magnitude of disconfirmation. With regard to both Bush's and Clinton's performance, Bush voters have a greater absolute level of disconfirmation than do Clinton voters (where "absolute level of disconfirmation" is defined as the absolute value of the difference between mean disconfirmation and "4," the midpoint of the disconfirmation scale). Results of the EOSM analysis are consistent with both the disconfirmation and satisfaction/dissatisfaction explanation of processing route. That is, Bush voters are more likely to process extensively ("centrally") and both 1) are more dissatisfied, and 2) have greater absolute disconfirmation than do Clinton voters. However, if absolute level of disconfirmation and not satisfaction/dissatisfaction per se determine amount of processing, then a group which is satisfied and has greater absolute disconfirmation will process more than a group which is dissatisfied and has lower absolute levels of disconfirmation. The CPSM data allows us to examine this situation.

In the CPSM, Clinton voters have higher overall satisfaction and also slightly higher absolute value of disconfirmation. Thus, one might expect that

Clinton voters would exhibit greater processing than do Bush voters; in fact, such appears to be the case, as 15 paths are significant for Clinton voters, while 9 are significant for Bush voters (Table V-13). Also, there are more significant correlations among Clinton voters than among Bush voters (Tables V-19 and V-20).

Of course, the CPSM does not provide an ideal set of variables for testing this idea: though "satisfaction with process" is the relevant satisfaction variable for the model, it is likely that peoples' overall satisfaction is dominated by the election outcome. Thus, even Clinton voters dissatisfied with the process are likely to be satisfied overall while Bush voters satisfied with the process are likely to be dissatisfied overall. (This factor may be driving the high proportion of significant correlations attributable to variables paired with "expectations," the one pre-election variable in this model).

Investigating this issue further is beyond the scope of this dissertation. However, future research could address the issue by directly comparing high versus low absolute value disconfirmation treatments and high versus low satisfaction levels; such a comparison could best be accomplished using an experimental or quasi-experimental design.

Disconfirmation possesses a few characteristics which make it theoretically preferable to satisfaction as a determinant of processing route. Because it occurs prior to satisfaction in any causal model, it is more likely to be able to explain <u>why</u> processing is central versus peripheral. For a pre-post relationship to be significant, only the "post" variable is subject to adjustment post-performance (assuming the "pre" variable is actually measured pre-performance). Disconfirmation, the judgment of the performance - expectation relationship, is the most likely place such an adjustment could

occur. By the time satisfaction/dissatisfaction is formed, presumably all pre-post relationships have been established, and thus satisfaction/dissatisfaction does not determine processing path but can only function as a classification variable after the fact; i.e., something else is responsible for the differential processing and disconfirmation seems the most reasonable construct for performing this function.

It may be difficult to test this idea in a typical marketing context because of the difficulty of positively disconfirming expectations to the same extent they can be negatively disconfirmed. Expectations are generally high so there is a lot of "room" for performance to fall short of expectations, but little room to exceed expectations in most commercial settings. Because of this asymmetry, observations that dissatisfaction is associated with increased processing are indistinguishable from observations that high absolute value disconfirmation is associated with increased processing.

To address this issue well, the larger issue of what exactly disconfirmation is must be resolved. The multiple serious problems with both the conceptualization and operationalization of disconfirmation are discussed in Section II.3.5. There is strong evidence that disconfirmation of standards other than expectations (e.g., desires) is more appropriate theoretically and empirically (Cadotte, Woodruff, and Jenkins 1987; Spreng and Olshavsky 1993; Westbrook and Reilly 1983). The existence and maybe even the source of differential processing based on level of satisfaction/dissatisfaction can be addressed, but completely understanding the determinants of central versus peripheral processing route selection will probably have to wait until the questions surrounding disconfirmation are resolved.

The heightened relevance of expectations among dissatisfied Bush voters may also be due, in part, to an "inoculation" effect; that is, Bush voters may have artificially lowered their expectations of Bush in an attempt to moderate their ultimate level of dissatisfaction. Polls had consistently showed Bush to have less support than Clinton. Though data which would have shed light on this issue were not collected, such an effect would have been entirely consistent with regret theory.

VI-3. Total Effects of Desires versus Expectations

Expectations has long been a key antecedent variable in models of satisfaction formation (Czepiel and Rosenberg 1977; Miller 1977; Swan 1981). While desires is a relatively recent addition to the literature, it has strong theoretical and empirical support (see Section II-3.2). The purpose of research hypothesis #4 was to investigate the relative importance of these two variables on satisfaction formation.

From Chapter V, we see that, for both Clinton and Bush voters, desires have greater direct and indirect effects on all three satisfaction measures than do expectations. In addition, desires appears to provide unique explanatory power. One might expect that, especially in a political context, desires and attitudes would be highly correlated, but such is not the case in this research (desires - attitude correlations range from -.09 to .52).

Logically, this is not surprising. The use of expectations in satisfaction models, both independently and as a comparison standard for disconfirmation, has multiple conceptual problems (e.g., Cadotte, Woodruff, and Jenkins 1987; Spreng 1992; Tse and Wilton 1988). On the other hand, the case can be made that satisfaction is dependent, at least in part, on the extent to which

performance is consistent with desires (Spreng 1992; Boulding et al 1993). In addition, the modification indices for the EOSM indicate that the addition of paths from desires to other consequent variables may significantly improve the fit of the model.

Clearly, additional examination of desires as an antecedent variable in satisfaction formation is warranted. One important issue needing resolution is how desires differ from similar constructs, most notably, from ideals. Others have addressed the question (e.g., Spreng and Dixon 1992; Tse and Wilton 1988) but there has been no resolution which has been subjected to empirical verification. The distinction is complicated by the reality that people are usually faced with constrained choices. In this research, for example, given that Bush was the Republican nominee, is there any difference between "desiring Bush to win the election" and "Bush is the ideal candidate on the ballot to win the election?" On the other hand, under no constraints, wouldn't one desire the ideal? Again, in this context, it seems that many Republicans would "desire" a Reagan clone because that is their "ideal," while many Democrats would desire a Kennedy clone. If, as some suggest, the difference is the reality constraint, there should be no confusion as long as the constraints (or lack of constraints) are clearly understood.

The relatively low correlations between desires and attitudes is somewhat surprising. There are two possible explanations. First, attitude was measured as the summation of beliefs times importance for four attributes. Though there is strong support for selecting these four attributes, it is possible that other variables were salient to respondents. Desires, being operationalized generally, could be based on anything the respondents considered important. Second, the issue of reality constraints may be relevant.

The implicit standard for the belief component of attitude measurement is an ideal (i.e., the ideal candidate would receive a "10" on each belief measure). It is very likely that some voters rated a candidate low on a belief item, but still gave the candidate a high desires score because, given the limited choices, that candidate was the most desired. For example, Clinton voters may have rated Clinton low on a particular attribute (e.g., personal integrity) but still assigned him all 100 points in the desires question because they did not want Bush or Perot at all. Similarly, Bush voters could have rated Bush low on a particular attribute (e.g., domestic economy) but still assigned him all 100 points in the desires questions to indicate they did not want Clinton or Perot.

Finally, the issue of how best to measure desires needs to be resolved. Desires may refer to a "more is better" versus an "ideal point" attribute, and measurement scales may have to differ accordingly. Also, researchers should address whether "desired outcome" or "strength of desires" is the most appropriate construct for a given situation. While the desires scale used in this research may have been flexible, interpretation of responses is difficult in this regard. If a voter responded in terms of "desired outcome," a rating of 100 points implies he or she wanted the other candidates to receive 0% of the vote. Is this really the outcome desired? On the other hand, a response of 100 points in a "strength of desires" context implies the respondent felt no ambivalence towards the candidate. Both interpretations of a desires question -- desired outcome versus strength of desires -- are reasonable in different contexts, depending on the exact research question of interest. When "desired outcome" is the relevant construct and choice is binary, perhaps desires should be operationalized as a categorical choice. When "strength of desires"

is relevant (for example, if one is trying to assess how difficult it would be to change desires), a continuous scale seems to be the appropriate measurement tool.

Desires may be more congruent with the affective nature of satisfaction than are expectations. Some early researchers conceptualized satisfaction as a "judgment" implying that cognitive factors alone could account for the satisfaction formation process. Recently, however, satisfaction researchers have been focusing more and more on the affective dimension of satisfaction (e.g., Oliver and Westbrook 1991; Oliver and Mano 1993; Oliver 1993). Affective elements of anticipation may be more accurately captured with a "desire" construct than with an "expectation" construct. The findings presented in this study are consistent with such an interpretation.

To make the case that desires should be included as a "standard" antecedent variable in satisfaction formation models, the following should be demonstrated: 1) there are significant theoretical reasons for including desires as an antecedent variable, 2) "desires" are distinct from other antecedent constructs currently included in such models, and 3) there is empirical evidence that desires functions in this manner across multiple contexts. The first requirement was addressed in Chapter II. The second and third requirements are supported by the findings of this research. One important requirement for future research is to determine whether "desires" functions in its capacity as an important antecedent variable across a wide variety of contexts using multiple methods.

One important implication of this finding is that managers should not be urged to manage satisfaction by manipulating only expectations and performance quality. In addition to the obvious risk of "under-selling" a

product's benefits in a competitive environment, the focus on expectations (which are relatively easy to manipulate) versus desires (which are difficult to manipulate) is on shaky theoretical and empirical ground.

VI-4. Other Findings in Relation to Past Research

This section contains a discussion of the results of the current research which do not neatly fit into one of the research hypotheses but which are interesting when considered in relation to previous research.

VI-4.1. The Relationship of Expectations to Disconfirmation and to Satisfaction

The relationship between expectations and satisfaction in the competitive satisfaction model presented here is similar to the relationship described in the satisfaction literature. However, the signs of these paths illustrates a point often omitted in discussions of this relationship: the path is positive when the expectations refer to a desired trait and negative when the expectations refer to an undesired trait. In most previous research, expectations are usually expectations with regard to a desired trait, and so the relationship is hypothesized to be positive. In cases of head-to-head competition a trait may be desirable for both alternatives, undesirable for both alternatives, desirable for one's choice and undesirable for one's nonchoice, or undesirable for one's choice and desirable for one's nonchoice. In the process model, for example, advertising effectiveness was an element which was desirable for one's own candidate and undesirable for the opposing candidate. Thus, for Clinton voters, the relationship was positive with respect to Clinton's advertising effectiveness and negative with respect to Bush's

advertising effectiveness. The opposite is true for Bush voters. However, no one wanted Clinton or Bush to run an unfair campaign. Thus, the relationship between expectations and satisfaction was negative for both Bush and Clinton voters. In other words, a competitive model of satisfaction introduces an additional element of complexity even to relationships about which consensus exists.

Similarly, the relationship between expectations and disconfirmation appears to be more complex in this competitive model than in the traditional model. Expectations have been thought to affect satisfaction directly as well as indirectly through disconfirmation (Yi 1990) The expectations - disconfirmation relationship is generally thought to be negative, i.e., as expectations rise the judgment that performance meets or exceeds expectations decreases. Of the eight expectations - disconfirmation paths in the CPSM, five are significant; two of the five observed relationships are positive. The positive paths appear for campaign elements which logically are undesirable for a particular group. Specifically, Clinton voters probably would not want Clinton to run an unfair campaign, nor would they want Bush's advertising to be effective. In both cases, the positive expectations - disconfirmation path is paired with a negative expectations - satisfaction path, consistent with the current understanding of both direct and indirect effects of expectations on satisfaction (albeit with both signs opposite to those generally reported). For the two similar paths for Bush voters (expectation of Clinton's advertising effectiveness and its related disconfirmation, and expectation of Bush's unfair campaign and its disconfirmation), the signs are also positive, though the paths are not significant.

More puzzling, however, is the pattern of relationships of expectations - disconfirmation and performance - disconfirmation for these elements. In both cases, the performance - disconfirmation relationship is positive, too. These relationships seem to be illogical because they imply that people are more likely to judge that performance exceeds expectations the higher expectations are.

One possible explanation of this phenomenon is that the relevant "expectation" used to make the disconfirmation judgment differs for desirable versus undesirable elements. It is possible that retrieved expectations form the basis for disconfirmation judgments when an element is undesirable while actual expectations form the basis for the comparison for desirable elements. Alternatively, it is possible that both comparisons rely on retrieved expectations, but that retrieved expectations for desirable elements remain similar to actual expectations while retrieved expectations for undesirable elements decrease relative to actual expectations. Finally, it is possible that expectations for undesirable elements have a greater impact on perceptions of performance than do expectations regarding desirable elements. That is, high expectations for an undesirable element bias individuals to perceive performance as being "worse" (more undesirable) whereas the same does not occur for desirable elements. It is well-accepted that consumers "over value" negative information in decision-making processes (e.g., Mizerski 1982; Richins 1983); perhaps different satisfaction formation processes operate when negative elements are explicitly considered. Given recent fruitful work on the distinction between retrieved versus prior expectations (Dröge and Halstead 1991; Halstead 1993), future research should start with that distinction as a possible explanation of the findings reported here.

VI-4.2. Disconfirmation

Although not a focus of the dissertation, results do shed light on the utility of the disconfirmation model of satisfaction formation. Disconfirmation with each candidate's performance is a significant antecedent of satisfaction with the chosen candidate for both groups in the EOSM. Also, overall disconfirmation is the dominant predictor of overall process satisfaction in the CPSM. To this extent, the findings illustrate at least the predictive ability of disconfirmation. However, two caveats are necessary. First, because no subjective measures of performance are included, the strength of the disconfirmation - satisfaction relationship may be overstated in the EOSM. Second, while high in predictive ability, subjective disconfirmation lacks strong theoretical meaning. This problem is illustrated by the absence of links with variables which ought (theoretically) to be antecedent to disconfirmation in both the CPSM and EOSM.

One problem with the traditional CS/D conceptualization of disconfirmation is that the standard is only internal (e.g., expectations, desires) or only external (e.g., best brand, experience based norms). In other words, something important is excluded though there is strong theoretical and empirical support that both internal and external standards are relevant. With the proposed model, both internal and external factors are included in the satisfaction formation process.

Finally, after data were collected for this research, the concept of "desires congruency" was introduced to the literature (Spreng and Olshavsky 1993). This is basically a measure of the degree to which performance matches desires. In the present research, such a measure of congruency was not included, but a path from desires to disconfirmation of expectations was

estimated. This may have resulted in an inflation of the apparent effects of disconfirmation on satisfaction; in the future, the more theoretically-attractive construct of desires congruency should be included also, with it (and not disconfirmation) mediating the effects of desires.

VI-4.3. Attitudes

The significance of some attitude - satisfaction links in the EOSM has implications for the inclusion of attitude as an antecedent variable in future research. As discussed in Section II-3.3, despite the reasonable theoretical arguments for including attitude in satisfaction formation models, empirical support for including this construct has been weak or non-existent. In the EOSM, attitude towards Clinton was a significant predictor of satisfaction with Clinton among Bush voters (Table V-6). In fact, among Bush voters, attitude towards Clinton is a more important predictor of satisfaction with Clinton that is expectation or even disconfirmation. In previous satisfaction research, antecedents of satisfaction with nonchoices have not been included. Perhaps it is attitude towards nonchoices which is more relevant and that is why previous research has been unable to establish the relevance of attitude empirically. In addition, attitude towards Clinton was a significant antecedent of satisfaction with Clinton among satisfied Clinton voters only, indicating that the relationship between the two constructs may be complex (e.g., non-linear). For example, it is possible that voters with unfavorable attitudes toward Clinton were dissatisfied because he won, those with moderately favorable attitudes were satisfied because he won, and voters with extremely favorable attitudes towards Clinton were less satisfied because Clinton did not win by a very large margin, and in fact won with 43% of the vote. (The press

and Clinton critics immediately pointed out that Clinton had not received a "mandate" from the electorate.)

It is possible that the relationship between attitude and satisfaction was confounded in this context because people were voting as much against a candidate as they were for a candidate. Thus, it is possible that attitude towards a nonchoice may affect satisfaction with one's choice, and vice versa. Also, it is possible that attitudes are directly related to overall satisfaction, bypassing satisfaction with the candidate. There is some evidence this occurred. Among Bush voters, one modification index indicates model fit would be improved by adding a path from attitude towards Bush to overall satisfaction, though the path from attitude to satisfaction with Bush was not significant. The high standardized residuals associated with attitude - satisfaction covariances suggests that these relationships account for a large amount of the model's lack of fit. Finally, the simple correlations for EOSM indicate that 1) among Clinton voters, attitudes toward Bush are at least as strongly correlated with satisfaction with Clinton as are attitudes toward Clinton, 2) among Bush voters, attitudes towards Bush are nearly as highly correlated with satisfaction with Clinton as are attitudes towards Clinton, and that attitude towards Clinton and attitudes toward Bush are equally correlated with satisfaction with Bush, and 3) attitudes toward Clinton and Bush are both highly associated with overall satisfaction for Bush voters, but not for Clinton voters. Together, these results indicate the importance of measuring attitudes toward nonchoices in satisfaction research. From a managerial perspective, such a conclusion is not surprising. In many situations consumers' negative attitude towards a product or firm may play a significant, at times dominant, role in determining the choice set and/or specific nonchoices.

VI-4.4. Context of the Research

Though without precedent in the satisfaction literature, use of an election context for studying satisfaction has proven useful. The expected benefits of such a context (identified in Section I-5) did materialize. Specifically, variance was found in the satisfaction measures, an objective measure of performance did exist, expectations and desires were often different and could be measured on scales directly comparable with each other (and with the performance measure), "typical" antecedents of satisfaction proved to be useful, competitive dimensions of the context were clear, etc. While the study of satisfaction with the election results may or may not have inherent value to political marketers, its value for theory-testing appears clear. An important next step is to extend the analysis conducted here into a more traditional marketing context to begin to establish the external validity of key findings. First, situations which share certain competitive characteristics with an election should be studied. For example, sports event marketing or competitive bid situations in industrial marketing would be logical next contexts for studying post-purchase satisfaction formation processes. In both cases, competitive elements are obvious, choice sets are clear and known in advance, there is an objective measure of performance, pre-choice processing is likely to be widespread, and involvement is likely to be high. Assuming it is demonstrated that multiple targets and interrelated processes do operate in these more traditional contexts, the analysis could be extended further. For example, typical consumer goods could be studied. As long as nonchoices remain salient postchoice for any important consumer segment, the competitive model of satisfaction formation could be utilized.

VI-5. Limitations

There are several limitations to the work presented here. While most are the result of conscious trade-offs, and thus are balanced by associated strengths, it is worthwhile to enumerate the most significant of these limitations. Limitations fall roughly into three categories: limitations due to the research context, theoretical limitations, and methodological limitations. Each will be briefly addressed.

Limitations Due to Context

First, the context of a political election may involve process and dynamics very different from those found in more traditional marketing contexts. While high external context validity is not critical to the basic theoretical contributions of this dissertation, the non-traditional context does limit direct extrapolation of research findings to other contexts.

Theoretical Limitations

First, this dissertation does not attempt to resolve, or even address, the important conceptual or operationalization problems associated with any individual construct. Thus, it is subject to all the criticisms regarding construct validity found in the rest of the satisfaction literature. For example, the EOSM and CPSM models utilized the most common conceptualization of disconfirmation: subjective appraisal of the disconfirmation of predictive expectations. In Section II.3.5, the criticisms of this variable were discussed in detail. Disconfirmation was operationalized as it was in this study to facilitate comparison with previous research, though an alternative comparison

standard may have been more appropriate. Clearly this construct did not effectively mediate the effects of desires, as well as a desires congruency measure may have been able to.

Second, and more important, is the potential limitation resulting from the omission of other possible antecedent variables. Omission of antecedent variables from the EOSM, especially those which might logically be uncorrelated with satisfaction with Bush or satisfaction with Clinton, could result in model misspecification. For example, in an election context, the quality of information about each candidate could affect expectations and disconfirmation, and voters' satisfaction with information could also affect overall satisfaction (as demonstrated by Spreng 1992). Similarly, the recent intense interest in the role of affect on satisfaction formation (e.g., Westbrook and Oliver 1991; Mano and Oliver 1993; Oliver 1993) indicates that affect can have a powerful and unique effect on satisfaction formation; such potentially important antecedent variables were not included in this analysis.

Methodological Limitations

First, the field setting of the research made it impossible to tightly control for competing explanations of findings. This limitation affects all field studies to varying degrees. Given that this dissertation represents a first attempt at specifying the basic structure of a new model, it is impossible to evaluate the potential consequences of this limitation.

Second, the sample was not randomly selected from the general population. Again, this limitation is related to the external validity of research results. While convenience sampling is often accepted as adequate for theory development and theory testing (Calder, Phillips and Tybout 1981), non-

probability sampling schemes inhibit the generalizability of research findings beyond a particular sample. In this research, even though attempts were made to collect a sample which mirrored the electorate, inferences beyond the sample should be made cautiously.

Third, use of single item constructs poses a limitation in that measurement error cannot be estimated. One possible consequence is that path estimates are less accurate than they would be had it been possible to estimate measurement error.

The repeated calls for additional research and replicating key findings in more traditional marketing settings were motivated, in part, by these limitations.

VI-6. Concluding Remarks

The competitive model of satisfaction is based on the idea that alternatives considered during the decision-making process of choosing remain salient beyond the choice. Extending the explicit consideration of competition from decision-making processes, with its extensive theoretical and empirical literature to post-purchase processes, will help tie together the entire consumption process. While the "emerging dialectic" of buying and consuming (Oliver and Westbrook 1991) may yield useful micro-analytic insights into bits of consumer behavior, it seems critical to remember that the entire process of buying and consuming is ongoing and at least somewhat repetitive with choice processes flowing into post-purchase processes flowing into future choice processes, etc. This dynamic process perspective has begun

to receive attention in the literature (e.g., Boulding et al 1993), but certainly needs development.

Further, the potential contributions of this perspective to the emerging focus on relationship marketing is clear. As firms seek to establish ongoing relationships with their consumers, the firms are really trying to eliminate other products/services from consumer choice sets and to remain the only salient target postchoice. Within the firm, the roles of "marketing manager" and "customer service manager" are becoming blurred. For firms trying to attract consumers from a competitor, knowledge of how customers form satisfaction/dissatisfaction becomes just as valuable as how consumers make their choices in the first place, because in relationship marketing, the two blend together. Previously, tools for investigating the competitive nature of post-purchase processes did not exist in the satisfaction literature. Given the trends towards forging long-term ties with customers, such tools are bound to become important for both theoretical and managerial analyses.

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