

CONSUMER DURABLE GOODS: A REVIEW OF POST-PURCHASE ISSUES

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ABSTRACT

This paper discusses current literature on post purchase processes for consumer durable goods. Key issues covered are product use experience, consumer satisfaction/ dissatisfaction, complaining behavior, disposition of old products, and warranties. The paper concludes with a summary of research directions.

INTRODUCTION

As the field of consumer behavior moves through its own life cycle, the study of individual topics becomes more specialized -- approaching a niche strategy. In the study of post-purchase processes a dichotomy is evolving between products and services, with the evaluation of the service experience gaining in depth study. The argument that the evaluation of services differs from the evaluation of products might also be extended to differences among product categories, for example durables versus nondurables.

Durable goods are tangible goods which normally survive many uses. Examples include refrigerators and clothing (Kotler 1980). The distinction between durables and consumables is important as post-purchase processes for consumer durable goods differ significantly from those for nondurables. Durables tend to be expensive and consumers' experience with them (and the stream of benefits delivered) typically spans a long period of time. Thus, the processes of long term post-purchase evaluation, complaining behavior, old product disposition, etc. are likely to be different for durables than for nondurables. The post-purchase phase is critical from the marketers' perspective since it is here that long term profits are built.

Throughout the period of consumption, users evaluate the product or service. Attributions may be made to the particular item, brand, class of products, and so forth. Replacement decisions will be made based on the attitudes and expectations formed during the interpurchase interval.

Marketers who stress favorable post purchase evaluations are more likely to be considered for replacement purchases. In addition, positive word-of-mouth communications from these pleased consumers can result in additional buyers. Both phenomena translate into increased profits over the long run.

This paper reviews the literature in post purchase processes for durables with a primary focus on product use experience, CS/D, complaining, disposition and warranties.

PRODUCT USE EXPERIENCES

Having bought a durable product, the consumer then needs to *use* that product in order to gain the benefits for which it was purchased. Exactly how a consumer wants to -- and actually does -- use an item can provide the marketer with helpful information regarding product design, promotional appeals, and follow-up sales and service for customers (U.S. News and World Report 1988). For example, when consumers began to perceive the usefulness of citizen band radios for avoiding speed enforcement areas, the potential market was greatly expanded (Burger and Venkatesh 1979).

Similarly, as microwave ovens gradually penetrated the American market, both consumers and producers were educated as to post-purchase use processes. Consumers discovered that microwaves were not the "do everything" appliances they may have been led to believe and were, in fact, inappropriate for foods requiring browning. This led to the development of a new product class - combined convection/microwave ovens.

To this point, the academic literature has generally not addressed the issue of consumer learning processes in the course of product use. On the other hand, some producers have taken steps to learn from the usage habits of their customers. Originally, for example, videocassette recorders were thought to provide consumers with the opportunity to develop home libraries of

movies and television programs. When consumers instead began to rent movies and use their home recorders to time-shift viewing (watch a program at some time other than when broadcast), marketers began to stress programmability features that allowed recording without an operator as primary selling attributes for VCRs. Similarly, computer manufacturers and retailers are beginning to recognize that novices need more initial instruction than they currently receive. Press reports are rife with anecdotes about consumers using the mouse as a footpedal (as in sewing machines) or attempting to fax by "showing" documents to the computer screen.

DEVELOPMENTS IN CONSUMER SATISFACTION/DISSATISFACTION (CS/D) THEORY

The topic of CS/D has recently become one of the most studied issues in the field of consumer behavior. In general, researchers agree that the concept of consumer satisfaction/dissatisfaction refers to an emotional response to an evaluation of a product, store, or service consumption experience (Day 1983; Dube' and Schmitt 1991; Hunt 1977, 1983; Westbrook 1983; Woodruff, Cadotte, and Jenkins 1983). Satisfaction can be thought of as a feeling of "delight" and dissatisfaction a feeling of "disappointment" (Oliver and DeSarbo 1988).

Most experimental research on CS/D has studied simple non-durable products. This is the result of the experimenter's desire to create a complete "prepurchase-purchase-post-purchase" sequence within the experimental setting. Thus, the effects of properties peculiar to durables (e.g., extended usage experience, possible delays in the development of problems with the product, availability of 90-day warranties, etc.) have not been rigorously examined through consumer experiments.

Some related work has, however, been undertaken. For example, Churchill and Surprenant (1982) used a disconfirmation framework to investigate the possible differences between satisfaction with a durable and satisfaction with a non-durable. Working with the disconfirmation theory previously discussed, they varied people's expectations about, and perceptions

of, the performance of both a video disc player (a relatively novel item at the time) and a hybrid variety of high-blooming chrysanthemums. They found that the discrepancy between expectations and actual product performance (i.e., the measure of disconfirmation) predicted a consumer's level of satisfaction for the chrysanthemum (non-durable) quite well, as expected. Satisfaction for the video disc player (durable good), however, was related only to the actual level of product performance -- differential levels of expectations were not significant here -- (interpretation of this finding must be tempered, and it is discussed in a following section). Others have found similar effects for perceived performance (Tse and Wilton 1988).

A broader survey-based study (Day and Ash, 1979) also suggests some basic differences between CS/D for durables and non-durables. Across a wide variety of durable and non-durable products and services, respondents were found to be more inclined to select extreme CS/D responses ("quite satisfied" or "quite dissatisfied") for durable products but more moderate responses ("somewhat satisfied" or "somewhat dissatisfied") for nondurable products and services. For example, 55% of the consumer durables received extreme responses, against 38% of non-durables, and 43% of the service categories. The authors suggest that these findings might reflect the relative importance of the consumption classes to consumers. However, given the survey design it is also possible that the stronger responses for consumer durables might also reflect a difference in the length of time over which strong CS/D feelings linger (e.g., Oliver and Swan 1989b).

An excellent review of various models of satisfaction including the disconfirmation of expectations paradigm as well as variations based on norms, a multiple process model, attribution, affect and equity models is provided by Erevelles and Leavitt (1992). The authors posit situations in which each of the models seem appropriate.

From the discussion above it is clear that the measurement of satisfaction is a crucial, much-debated issue. Westbrook (1983) and Westbrook and Oliver (1991) have pointed out that satisfaction is an emotional response, and should be reflected through measures of emotions. This reflects an interpretation of satisfaction as a separate cause of

such important behaviors as positive or negative word-of-mouth, brand loyal purchasing, and complaints or compliments being issued to marketers. Preliminary investigations (using surveys of automobile owners) suggested that four types of emotion seem to be related to ownership experience: 1) anger, unhappiness; 2) enjoyment, interest; 3) guilt, shame; 4) surprise. Correlations between measures of these emotions and a variety of satisfaction measures showed that good indicants of the response to all of these emotions were: 1) consumer's estimates of the subjective probability, "If you had it to do over, how likely is it that you would repeat the decision;" and 2) a 11-point graphic measure ranging from "completely satisfied" to "not at all satisfied." Thus, there is promise in measuring consumer satisfaction by measuring consumer's emotions about specific products and purchases.

One major problem with research in consumer satisfaction has long been the lack of agreement as to what satisfaction is and how it is to be measured. A recent review identified over thirty different measurement scales, each purporting to measure satisfaction or some aspect of satisfaction (Hausknecht 1990). Although there is a consensus that the post-purchase period encompasses interesting phenomena, the nature of exactly what intervenes during this time is not as well agreed upon. Although some authors agree with the position that attitude and satisfaction are synonymous (Ortinau, 1982), most distinguish the two.

According to Westbrook (1977), nearly all the studies reported in the satisfaction literature use a form of dissatisfied-satisfied continuum. Unfortunately, these scales are not perfect for the measurement of satisfaction. One potential problem stems from the fact that, having been presented with a question in an experiment or a survey, a consumer is likely to do his/her best to respond, rather than leave it blank. When overt satisfaction or dissatisfaction is present for the person, this does not present a problem. However, it is possible that little or no satisfaction (or dissatisfaction) emotion is present when a particular questionnaire is administered. This could be because so much time since purchase has elapsed that satisfaction is no longer felt. Even so, however, a consumer attitude may linger

(Westbrook 1977). In this case the conceptual distinctiveness of satisfaction and attitude is lost, as respondents may choose a position on a satisfaction scale based on their post-purchase attitude.

From the marketer's perspective, if it is deemed desirable to manage the levels of satisfaction to optimize such behaviors as consumer word-of-mouth, then satisfaction, in addition to attitude, must be measured. Marketers who employ the same scales as have been used by academics may not be sufficiently sensitive to this problem of discriminability among measures. More typical industry practice is exemplified by the J.D. Powers and Associates Consumer Satisfaction Index - a measure that is dependent on the number of problems experienced with new automobiles and other durables (Carsky 1988).

Consumer satisfaction is not simply a feeling, it is a feeling with respect to a particular object or referent. For researchers, therefore, it is not sufficient to find that a person merely feels satisfied, it is necessary to specify that the person is satisfied with something. In order to base theory or strategy on measures of satisfaction, it is important that the measures tap appropriate object(s) of the satisfaction.

This is important for the marketer who wishes to optimize his or her own position within the distribution channel. A retailer, for example, may not wish to invest heavily in repair or warranty programs that may increase satisfaction with the brand (manufacturer), rather than consumer satisfaction with his or her store. A possible result of such mis-specification would be that the satisfied consumer reports to a friend about the "great brand X washer" she bought rather than the "great washer she got at store Y".

Aiello and Czepiel (1979) made an interesting distinction among three types of satisfaction: "system satisfaction" (based on operations of the institutional marketing system), "enterprise satisfaction" (based on complex product/service organizations such as retail stores), and "product/service satisfaction" (based on the consumption of a specific product or service). Although obviously related, these three sources are discriminable and often contribute to consumer satisfaction. Schindler (1988) also looks at a very specific attribute satisfaction, satisfaction with

price and Ackerman and Hawks (1992) focus on satisfaction with the comfort level of a mattress.

In a similar vein, Bernacchi, Kono and Willette (1980) focus on satisfaction with new automobile warranty service and the effect of this satisfaction on subsequent loyalty to the brand of automobile. Biehal (1983) elaborates this point by arguing that obtaining service from the dealer may create actual interdependence between item (automobile) and service satisfaction. Thus, although satisfaction with the two market goods (item and service) is discriminable, CS/D measures may not show independence.

Finally, when examining satisfaction for small business computers, Rao (1982) added a third type of satisfaction (in addition to item and service) -- that with software. In this context, software is ancillary to the computer but integral to the consumer's experience. Thus, the computer manufacturer must monitor satisfaction with the product's performance, the service available for it, and ancillary products (software) in order to determine what is influencing customer satisfaction with the bundle.

THE ROLE OF EXPECTATIONS IN CS/D

As noted in an early section in this paper, consumer expectations have a crucial role to play in the theory of consumer satisfaction. As noted, most of the studies on consumer satisfaction have used some variant of the disconfirmation paradigm, wherein satisfaction is related to the size and direction of the disconfirmation experience, and where disconfirmation is related to the person's initial expectation.

Consumer's expectations are themselves dynamic, however. Prior product experience, for example, should make expectations more realistic. The experience may be with the product in question or with similar, competing products. Either may provide cues from which to derive expectations during search (van Raaij 1991). Other forms of information search -- including discussions with friends or salespersons, reference to *Consumer Reports*, perusal of ads, brochures, etc. -- should likewise lead to more accurate expectations of product performance at the time a consumer makes his or her purchase. What, however, does the relationship between search and

satisfaction appear to be? Does more consumer information search lead to higher levels of consumer satisfaction?

Kennedy and Thirkell (1983) report data from a large Canadian survey which found that dissatisfaction with an automobile *increased* with the number of information sources consulted. They offered two possible explanations for this: 1) less experienced shoppers needed more help but still made poorer choices; and 2) after investing a great deal of effort, the extensive shoppers simply had higher expectations. Also, it is possible that the shoppers who engaged in more extensive search made more extreme evaluations on both ends because they were more involved with the purchase situation.

Support for this explanation was offered in a paper by Westbrook (1980), in which he reports finding more extreme levels of satisfaction with an automobile for those persons who engaged in only moderate search (versus high or low). He explains that low search may not do a very good job of locating a good product and may reflect almost a casual attitude toward the product which is not likely to generate strong feelings. On the other hand, high levels of search suggest much greater involvement with the product and purchase experience, but perhaps more difficulty in locating the correct "bundle" of attributes that would fulfill expectations. This could be due, in part, to consumers' inability to identify and invoke the appropriate schema for the product/purchase situation (Stayman, Alden and Smith 1992). This explanation is consistent with his findings for a product class (footwear) for which performance criteria are not usually objective and a large amount of search may be a reflection of unrealistic expectations.

Although the disconfirmation theory is dominant in the CS/D literature, a consumer's expectations are not universally employed. Mowen and Grove (1983), for example, look at satisfaction with an automobile purchase from an equity theory perspective. Equity theory contends that a person compares his own outcomes (and inputs) in a situation with those outcomes gained (or inputs invested) by another. Mowen and Grove found that "coming up short" in a purchase (compared to someone else who made a similar purchase) leads to dissatisfaction. While this

seems reasonable, the issue of specification appears relevant. For example, equity theory may well be appropriate when a consumer compares a "deal" with someone else, but would more likely be directed to satisfaction with the dealer or retailer than with the product or manufacturer.

CS/D AND THE ROLE OF TIME

Consumer satisfaction is dynamic, and is quite susceptible to changing over time (Peterson and Wilson 1992). Change may occur as new information about the product or purchase is acquired (Mowen and Grove 1983), or as the importance of various attributes is reconsidered (Kennedy and Thirkell 1983). A more complex sequence of CS/D change can also ensue when a consumer reacts to perceived dissatisfaction by complaining (either to the marketer or a third party), and then have a reversed CS/D reaction after the problem has been resolved (Andreasen 1977).

It is not sufficient, then, to ignore the role of time in CS/D research. Important events between purchase and measurement of satisfaction must be considered in order to reasonably interpret consumer satisfaction data. Also, it can not be simply assumed that a consumer's strong positive feelings of initial satisfaction will persist until the repurchase or replacement decision is made. A strong example of this can be found when considering the "ultimate durable," a house. Homeowners discriminate among sources of satisfaction feelings and may ultimately come to loathe what they had loved (Hausknecht and Webb 1991).

Unfortunately there are few data available which describe change in satisfaction within the context of a longitudinal study. Westbrook (1977) did report some discriminability in satisfaction based on: 1) whether the consumers were in the process of replacing, or had already replaced, an appliance, and 2) whether the unit that was being replaced was in working condition or not. It is of course possible that marketers have collected data on duration effects on CS/D, but have chosen not to report these in the literature.

For durable goods, of course, the difficulty in specifying an appropriate time of measurement is especially severe. By definition, durable goods are

expected to last for an extended period. "Thus, failure of durable products frequently comes as a surprise and usually imposes an unanticipated financial burden on the family unit" (Ash, Kennedy and Thirkell 1980, p. 131). So, although satisfaction with a durable may be high at the *beginning* of its useful life they may be much lower when an actual replacement is being considered (Westbrook 1977). (It is interesting to consider how strong a factor this might be in explaining the low brand loyalty for appliances that was found by Wilkie and Dickson 1985). This issue will be further discussed in our later section on Product Disposition.

OUTCOMES OF CONSUMER SATISFACTION/DISSATISFACTION

Positive feelings of satisfaction can have positive effects on word of mouth behavior (Swan and Oliver 1989). Pleased consumers contact the company with positive feedback (Resnik, Gnauck and Aldrich 1977), spread the "good news" among friends and acquaintances (Biehal 1983), or decide to repurchase and/or remain loyal (Bernacchi, Kono and Willette 1980). In general, however, such positive consumer actions have received less attention from researchers (and, apparently, marketers) than the seemingly more urgent negative reactions (see Perkins 1993).

We have already alluded to complaining as one result of feelings of dissatisfaction (complaining will be discussed in more detail below), but other consumer behaviors are also influenced by the feeling. For example, consumers may not seek redress from the marketer or some third party agency but may content themselves with "warning" friends and acquaintances about the trouble they have experienced. Some consumers may not even go that far, but rather decide that they will personally avoid the brand (or product class, etc. depending on where they attribute the locus of the feelings). This can have especially troublesome effects if the dissatisfaction feeling has resulted from failure at the end of the product's useful life. Bernacchi, Kono and Willette (1980) reported that approximately half of the respondents who were dissatisfied with warranty service on their automobile (approximately 10% of the sample) had decided not to repurchase from the same

manufacturer.

Much of the rapidly growing literature of consumer complaining has treated it as part of the consumer satisfaction/dissatisfaction process. Although dissatisfaction may not be as pervasive as negatively biased surveys would suggest (Bloemer and Poesz 1989), it is certainly more prevalent than would be indicated by the number of complaints received by marketers (Gersten 1991). By the time one consumer is sufficiently motivated to contact the company, others will have taken other actions in response to dissatisfaction which are invisible to the marketer.

Nevertheless, the number of complaints received historically has been used as an indicant of customer satisfaction. This assumes that the more intense the degree of felt dissatisfaction, the higher the probability that the consumer will complain. Perhaps this attention is due to the vividness and apparent urgency of personal communication between customer and firm. It is necessary to recall, however, that actually voicing a complaint is only one (and perhaps the most extreme) alternative behavior available to the dissatisfied customer.

Therefore while it is probably true that the level of dissatisfaction influences the likelihood of complaining (Bearden and Teel 1983), other factors such as value orientations and institutional barriers (Strahle, Hernandez, Garcia and Sorens 1992), personal predisposition to complain (Bearden 1983; Richins 1980; Robinson, Valencia and Beal 1982), attitude towards complaining (Halstead and Dröge 1991), consumer knowledge levels (Martin 1991), the perceived equity of the transaction (Swan and Oliver 1989), the perceived trade-off of costs versus benefits (Day and Ash 1979; Richins 1980), the perceived importance of the purchase (Landon 1977), and the locus of attribution of blame (Wilkie 1994) have also been suggested as determinants of the level of response. Again, as with satisfaction, individual personality or demographic characteristics do not appear to directly affect the choice of complaining response. Rather, such variables as past history of complaining or personal level of employment (i.e., opportunity cost of time) may alter one's perceptions of the benefits or costs, respectively, of complaining and therefore indirectly determine behavior (Richins 1983; Singh and Wilkes 1991).

The American marketplace has made complaining relatively easy to accomplish. Although most people are not aware of specific laws and regulations designed for consumer protection, many are fairly well aware of alternative channels of recourse (Dickinson and Shaver 1982). However, despite attempts to simplify the process consumers still cite triviality of the problem, personal procrastination, unlikelihood of redress or lack of knowledge of where to go as reasons for not complaining about even significant problems (Day and Ash 1979; Levy and Surprenant 1982).

Despite efforts to make channels of redress available to more consumers at all socio-economic levels (Lippert and MacDonald 1981), complaining is still relatively uncommon and seems to depend on the intensity of dissatisfaction (Prakash 1991) as well other factors mentioned in the previous section. Yet, some response to dissatisfaction on the part of the consumers (e.g. negative word-of-mouth, or personal boycott) is still quite likely (Rao 1982; Singh and Wilkes 1991). This suggests that, if some level of dissatisfaction is assumed to be inevitable, marketers should take action to increase the likelihood of complaint. When grievances are aired, redress is possible and customer loyalty may be maintained.

The major national study by Andreasen and Best (1977) revealed that only about 57% of voiced complaints in the case of consumer durables were resolved to the customer's highest satisfaction rates, presumably because business was more likely to resolve problems in order to maintain goodwill if the effort involved little or no outlay. Thus, it appears that there is a high level of unresolved dissatisfaction in the consumer marketplace. This has led to further attention to the manner in which complaints are handled at the company level.

Two key issues with complaint handling are the appropriateness of the remedy and the attitude in response. When the dispute is easily reduced to monetary differences, the amount and type of remedy can be readily agreed upon. When the difficulty is not financial, however, it can be more difficult for the company to select a satisfactory response (Gilly and Gelb 1982) and representatives may actually over-commit resources to resolve the dispute (Resnik and Harmon 1983). The finding

from the latter study highlights the necessity of determining perceived appropriateness before establishing company policies regarding complaints. We will return to this issue in the closing section of this paper.

PRODUCT DISPOSAL OR DISPOSITION

The final stage in a product's life occurs when the consumer *disposes* of it. This process can be more complex than we might first imagine. For example, there are three major options in product disposition: trash it, save it (either store it or repair it), find a new owner (sell or give it away).

Across all types of products there are substantial product differences in disposition modes. At one extreme, some products (especially foods) are disposed of during consumption itself. At the other extreme, consumer durables, used over periods of time, usually do face disposition decisions. Even here, however, substantial product differences in modes exist. DeBell and Dardis (1979), for example, compared disposal of washers with refrigerators and found that although about equal percentages were trashed, those that were not were handled quite differently. More washers were taken away by the dealer, while more refrigerators were used elsewhere by the consumer or given away. Part of this difference was attributable to the working condition of the appliance but part was also related to the comparative utility of owning multiple units of each appliance type.

The explosion of electronics and "smart" durables in the 1990's has exacerbated the disposition problem for consumers. Not only have the economics of the repair versus replace decision become even more skewed toward the latter, but obsolescence is playing an even larger role. For less money than it takes to repair an item bought even relatively recently, a consumer can purchase, brand new, an improved model with more features and functions.

Not all consumers dispose of durables early. Some purchase with the intention to keep the appliance a long time (Tippett, Magrabi and Gray 1978) and only replace the appliance when a breakdown occurs rather than undertake expensive additional repairs. According to the MSI appliance shopping study conducted by Wilkie and

Dickson (1985), most large appliance purchases were sparked either by breakdowns or operating problems with the existing machine.

While waiting for a breakdown may at first appear to be a reasonable consumer strategy, let us consider the question a bit further. For example, it may be that consumers are not sure whether to replace their appliances earlier, in part because they are not sure about how to dispose of them easily and receive value for them. In this sense, *an existing product, late in its life, presents a barrier to a new purchase* the consumer would otherwise be willing to make. Alert marketers may be able to overcome this barrier and increase overall product demand by attempting to move the disposition decision to an earlier point and time. This would seem especially likely for products that can be "traded up" for better features or new advances, such as computers and stereos.

Relatedly, Wilkie and Dickson (1978), also found that brand loyalty appeared to be quite low for major household appliance replacement purchases (that is, consumers were twice as likely to buy a different brand, than to continue with the same brand as had been owned). Could this be due to the fact that consumers are especially displeased with their product just at the time it has broken down? That is, Sears might have a much higher chance of selling another Kenmore refrigerator to the Smith's if they dispose of it in the twelfth year (while it is still working well) as opposed to the thirteenth year, after it has broken down.

This does not mean, of course, that a consumer is necessarily better off to dispose of old products earlier. On some occasions, however, this could be the case, as with new energy efficiency developments, new features in electronics and computers, new safety in tires, the timing of special price deals etc.. Thus, for both marketers and consumers, the issue of changing the timing of product disposition bears increasing attention. With some rapidly changing technologies, the concept of "durable" becomes questionable itself. Some consumers are leasing cars and computers because they do not wish to be making payments on hopelessly outdated products.

WARRANTIES

Prior to the disposition and replacement of a durable product, consumers expect a comparatively long useful life. Most manufacturers provide at least some warranty coverage for a portion of this period. How these practices affect consumer purchase and/or use behavior is not much studied in the literature (for overviews, see Kelley and Conant 1991 and Voss and Ahmed 1992). This is obviously an important issue for marketers of consumer durables, as it can be an important signal to consumers.

For example, in a survey reported by Wilkes and Wilcox (1981), of five microwave oven attributes, warranty was viewed as most important in determining respondents' relative attitude. Similarly, Meeks and Oudekerk (1981) found that over eighty percent (80%) of homebuyers expected newly built homes to be warranted by the builder (only 23% of the respondents reported having heard of warranties on existing homes - this difference may reflect respondents' views of their roles as purchasers of new homes and eventual sellers of existing homes). Finally, there is some suggestion that warranties and service under warranty may produce satisfaction responses to durables which may influence subsequent purchases (Ash et. al 1980; Bernacchi et. al 1980; Darden and Rao 1977).

For the most part, the purchase of a durable is a significant decision for a consumer. The uncertainty that arises after the excitement of the selection process can be reduced by providing reassurance that the manufacturer (or retailer) is prepared to stand behind his product. But in actuality, the process by which this reassurance takes effect is not as simple as it seems. Darden and Rao (1977) examined the influence of a consumer's experience with appliance repairs on how important she/he perceives a warranty to be. They found that consumers who had more satisfactory experiences with repairs under warranty actually felt that warranties are less important than did those with fewer satisfactory experiences. Similarly, as the number of unsatisfactory experiences increased, the importance of warranties increased.

The upshot of this, then, is that the necessity of having repairs performed seems less critical in

future evaluations of product warranties than the satisfaction with those repairs. The authors suggest that this may be because, although the warranty is generally from the manufacturer, the retailer (or other dealer) is more responsible for repairs. Unpleasant repair experiences, then, create a desire to be protected by the manufacturer from future problems with a dealer or service agent.

All of this assumes that the repairs are provided by the distribution channel (as opposed to directly from the manufacturer). But today even complex durables are purchased from outside of "normal" channels. As more consumers obtain items such as home electronics (television, stereos, computers) from discount or mail order houses, local warranty service becomes less available. Consumers who require after-sale support or even very minor repairs and adjustments find that the process may be burdensome, and the image of the manufacturer or even the industry in general may suffer because small problems now represent serious inconveniences. On the other hand, properly executed recalls can turn negative experiences into more positive attributions to the firm (Standop 1991). For example, Saturn, concerned with keeping its reputation for customer satisfaction recently made a big effort to make its latest recall a positive experience for customers. They treated owners to a free barbecue of hamburgers and hotdogs or coffee and doughnuts while they waited for a 30-minute repair. A national survey of potential new car buyers found that twenty-seven percent of potential new car buyers had a more favorable opinion of Saturn after the recall than before. Half reported unchanged opinions while twenty-one percent said they looked at Saturn less favorably. Similar mass recalls in the past caused much higher disapproval ratings according to Peter Haag, vice president of Market Opinion Research (Ritz 1993).

Besides the possible financial risk of products which fail to operate as expected, there is also a threat of damage or physical injury in the use of products. Again, many durables possess greater potentials for harm, especially in the cases of powered or moving components (automobiles, home workshop tools, etc.). The consumer behavior literature is relatively mute as to the ways that people learn to use (or choose to use)

potentially dangerous devices (see, however, Griffin, Babin, and Darden 1993; and Stoltman, Morgan and Boedecker 1993).

CONCLUSION

In an interesting 1980 MSI working paper, John Czepiel succinctly described the tasks of marketing as follows:

"In any organization, marketing bears the responsibility for three key tasks: (1) *design* of an offering to meet consumer needs, (2) *attraction* of clients to that offering, and (3) *monitoring and control* of results for efficiency and to insure the continued meeting of customer needs in a changing environment." (Czepiel 1980)

This perspective reminds us that marketing efforts in any one area (for example, advertising or pricing) should not be viewed in isolation, but rather as part of an overall management system. Further, marketers should consider *all* aspects of the consumer's decision process -- activities at the prepurchase stage, during purchase, and during post-purchase -- when designing their management systems.

Consumer durables in the U.S. account for approximately \$615 billion in annual sales (Survey of Current Business, 1995), yet they are the subject of relatively few studies of post-purchase processes and consumer satisfaction. The foregoing discussion, however, indicates that post purchase processes for durable goods are qualitatively and quantitatively different than those dealing with frequently purchased products.

One reason for the relatively small number of studies done on durables is the complications associated with durables research. For example, with long term usage of durable products a consumer's report of "satisfaction" might reflect the performance of the actual product or may reflect satisfaction with the channel (enterprise) or the category or marketing system (Aiello & Czepiel, 1979). Additionally timing becomes an issue as satisfaction will change over the ownership and usage of a durable. For example, in applying the expectations-disconfirmation paradigm, where one presumably wants to measure

dis(confirmation) at a point in time after purchase, it is difficult if not impossible to sample consumers who are homogeneous on the time since purchase (although it is possible to rent a mailing list of new car purchasers who have had their new cars a specified amount of time). Moreover, if one is to survey "experienced" users of a product, it is difficult and perhaps somewhat suspect to attempt to also measure pre-purchase expectations after the fact. Additionally, the expectations about product performance may change with time and experience. An interesting question deals with how the nature and the importance of the expectations change over time. To deal with these issues existing theories need to be expanded.

In an interesting attempt to examine the changing role of expectations over time Sambandam (1995) surveyed recent (3 months) and less recent (18 months) buyers of new automobiles. He argued that inconsistency in the literature, with some finding support for the expectations-disconfirmation paradigm (Oliver, 1980) and others finding support for the performance-disconfirmation paradigm (e.g., Anderson and Sullivan 1993) can be resolved using Prospect Theory (Kahneman and Tversky, 1979). He suggested that close to the point of purchase, the expectations-disconfirmation paradigm would be a better predictor of satisfaction and that over time, expectations adjust to performance. Here the performance-disconfirmation paradigm would prove superior. He suggests that for relatively new purchasers of durables the reference point in Prospect Theory can be conceptualized as closely corresponding to the pre-purchase expectations in the expectation-disconfirmation theory. Disconfirmation reflects the change from the reference point and the Prospect Theory value function then determines satisfaction. For more experienced consumers, he suggests that expectations approach the level of perceived product performance. Here perceived performance becomes the reference point, and disconfirmation again represents the change. This study represents one recent attempt to expand the domain of the existing theories to encompass the issue of changing expectations over time.

Further research is needed in a number of other areas as well in order to better understand the *consumption* of durables as well as their

purchase. Specific topic areas of interest are:

- how consumers learn to use durables
- how CS/D changes over the useful life of durables
- how consumer brand loyalty changes at product disposition
- how warranties affect satisfaction
- how to best convince consumers to complain when they are dissatisfied
- how to determine the best remedies when consumers do complain

In conclusion, this paper has covered a wide variety of topics involved in the post-purchase phase of consumer behavior. It has shown why the events after purchase are important to both consumers and marketers. Some of these topics, such as CS/D and consumer complaints, have received considerable attention in recent years. Others are in need of further research. All, however, are important, interesting and pose challenges for both academics and practitioners in the future.

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