Faculty Working Papers

A TAXONOMY OF CONSUMER SATISFACTION/ DISSATISFACTION MEASURES

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Business, government and other non-profit organizations need measures of how well products and service are meeting client needs and wants so that they can enhance their own and/or society's well being. The extent to which these needs and wants are met has come to be called [Hunt, 1975] consumer satisfaction/dissatisfaction (CS/D), a term preferable to alternatives such as happiness/unhappiness since it specifically implies the satisfaction of specific needs and wants.[1] Thus, there is now considerable theoretical and empirical interest in the question of how one ought to measure consumer satisfaction/dissatisfaction [Leavitt, 1975; Hunt, 1975; Warland, Herrmann and Willitts, 1974; Day, 1975]. The purpose of this paper is to offer a taxonomy of possible CS/D measures and to present data from a recent national field study on the consequences of using alternative definitions.

WHAT TO MEASURE

The question of how one can and ought to measure CS/D depends on the answer to three questions:

1. What are your goals? Do you wish to maximize satisfactions or just minimize dissatisfactions?

2. Are individuals to be allowed to define their own satisfaction or dissatisfaction or is some objective measure preferred?

3. At what point in the purchase process do you wish to measure consumer satisfaction or dissatisfaction, soon after the purchase or after possible complaints have been resolved?

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[1] Happiness is also postulated to be a more enduring status not related to specific instrumental activities.

Satisfaction or Dissatisfaction?

Clearly, it is in the interest of society and individual businesses to maximize consumer satisfaction. However, one may choose rather to minimize dissatisfaction on either philosophical or practical grounds. The philosophical issue is most critical for government agencies who may feel that their role ought to be one of minimizing abuses in the marketplace, of protecting consumers from serious calamities from which they realistically cannot protect themselves. This would lead to an objective of minimizing dissatisfactions. Minimizing dissatisfactions may also be chosen for practical reasons. As we shall note below, maximizing satisfaction is an elusive goal. It is difficult to conceive of ever making all people fully satisfied, and it does seem at least feasible to achieve a level of product and service performance free of "defects."

Objective or Subjective Measure?

The second question of whether an individual should be allowed to define his or her own level of satisfaction raises the subjective/objective issue prominent in the social indicators literature [cf. Andrews and Withey, 1974]. In simplest terms, the question is: should one simple ask people for measures of how well they feel they were satisfied by a given purchase or should one develop an objective measure of purchase performance which is largely uninfluenced by personal idiosyncracies. The problems with subjective measures are several:

a. Since they are psychological constructs, there is great potential for measurement and response bias;

b. As affective states, they may be unreliable due to the influence of situational factors;

c. There are significant aggregation problems; i.e., what one consumer means by "somewhat satisfied" may not be the same as what another means by the same term.

d. It is very likely that subjective satisfaction measures may be negatively correlated with social status; thus if consumer responses are equally weighted, the use of subjective measures may have the perverse effect, for example, of diverting company or governmental resources to the upper class consumer who is distressed that he can hear the clock on his Rolls Royce actually ticking away from the disadvantaged consumer who is pleased that his used car lasted twice the length of the warranty period before the engine block cracked.

e. It is also likely that subjective satisfaction may be negatively associated with past satisfaction, i.e. that as one is satisfied, one raises one's internal standards. This, in its turn, has the perverse effect that as satisfaction increases on an absolute scale, measures of subjective satisfaction may actually increase!

First or Final Satisfaction?

It is clear that there are two critical points in the post-purchase satisfaction process at which one can measure CS/D. This is made clear in a simplified description of the post-purchase satisfaction process presented in Figure 1. Here one can see that dissatisfaction with a product or service can occur because the consumer believes it has not lived up to expectations, either something has specifically gone wrong or the purchase just "hasn't measured up." (This is a distinction we shall return to below.) One can, of course, scale this initial reaction. The problem with such a measure, particularly as it might be used by governmental agencies, is that it clearly ignores sellers' complaint handling mechanisms. It may well be that a very substantial number of consumers will have the source of their initial dissatisfaction resolved by such mechanisms. Thus, in some contexts, what we shall term final satisfaction may be the preferred measure since it adjusts initial dissatisfaction by subsequent satisfactions.

Figure 1 about here

HOW TO MEASURE CS/D

The above discussion suggests eight possible approaches to the scaling of CS/D depending on whether the measure is (a) of satisfaction or dissatisfaction ; (b) objective or subjective; and (c) initial or final. There are, of course, important additional questions to be asked in the preparation of a specific study plan. Among the most critical of these is that of the level of purchase category aggregation for which the measure will be taken. The latter question will not be our concern here, although the paper does report data at a rather general level of aggregation below. We will now turn to a description of several possible scales appropriate to each of the eight categories.[2]

Figure 2 about here

Maximizing Satisfactions

1. Initial subjective satisfaction: Here a simple scale of satisfaction with a given purchase category may be administered. This is perhaps the most frequently used technique. A typical approach is that of Handy and Pfaff [1975] who use a five point initial subjective satisfaction scale ranging from "always satisfied" to "never satisfied." This scale and the four point scale which will be discussed further below [Best and Andreasen, 1976] have not been tested for validity and reliability. Further, they make

[2]Actually seven since, as will be noted below, I could not think of a measure of initial objective satisfaction.

no allowance for consumers' lack of knowledge and interest in the purchase category. A scale that does meet these requirements developed by Andrews and Withey [1974] is reproduced in Figure 3. This scale has not been used in consumer studies to date.

Figure 3 about here

As an alternative to this time-consuming procedure, several researchers ask respondents not to scale each purchase or purchase category but to rank the categories or some subjective initial satisfaction criterion. An example of this approach is found in Day and London [1975] who ask their respondents to report purchases that were "most satisfactory" and "least satisfactory."

Finally, it should be noted that at least some firms rely not on the subjective opinions of consumers but on the opinions of salesmen or middlemen to ascertain how well their products and services are performing [McNeal, 1969].

The problem with these scales is, of course, that they are subjective. And thus they have the problem of response bias, aggregation, and so on described earlier. One problem in over time measurements is the difficulty of separating changes in expectations from changes in performance. Kotler has proposed a procedure for monitoring these effects separately with what he calls a derived dissatisfaction measure [1975, pp. 155-6]. A sample scale adapted from Kotler is reproduced in Figure 4. The scale, however, still retains the problems of bias, reliability, and aggregation discussed earlier.

Figure 4 about here

Both Kotler and Andrew and Withey's scales are unidimensional. This need not be the case. Cognitive processing modellers have pointed out that consumers evaluate purchase alternatives along several dimensions. It may be that in certain cases policy makers may wish to measure satisfaction (or derived dissatisfaction) along several dimensions. Such disaggregation may yield important insights into the workings of cognitive processes described in Figure 1. An obvious place to begin would be correlation studies predicting general affective scores such as those derived from Andrew and Withey's or Kotler's scales from multidimensional satisfactions data.

Final Subjective Satisfaction. As noted in Figure 1, whether or not a source of dissatisfaction is ever removed, even partially, depends on two things, first whether the consumer brought the problem to the attention of the seller and, second, whether the response of the seller was perceived by the consumer to be satisfactory or not. It is likely that whether the problem is mentioned to the seller will be a function of both the seriousness of the problem as perceived by the consumer and whether the consumer expects the complaint process to be satisfactory. The latter in turn may be a function of the consumer's own characterisitcs (such as his/her perceived locus of control [Landon and Emery, undated]) as well as the consumer's beliefs about the company's complaint handling performance.

The specific measure for final subjective satisfaction would then involve modifying initial subjective satisfaction scores to incorporate satisfactory complaint handling experiences. As with "derived dissatisfaction" scores, some of the subjectivity could

be monitored by asking for separate data on consumer's expectations regarding the complaint handling process.

Initial Objective Satisfaction: No measure has been developed.

Final Objective Satisfaction: Business has for some time argued that the ultimate test of whether a product or service has been unsatisfactory has been that product or service's sales or market share. Indeed, after consumer research and unsolicited complaints, these measures were found by McNeal to be the two measures most frequently used by business to measure consumer satisfaction in the late 1960's [McNeal, 1969]. The problem with sales measures, however, is that they are affected by so many marketing factors that a decline in sales due to dissatisfaction of past customers with the purchases may be masked, for example, by customers switching in from other brands due to differences in marketing mix among firms (price, promotion, etc.). This problem, of course, could be overcome if customer level sales data, say from a consumer panel, was collected on repeat purchases only. This measure, however, is still subjected to intercompany competitive differences. It is also not a very effective measure in cases of products with long repurchase cycles since such repeat behavior will be highly subject to non-performance influences. Repeat sales data on products with long repurchase cycles also have the disadvantage that they usually come too late for timely remedial action.

Minimizing Dissatisfaction

One can, of course, in the case of the simple subjective measures described above take only the negative "half" of the scale--i.e., the dissatisfactions--and base policy on these measures. The deficiencies of such measures have already been discussed.

An alternative set of measures proposed for dissatisfactions is that comprising what are called consumer complaints data. Companies as well as federal agencies for some time have been using unsolicited data of this kind in policy decisions [cf. Diener, 1975] and more recently several researchers including the author (with Arthur Best) have been seeking data directly from consumers on their product and service problems. These measures of dissatisfaction have as a principal advantage that they provide information on the specific sources of dissatisfaction within purchase categories, something that only the multidimensional subjective satisfactions measures can parallel (at a much greater cost and likely greater inaccuracy).

5. Initial Subjective Dissatisfaction: The simplest "complaint data" scale that one might use is the frequency with which consumers mention having a specific problem with regard to a product or service categories. This may be further narrowed to eliminate price complaints which we have found are quite prominent in certain categories (e.g., food) in periods of serious inflation.

   General complaint measures are classified in this taxonomy as subjective since a substantial number of them involve judgmental matters (e.g. "badly designed," "poor stitching," and so forth).

They are, therefore, like other subjective measures responsive to changes in consumer expectations, market sophistication, and so forth.

A further issue with respect to these data is whether one should measure what we have called "complaints" or "problems." Complaints are those problems voiced to business or official complaint handling agencies (what McNeal calls "unsolicited complaints"). Measures of these complaints have two advantages. First, since they represent a specific document they eliminate the response bias problems (memory, yeasaying, etc.) of direct consumer measures. Second, they are already routinely catalogued by most businesses and government agencies.

The argument for problem measures on the other hand is that several studies have shown that complaints come from an unrepresentative sample of the population. Unfortunately, as Day notes [1975], what has not heretofore been tested is whether complaints data are unrepresentative of problems data. Clearly, if the former substantially parallel the latter the cost of collecting the latter would not be justified. This, also, is an issue we shall turn to below.

6. Subjective Final Dissatisfactions: Just as initial satisfactions data can be modified by satisfaction with complaint handling processes, so can initial complaint or problem measures be reduced by subsequent satisfactory complaint handling.

7. Objective Initial Dissatisfactions: It was noted that some problems were in fact subjective. It is, of course, not true that all problems are subjective. The lateness of shipments for special orders,

the frequency with which warranty claims are made for partial or complete breakage and the frequency of billing errors not in the customer's favor are objective measures which companies can collect internally. These are also--subject to random memory loss--the kinds of problems consumers ought to report reasonably accurately in field surveys of consumer problems. It may therefore be useful to distinguish "objective" problem data in such studies from all problem data. This, too, is a measure we shall report on below.

8. Objective Final Dissatisfaction: Given that warranty and related complaints virtually always are attended to by businesses, one would need specific survey data to tell to what extent such "objective" complaints were ultimately resolved to the consumer's satisfaction. An alternative objective measure would be data on consumers who do not repurchase a particular item. As noted, such data would only possibly be useful for a limited number of purchase categories.

SOME PRELIMINARY DATA

It was noted in the discussion above that some of the proposed measures are clearly easier to collect than others. Implicit in the discussion therefore is the question of whether all of these measures--or some subset of them--tend to give the same results. Data from a recent study by Best and Andreasen [1976] permit preliminary discussion of this question.

The study contacted an urban sample of 2419 households in 34 cities. Each household was queried about problems with purchases in 64 relatively broad product and service categories. This yielded data on 28,500 purchases, about 8000 of which had some kind of perceived problem.

The study provided four kinds of data relevant for this analysis:

a. Subjective initial satisfactions data

b. Problems data

c. Complaints (voiced problems) data

d. Data on satisfactions with complaint handling processes

Since the problems data could be further partioned into "subjective" and "objective" problems, scales can be derived to fit four of the cells in the CS/D taxonomy just described. Data on these scales for 10 of the 34 purchase categories--seven products and three services--are presented in Tables 1 through 3. The ten categories were chosen to represent the range of results in the study, to minimize interpretative problems in some categories, and to ensure that each category was large enough (i.e., had at least twenty-five complaints resolved).

The data presented in the Tables are index scores and rankings of the ten purchase categories. They are designed to answer the question: which purchase category does best or worst in meeting consumer needs and wants according to the various definitions. Thus, they provide information on relative not absolute performance although in a few cases differences in absolute levels across scales will be noted. The Tables provide data on four cells in Figure 2. We begin with a simple measure of initial subjective satisfaction, then present two sets of data for initial and subjective dissatisfaction, one set of data on initial "objective" dissatisfaction for the seven products only, two sets of data on dissatisfaction with complaint handling processes and, finally, a composite final dissatisfaction measure. Since only one set of data reports satisfactions data, these data will be cast in the negative (i.e., as dissatisfactions) for comparability with the remaining data.

Satisfactions and Problems

The first pair of columns in Table 1 report index scores and rankings of the ten purchase categories using a simple four point satisfaction scale. Respondents whose household had purchased in the product category were simply asked whether the purchase was "satisfactory, somewhat satisfactory, somewhat unsatisfactory, or unsatisfactory." This therefore may be classified as an initial subjective satisfaction measure. However, as noted earlier, to permit comparison with the remaining data, the results were cast in the negative. Thus, the indexes are based upon the proportion of respondents reporting their purchase as "somewhat unsatisfactory" or "unsatisfactory." As the rankings indicate, the three repair services are clearly the poorest performers using this measure while bicycles, television sets, calculators and tires are the best.

Table 1 about here

The next set of columns report a measure of the frequency with which consumers reported non-price problems with their purchases, a measure of initial subjective dissatisfaction since many of the problems, as we shall note below, were judgmental. The raw data for this scale are different from the satisfaction measures in the first columns in two important respects. First, it was found that when asked how the purchase could have been better eighteen percent of the respondents who indicated they were "somewhat satisfied" or "satisfied" with purchases in these ten categories reported problems essentially similar to those who were dissatisfied with their purchase. Thus, in this sense the simple initial satisfaction scales underreport absolute levels of consumer dissatisfaction.

Second, it was found that when the type of problem was investigated, the sole problem in fourteen percent of the purchases was that "it cost too much." While it may be desirable in other circumstances to monitor consumer's reactions to the prices they pay, such reactions are likely to be more sensitive to inflationary pressures than to either governmental or business product/service improvement programs.[3] In this second sense, then, overall satisfaction/dissatisfaction scales tend to overreport the absolute level at which consumers' needs and wants are unmet.

When the frequency with which purchases involve perceived non-price problems is computed, there are important shifts in the rankings from Column 1. In general, car repair purchases tend to fare badly and television sets, calculators and tires continue to do well. The index score for car purchases, however, increases significantly making it the second worst offender by this criterion. Index values for bicycles and toys also increase while home repairs decline somewhat and appliance repairs decline significantly. The latter is partly due to the fact that appliance repair dissatisfactions relatively more often involve price-only complaints.

Voiced Complaints

Since unsolicited complaints data are routinely catalogued by many businesses and thus could easily be made the basis of a low cost CS/D monitoring system, an important question is: do these complaints accurately reflect problems in the marketplace given that we know that those who voice complaints are not representative of all those with problems [Warland, Herrmann and Willits, 1975]? There are two dimensions to this question.

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[3]Price is much more often a problem mentioned for service categories where the response may be less often a reflection of inflation and may even be a surrogate for poor performance.

First, one could ask whether the index numbers and ranks of purchase categories is the same for voiced complaints data as for non-price problems data. If the indexes are the same, unsolicited complaints would be valid indicators of the relative performance of various categories and, given an estimate of the rate at which complaints are voiced to sellers, would also yield an estimate of the absolute level of performance across categories. The second issue, which we will not investigate here, is whether the type of complaint voiced is representative of all problems consumers perceive. If it is representative, unsolicited complaints, even though not indicative of overall relative or absolute performance, could pinpoint areas where improvements could be effected.

Differences between the second and third sets of columns in Table 1 essentially reflect the differences in the frequency with which consumers act on problems they perceive in the category.[4] Respondents were more likely to contact sellers about repair problems, especially home repairs, and car and television purchases and much less likely to voice problems with respect to toys. One obvious inference to be drawn from this is that the voicing of problems may well be a function of the expensiveness of the purchase. Thus, unsolicited complaints data may be considered effective measures of problems in relatively expensive categories and less effective in inexpensive categories. Alternatively, one may consider unsolicited complaints as indexes of problems weighted by importance. It is, however, also possible that these scores may reflect the consumers' beliefs about the responsiveness of sellers in the category. Thus, the issue of the usefulness of these data still remains unclear.

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[4]The "voiced non-price problems" column was computed by comparing complaints voiced to sellers or official third parties to total purchases.

"Objective" Problems

The final set of data in Table 1 represents an attempt to grapple with the difficulties of scaling "objective" problems from our data. In many of the purchase categories under study here, consumers reported such problems as "should be easier to use," "doesn't last long enough," "repaired sloppily," "was misrepresented," and so on. In each of these cases, it is clear that the problem may be a matter of idiosyncratic personal judgment. This personal judgment may be highly related to expectations, which in turn may be a function of income, education, and so on. Two observers thus may not both see the same evidence as a "problem." To eliminate this source of bias, a separate count was made of the frequency with which consumers reported problems of the following types:

partially or totally broken
wrong product or service provided
customer's property lost
slow or not delivered
clerical error

These classifications shall be defined as "objective problems" in the sense that two observers ought to come to the same conclusion from the evidence that a "problem" exists. Unfortunately, they are classifications that are hard to apply to services. Thus, Table 1 only ranks the seven product purchases--and to ease comparability assumes that the services would be ranked 1, 2 and 3.

Comparing column 2 and column 4, we can see that television sets and automobile purchases have high frequencies of objective problems. On the other hand, eyeglass problems apparently are much more subjective in nature. One is forced to conclude, however, that although these data may be more objective in character, they are at this point probably more sensitive to present definitions and coding schemes. This is another area for further investigation. A better taxonomy of types of purchase problems

is clearly needed, preferably one that would allow us to define objective problems for services.

Complaint Handling Indexes

Initial problems are sometimes resolved by sellers' complaint handling mechanisms. Table 2 presents two indexes showing levels of dissatisfaction with these mechanisms. The question of how these indexes might be combined with those in Table 1 will be discussed below.

Table 2 about here

The first set of data in Table 2 are index values showing the relative frequency with which voiced complaints were not satisfactorily resolved by sellers' complaint handling mechanisms.[5]

Here we see that not only are the repair services major sources of consumer problems, their complaint handling is the poorest as perceived by our respondents, with appliance repair complaint handling by far the worst. And, again, we see that television sets, calculators and tires not only have infrequent problems but also have relatively more effective complaint handling mechanisms. Our speculation that consumers may perceive the toy industry as poor complaint handlers is not borne out by the data which give it far and away the best ranking.

The second set of data in Table 2 computes the frequency with which all non-price problems are unsatisfactorily resolved. Unsatisfactorily resolved problems include those not voiced as well as those where the complaint handling process was not fully satisfactory. Again the difference between this set of data and the first set is a function of differences in voicing rates, differences that move the toy industry from best to worst in the rankings. It may be noted, however, that as expected, the second set of

[5]These calculations exclude problems whose resolution is still pending.

indexes have a narrower range than the first with only toys and appliance repairs more than six percentage points from the group average.

Final Dissatisfaction

If one is to develop an overall measure of final dissatisfaction levels as the taxonomy in Figure 2 proposes, how are initial indexes to be combined with indexes of complaint handling performance? One obvious alternative is simply to reduce the number of initially unsatisfactory purchases (by some definition) by the number that were communicated to sellers and satisfactorily resolved. An example of such a set of data is found in Table 3 which reports indexes of the frequency with which all purchases result in non-price problems that are not satisfactorily resolved.[6] Here one sees that the resulting indexes parallel very closely those in the second set of data ("non-price problems") in Table 1. This is primarily because satisfactorily resolved non-price problems are only about seven percent of all purchases. The two exceptions in this comparison are bicycles whose index improves and toys whose index significantly worsens, which, as we have seen, is largely due to a low voicing rate. Policy makers under some circumstances may wish to give greater weight to complaint handling performance in future final CS/D scores.

Table 3 about Here

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[6]The indexes in Table 3 can be approximated by multiplying the indexes in column 2, Table 1 and column 2, Table 2. Differences appear due to the fact that the base in column 2 in Table 1 does not delete pending cases as does the base in Table 3.

SUMMARY AND CONCLUSIONS

This paper has presented a taxonomy of consumer satisfaction/dissatisfaction measures and produced empirical data for four of the eight categories. The empirical analyses suggest the following conclusions:

1. Simple initial subjective satisfaction (or dissatisfaction) scales have at least two important biases: they underreport actual problems and they often reflect consumer concerns with high prices.
2. Unsolicited complaints data do not yield very accurate pictures of the rate of perceived non-price problems in the consumer world primarily because of different rates at which problems are communicated to sellers. Thus, field surveys to gather basic CS/D data seem unavoidable.
3. Measures of "objective" problems await a better taxonomy of problem types, especially for services.
4. Performance on initial product/service satisfactions scales may not always be reflected in equal (good or bad) performance for complaint handling mechanisms.
5. Final measures of satisfaction or dissatisfaction are likely to be heavily weighted by initial CS/D results unless differential weighting is applied to complaint-handling performance.

RECOMMENDATIONS

Among the scales for which empirical data were available, the initial non-price problems scale, the unsatisfied non-price voiced complaint scale and the combination of the two in a final dissatisfaction scale seem superior for their relative lack of ambiguity and ease of accumulation in a field survey. It is possible, however, that further work on "objective" problem scales will produce better measures in the future. In the interim, efforts to evaluate the retest reliability of the present scales are essential as are efforts to evalute them at different levels of purchase aggregation.

Finally, note should be made of the fact that in the recommended scales any one problem was considered as important as any other. Future scholars ought to consider the possibility of weighting these data by one or more of three factors: (1) the subjective or objective importance of the purchase, (2) the subjective or objective seriousness of the problem, and (3) the extent to which the household with the problem may be considered disadvantaged. One can conceive of numerous policy matters for which such weightings, if they can be obtained, would prove highly relevant.

REFERENCES

Andrews, Frank M. and Stephen B. Withey, "Developing Measures of Perceived Life Quality: Results from Several National Surveys," Social Indicators Research 1 (1974) 1-26.

Best, Arthur and Alan R. Andreasen, Talking Back to Business: Voiced and Unvoiced Consumer Complaints. Washington D. C., Center for Study of Responsive Law, 1976.

Day, Ralph L. "Consumer Satisfactions/Dissatisfactions with Services and Intangible Products," paper presented to Marketing Research Seminar, Institut d'Administration des Entreprises, University d' Aix, Marseille, France, 1975.

Day, Ralph L. and E. Laird London, Jr. "Collecting Comprehensive Consumer Complaint Data by Survey Research," in Beverlee B. Anderson (ed.) Advances in Consumer Research, Vol. III. Cincinatti: Association for Consumer Research, 1976, pp. 263-8.

Deiner, Betty J. "Information and Redress: Consumer Needs and Company Responses," working paper, Marketing Science Institute, June, 1975.

Handy, Charles R. and Martin Pfaff, Consumer Satisfaction with Food Products and Marketing Services, Economic Research Service, United States Department of Agriculture, Agricultural Economic Report No. 281, March, 1975.

Hunt, H. Keith. "CS/D: The Program Planning and Evaluation Perspective," in Beverlee B. Anderson (ed.) Advances in Consumer Research, Vol. III. Cincinnati: Association for Consumer Research, 1976, pp. 259-60.

Kotler, Philip, Marketing for Non-Profit Organizations. New York: Prentice-Hall, Inc., 1975.

Landon, Jr., E. Laird, and Donald A. Emery, Jr. "Causal Attribution of Consumer Dissatisfaction as a Predictor of Consumer Complaint Action," working paper, University of Colorado, undated.

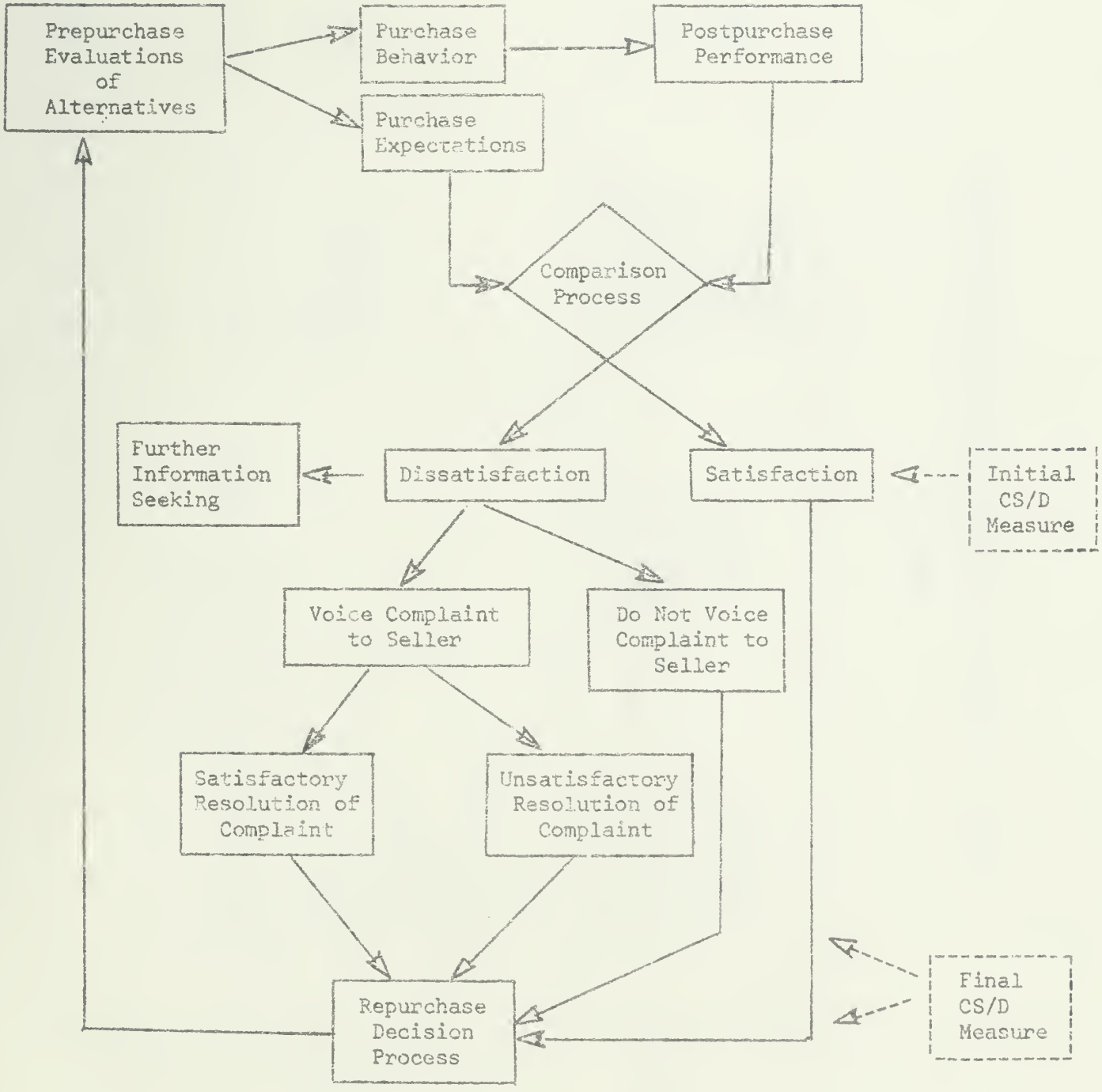
Leavitt, Clark. "Consumer Satisfaction as the Ultimate Life Force," in Beverlee B. Anderson (ed.), Advances in Consumer Research, Vol. III. Cincinnati: Association for Consumer Research, 1976, pp. 252-8.

McNeal, James U. "Consumer Satisfaction: The Measure of Marketing Effectiveness," MSU Business Topics (Summer, 1969), pp. 31-36.

Warland, Rex H., Robert O. Herrmann and Jane Willits, "Dissatisfied Consumers: Who Gets Upset and What Do They Do About It?" unpublished paper, Pennsylvania State University, November, 1974.

FIGURE 1

MODEL OF POSTPURCHASE CONSUMER PROCESSES

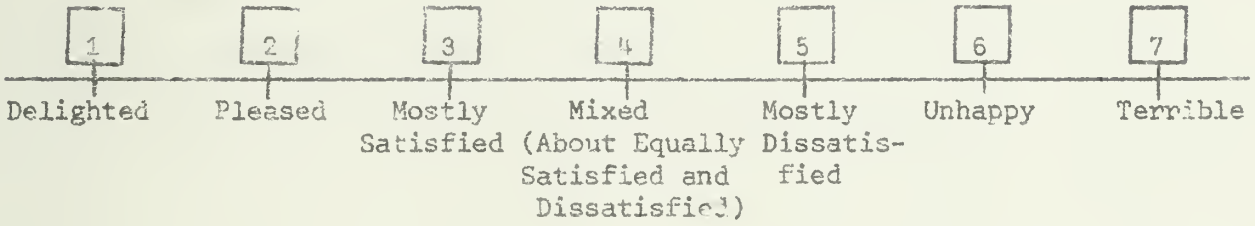


	INITIAL EVALUATION		FINAL EVALUATION	
	SUBJECTIVE MEASURE	OBJECTIVE MEASURE	SUBJECTIVE MEASURE	OBJECTIVE MEASURE
MAXIMIZING SATISFACTIONS	Simple Satisfaction Scales Ranking of Purchases Salesmen's or Middlemen's Opinions Derived Dissatisfaction Multidimensional Scales	?	Initial Satisfaction Modified By Complaint Satisfaction	Sales Market Share Repeat Purchasing
MINIMIZING DISSATISFACTIONS	Negative "Half" of Satisfaction Scales Frequency of Consumer Problems Frequency of Unsolicited Complaints	Frequency of Warranty Claims Frequency of "Objective" Problems or Complaints	Initial Dissatisfaction Modified By Complaint Satisfaction Frequency of Unresolved Problems or Complaints	Switching Out Initial Dissatisfaction Modified By Unresolved "Objective" Problems or Complaints

FIGURE 2.

TAXONOMY OF CONSUMER SATISFACTION/DISSATISFACTION MEASURES

I feel:



A Neutral (Neither Satisfied Nor Dissatisfied)

B I Never Thought About It

C Does Not Apply to Me

FIGURE 3.

SCALE USED IN ASSESSING AFFECTIVE RESPONSES

From: Frank M. Andrews and Stephen B. Withey, "Developing Measures of Perceived Life Quality: Results from Several National Surveys," Social Indicators Research 1 (1974), p. 11.

The performance of your calculator:

a. How good is it now?

(min.) 1 2 3 4 5 6 7 (max.)

b. How good did you expect it to be?

(min.) 1 2 3 4 5 6 7 (max.)

FIGURE 4.

SAMPLE DERIVED DISSATISFACTION SCALE

Adapted from: Philip Kotler, Marketing for Non-Profit Organizations. (New York: Prentice-Hall, Inc., 1975), p.

TABLE 1

INITIAL DISSATISFACTION INDEXES

	Dissatisfaction		Non-Price Problems		Voiced Non-Price Problems		"Objective" Problems		
	Index	Rank	Index	Rank	Index	Rank	Index	Rank	
Car Repairs	153	1	137	1	157	1	*		Assumed
Appliance Repairs	152	2	116	4	150	2	*		1, 2 & 3
Home Repairs	129	3	110	5	137	3	*		
Toys	106	4	119	3	53	9	95	7	
Car Purchase	96	5	125	2	135	4	232	4	
Eyeglasses	88	6	81	7	87	7	18	10	
Bicycle	70	7	96	6	94	5	107	6	
Television Set	66	8	80	8	91	6	152	5	
Calculator	62	9	66	9	60	8	83	8	
Tires	41	10	46	10	40	10	46	9	
Base	100		100		100		100		
No. of Cases	(7372)		(7453)		(7351)		(5137)		

TABLE 2

COMPLAINT HANDLING INDEXES

	Not Satisfied Non-Price Voiced Complaints		Not Satisfied Non-Price Problems	
	Index	Rank	Index	Rank
Car Repairs	105	2	100	6*
Appliance Repairs	141	1	110	2
Home Repairs	100	3*	100	6*
Toys	67	10	120	1
Car Purchase	94	5	99	9
Eyeglasses	100	3*	100	6*
Bicycle	93	6	101	5
Television Set	85	9	95	10
Calculator	92	7	105	4
Tires	89	8	106	3
Base	100		100	
No. of Cases	(917)		(1942)	

*tie

TABLE 3

FINAL DISSATISFACTION MEASURES

	Not Finally Satisfied Purchases	
	Index	Rank
Car Repairs	131	2
Appliance Repairs	122	3*
Home Repairs	110	5
Toys	134	1
Car Purchase	122	3*
Eyeglasses	77	7
Bicycle	80	6
Television Set	73	8
Calculator	65	9
Tires	46	10
Base	100	
No. of Cases	(7369)	

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