The Consumer Information Center is a federal program which encourages federal agencies to develop and release consumer information to the public. It also promotes consumer awareness and access to information through the "Consumer Information Catalog" and a mail order distribution operation. Through research, the Center can learn the needs and wants of consumers, help make decisions about marketing and distribution of information, and select publications for the Catalog. One of three methods of research is the nationwide testing survey, performed quarterly on 2,500 households; it involves interviews in-home where subjects are asked to respond to twenty consumer titles. Responses are then organized demographically for future comparison. The second method is the catalog audience survey designed to elicit responses to similar items from catalog subscribers. Finally, a sampling of 1,000 catalog orders is made for indications of preference. Overall results indicate a "respondent effect" due to enthusiasm on the audience survey and a significantly lower interest on the nationwide survey expressed by those over 65, those earning less than $10,000, and those with some high school education or less. When suggesting topics for publication, consumers consistently select similar items. Research results are used to establish consumer information priorities, and to target certain publications to certain demographic groups, and to reach less responsive audiences through radio, television, and the popular press. (FP)
MEETING CONSUMERS' INFORMATION NEEDS:
PUTTING RESEARCH TO WORK

By Drew Steketee
Presented to ACCI by Mary Arsenoff
April 27, 1979
Meeting Consumers' Information Needs: Putting Research to Work

By Drew Steketee

Presented to ACCI by Mary Arsenoff

The Consumer Information Center is a federal program in Washington, D.C. that encourages federal agencies to develop and release consumer information to the public. It also promotes consumer awareness of and access to this information through the Consumer Information Catalog and a mail-order distribution operation in Pueblo, Colorado.

The Center researches consumer information needs and interests. These data are used to encourage and distribute publications consumers really want.

Research shows some differences in the information interests of the general public versus users of the Consumer Information Catalog. The Center uses this knowledge to target Catalog efforts towards information-seekers, while disseminating consumer information to a less responsive audience through radio, television, and the popular press.

The Consumer Information Center is a federal program established by Executive Order in 1970 to coordinate the development, promotion, and distribution of consumer publications from the federal government. Its two missions are: 1) to encourage federal departments and agencies to develop and release relevant and useful consumer information, and 2) to increase public awareness of and access to federal consumer information.

Research plays a vital role in guiding these efforts.

First, it's our policy to encourage agencies to develop information consumers need and want -- not information the government thinks they ought to get. It's our research challenge to learn these needs and wants.

Secondly, our research program helps us make decisions about marketing and distribution of consumer information. If information is to be used by the public, we must deliver it to them in a useful and accepted form. Through research, we can gauge the different characteristics of our various audiences and target effective methods of reaching these groups.

We distribute consumer information by various methods including radio, TV, newspapers, and magazines, both through advertising our consumer booklets and by reporting on timely consumer topics.
But the keystone of our marketing efforts is the Consumer Information Catalog, a 16-page listing of about 240 federal consumer publications. Through direct mail, write-in requests, and display, the Center distributes 20 million copies of the Catalog each year. Consumers then order the free or low-cost publications they want from the distribution center in Pueblo, Colorado.

Thirdly, our research to date centers on selecting publications for the Consumer Information Catalog. Because of printing costs, the size of the Catalog is fixed. So publications compete for listing based on popularity.

In summary, our research helps us evaluate new topics, target our marketing for our audiences, and decide which publications will be listed in the Catalog. These functions are served by our nationwide title testing survey, our audience survey, and our "sales" sample.

NATIONWIDE TITLE TESTING SURVEY

Evaluating potential new consumer publications begins with testing titles among a representative national sample of 2500 households.

Each study is performed quarterly as part of an omnibus survey by a contract research firm which conducts in-home interviews on everything from car designs to toothpaste. As one part of this multi-faceted interview, the respondent is presented with a listing of 20 consumer titles and descriptions just as they would appear in the Consumer Information Catalog. The respondent marks the list indicating his or her interest in ordering each publication if it were offered.

Potential topics for the test are gathered in a number of ways. They may be suggested by other government agencies, by our staff, by news articles, or by consumers themselves. In all, about 50 potential test titles are narrowed down by committee to 14 actual test items.

Each survey also lists six existing publications as controls. These are of known popularity and are already listed in the Catalog. Half free and half charge titles, these controls include one highly successful and two moderately successful publications each.

The raw data from this survey are returned to us in 60 days. They show what percentage of respondents answered in each of four categories: "Definitely would order," "Probably would order," "Probably wouldn't order," and "Definitely wouldn't order." Don't know and not sure responses are also tallied.

The data represent the opinions of all respondents who we call our total group. Responses are broken down by several demographic factors, including age, education, income, sex, city size, and geographic region.
The contractor separately tallies the responses of a selected demographic group of nationwide respondents that simulates the age, education, and income characteristics of avid Catalog users who respond to our audience survey. This is our target group. They are between the ages of 25 and 34, and have one year of college education or more and a household income of at least $15,000.

We look at this subgroup to see how responses differ from those of the general public. We hypothesized that the target demographic group would be more interested in actively ordering printed consumer information. Therefore, their responses would be better indicators for choosing Catalog publications. In fact, they do respond more strongly to consumer titles. But they're sometimes turned off to titles that sound too simplistic or "just common sense."

Let's look at a few examples of how we analyze the results of this survey. But first, we must explain a few terms:

We measure interest in consumer information by the most positive response, "Yes, I definitely would order." The percentage of respondents answering this way is the publication's "score."

Another statistical device we use is our "index." It's merely a ratio of a publication's score to the average score of all the free or all the charge publications tested in that survey. Any list of 20 topics may be more or less popular than another. Or consumers may not feel like ordering booklets on a given day. So the index adjusts for variations among surveys and gives us a common denominator by which to compare data among previous surveys.

The index is simple to understand if you remember that an index of 1.00 is exactly average. An index of 1.60 means the publication is 1.6 times average or 60% more popular than average. An index of .84 is below average, about 16% less popular.

A second index is computed comparing all four possible responses, two positive and two negative. This is the positive-negative index. It allows us to examine underlying opinion not reflected in comparing the single, most positive responses. For any group of publications tested, there is an average ratio of positive responses to negative responses. When the two positive responses occur more often than this average, the positive-negative index is higher than 1.00. When the negative responses exceed the average, the positive-negative index is lower.

For example, a group of tested titles might have an average of 47 positive "Definitely would" or "Probably would" responses to 42 negative "Definitely wouldn't" or "Probably wouldn't" replies. The remainder would be "Not sure" or "Don't know" responses.
Thus, the average ratio of positive to negative responses would be 42 or 1.11. If a particular publication has 54 positive to 40 negative responses (a ratio 1.35), its positive-negative index is 1.35 or 1.21.

If a publication's score index were 1.09, the positive-negative index of 1.21 shows that overall opinion was comparatively more positive than just "Definitely would order" responses indicate.

So we have a score, a score index, and a positive-negative index. We compute these separately for both total and target group responses for each publication.

It's important to remember, though, that data for free and charge publications are always analyzed separately.

So — here's an example of how we use the data to judge the most promising consumer publications for the Catalog. Let's say that Title A is a proposed new publication on "Wills, Estates, and Taxes" and Title B is a new government booklet on Medicare.

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Total Target Score</th>
<th>Total Positive-Negative</th>
<th>Target Positive-Negative Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title A</td>
<td>19.0</td>
<td>24.3</td>
<td>1.00</td>
</tr>
<tr>
<td>Title B</td>
<td>22.0</td>
<td>19.5</td>
<td>1.15</td>
</tr>
</tbody>
</table>

Results show that the target group is more interested in "definitely" ordering Title A than the total group. The target score is higher, the target index shows it to be higher above average, and the index of all positive and negative responses shows even more positive response than average.

Title B, though, may be a problem for our most avid Catalog audience. Although the total index is higher than average, the target group isn't very interested judging from a lower "Definitely would order" score and a below average target index of 0.89. Even the index of target positive to negative responses shows stronger overall negative opinion than reflected by comparing "definitely would" responses alone.

**CATALOG AUDIENCE SURVEY**

To the results of our nationwide survey, we add the opinions of actual Catalog users who respond to our audience survey. We measure the opinion of these audience respondents to contrast with the more average group of the national representative sample. We retest our 20 consumer
titles with these people by inserting questionnaires in 1500 outgoing orders. An average of 500, or 33%, are returned.

Perhaps because of "respondent effect," respondents are of higher income and education and are more concentrated in age than the general public or perhaps even Catalog users generally. Also, audience respondents are about twice as enthusiastic in their intentions to order potential consumer publications. Why? Besides questions of methodology we'll cover later, one reason may be that this group has confidence in us:

- They've successfully ordered and received publications from the Catalog at the time they're surveyed; in fact, 75% are repeat customers.
- They're satisfied with our service and publications (by survey, about 95% satisfied).
- They're interested in printed consumer information -- enough to order -- enough to return the questionnaire.

So if we add the information from the audience survey to our nationwide title test, our example might look like this: (Positive-negative measures eliminated)

<table>
<thead>
<tr>
<th></th>
<th>Total Score</th>
<th>Target Score</th>
<th>Audience Score</th>
<th>Ratio to Target Score</th>
<th>Total Index</th>
<th>Target Index</th>
<th>Audience Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title A</td>
<td>19.0</td>
<td>24.3</td>
<td>47.9</td>
<td>1.97</td>
<td>1.24</td>
<td>1.24</td>
<td>1.13</td>
</tr>
<tr>
<td>Title B</td>
<td>22.0</td>
<td>19.5</td>
<td>28.2</td>
<td>1.47</td>
<td>1.10</td>
<td>0.89</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Title A's performance continues to improve in the audience score by the expected factor of 1.97 compared to target score. In the audience index, the slight drop is not significant. Remember, it's based on an average which is affected by the popularity of other publications, including controls. In the audience survey, the controls are even more popular than in the title survey because our audience has already been exposed to them -- and may have already ordered and received them.

Title B is typical, too, in its own way. It's popular with the total group but less popular with the target group and not at all popular with our actual audience respondents. And the ratio of its audience to target scores is just 1.47. This is far below our expectation that audience respondents will report twice the intentions to "definitely order."

So that's how we analyze title test data right now. Actually, Title A could be any of a number of good to outstanding consumer topics we're trying to get into the Consumer Information Catalog. Besides "Wills,
Estate and Taxes, other topics of prime interest include "Cutting Medical Bills" and "Protecting Yourself from Crime."

Title B may be a subject of interest to the total group but of lower interest to our avid Catalog users.

**SAMPLING CATALOG ORDERS**

How effective is title testing in predicting popularity of publications in the Consumer Information Catalog? The proof of the pudding is the "sales" sample measuring actual popularity in the Catalog. We randomly sample 1000 Catalog order blanks at our distribution facility. By tabulating orders, we determine the percentage of consumers ordering each publication. This is our "sales score" which we relate to the total, target, and audience scores that measured intentions to "definitely order."

The sales performance of a publication determines its chance to be listed in the next issue of the Catalog. Any publication that falls below a specific level of popularity for two quarters is subject to removal from the Catalog.

All of our surveys are aimed at predicting those consumer publications that will be popular enough to earn a lasting place in the Catalog.

We use the techniques outlined below to identify promising publications:

1. Comparison of total nationwide sample opinion with the preferences of the select demographic target group
   * The target group should show higher interest

2. Comparison of nationwide opinion with that of audience respondents
   * Audience response should be about twice as strong for a free publication, somewhat less for a charge title

3. Comparison against titles of known Catalog performance
   * If a publication outscores a control, it should be popular

4. Ranking of all titles and controls ever tested
   * This helps generalize data among various surveys to equalize variations in competition

**DO SURVEYS PREDICT ACTUAL POPULARITY?**

Not quite. For instance, nationwide sample respondents strongly overestimate their intentions to order charge publications. And while the
audience respondents are more realistic about charge publications, they're unrealistically enthusiastic in their overall ordering intentions.

Other factors may be present to bias results, including title and description changes, time lag between testing and Catalog listing, even news events and other factors affecting public opinion. And we already know that our target and audience demographics are not exactly representative of the total Catalog audience. But except for Zip Code studies, we cannot survey the audience more closely because of federal privacy requirements.

However, we can understand some of the limitations and anomalies in these studies to better understand the data. For instance, why are survey results generally higher than actual sales percentages?

Our explanation is that surveying reported intentions is a very imprecise measure of actual behavior. As they say ... talk is cheap.

Larger-than-life intentions may also result because an important element in real-life ordering is missing in the test procedure.

In actual ordering, Catalog users are permitted only 20 free consumer publications per order. On average, they order about 14. And those ordering charge publications choose only an average of four, presumably because of cost. So for one reason or another, their choices are rationed and prioritized.

But in the test procedure, the respondent considers each publication separately without prioritizing selections of competing titles. Therefore, "Definitely would order" intentions are generally higher in the test situation.

Similarly, charge titles test particularly high. Test selections are made freely without regard to paying the cost for these choices. This behavior is most apparent among the nationwide sample respondents who may have never actually ordered from the Consumer Information Catalog. The charge selections of audience respondents are more realistic. This may be because the hard decision about buying charge titles is still fresh in their minds.

ARE THERE ANY AGE, EDUCATION, OR INCOME TRENDS CONCERNING INTEREST IN CONSUMER INFORMATION?

For the purposes of this paper, we have generalized opinion on 40 free and charge consumer titles tested in two parallel nationwide and audience surveys. This represents but a small portion of the data available from 13 nationwide and four audience surveys where titles were tested. Since we are just beginning this systematic analysis of results, we regard our methodology and results as preliminary.

We have found that consumer interest in these 40 titles was quite uniform among most age, education, and income groups. In comparing nationwide and audience opinion, however, we find that significantly
lower interest was expressed by consumers over 65 years old, those with household incomes below $10,000 per year, and those with just some high school education or less.  

The percentage distribution of interest within each demographic characteristic shows more clearly the lower interest of the bottom education and income groups and the oldest age group.  

While most age, education, and income subgroups demonstrate roughly equal interest between surveys, the three "problem" groups show significantly less interest in the nationwide survey. Older citizens over 65 years old and those with household incomes below $10,000 are respectively 40% and 19% below the average interest of all ages and incomes. 

Audience respondents with some high school education or less actually offer 15% more "Definitely would order" responses than average, perhaps an indication of a number of students ordering from the Catalog. But among the nationwide sample who may not be Catalog customers, those in the lowest education group expressed 23% less interest in definitely ordering the test publications. 

What can we conclude about this? We can see that the opinions of our audience respondents are not necessarily those of the general public. Therefore, we may be justified in targeting our marketing approach by providing Catalog users with publications that best meet their interests. 

We believe that the general public, especially senior citizens and those with lower incomes and education levels, may have a special need to be smarter consumers in these inflationary times. Yet we can be less sure that these groups will initiate the transaction through the Consumer Information Catalog to receive informational booklets. For this reason, the Center delivers "unsolicited" consumer information directly to them through articles in the popular press and feature stories on radio and TV. 

On the brighter side, the apparently strong interest of the 25-34 age group in our audience survey is reflected in the responses of the nationwide sample. This is our top market - young people who may lack the experience of age but who face tough choices in home buying, child rearing, and financial management. They also have the educational background and financial resources to be our best customers for printed consumer information. And for the time being, the "baby boom" bulge in this age group assures us a large, enthusiastic audience for consumer information. 

WHAT TOPICS DO CONSUMER SUGGEST THEMSELVES? 

We test consumer titles which may be developed by federal agencies in Washington. But we also ask audience respondents what other titles
they'd like. And from time to time we find a winner such as "Keeping Your Family's Health Records."

What are their greatest interests? Consumers are fairly consistent in suggesting five or six areas most frequently including health, exercise, food, diet, child rearing and children's books, and energy. Perhaps because we're a government operation, they request publications explaining government operations and services, taxes, the law, and current legislation. Predictably, public opinion is fickle - the top area of interest changes with current events and the seasons.

Other areas of consistent but less pressing interest include: consumer protection, careers and jobs, senior citizen's subjects, home improvement and do-it-yourself projects, crafts, education, gardening, car care, small appliances, credit, and subjects for the handicapped.

As if that weren't enough, consumers offered an additional 119 single suggestions in a recent survey. This demonstrates both the wide diversity of consumer interests and the broad opportunities and challenge we all have to meet consumers' information needs.

PUTTING THIS RESEARCH TO WORK

Our judgements concerning the results of title testing help determine our consumer information objectives with nearly 30 federal agencies in Washington.

Our agency liaison staff uses research results to convince federal authors and policymakers to publish needed consumer information. Moreover, survey results can suggest that authors should target publications to certain demographic groups or adjust the reading level of a prospective publication.

Overall, this information helps agency officials establish their consumer information priorities and gives them ammunition in pursuing these priorities with agency administrators. In the often subjective field of anticipating the public interest, opinions backed by survey results can sometimes make the difference.
1. **TABLE 1:** Key Comparisons between Demographic Characteristics of Audience Respondents and US Population

<table>
<thead>
<tr>
<th>AGE</th>
<th>EDUCATION</th>
<th>HOUSEHOLD INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>High School or less</td>
<td>$10K or less</td>
</tr>
<tr>
<td>45-64</td>
<td>College Grad or more</td>
<td>$10K or more</td>
</tr>
</tbody>
</table>

**Audience**
- 30% 33%
- 34% 51%
- 14% 45%

**US Population (1976)**
- 15% 17%
- 72% 15%
- 39% 25%

2. **TABLE 2:** Average "Definitely Would Order" Scores for Recent Surveys and Typical Averages for Actual Orders

<table>
<thead>
<tr>
<th>NATIONWIDE SAMPLE</th>
<th>AUDIENCE RESPONDENTS (Typical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 Free Titles</td>
<td>11.74% 30.57% 10.0%</td>
</tr>
<tr>
<td>16 Charge Titles</td>
<td>9.75% 20.99% 1.7%</td>
</tr>
</tbody>
</table>

3. **TABLE 3:** Average Percentage of "Definitely Would Order" Responses by Demographic Characteristics for Nationwide and Audience Surveys

<table>
<thead>
<tr>
<th>AGE</th>
<th>EDUCATION</th>
<th>HOUSEHOLD INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-35-45-55-65+</td>
<td>Some HS Some Coll.</td>
<td>$10K-$15K</td>
</tr>
<tr>
<td>-24</td>
<td>34 44 54 64 65+</td>
<td>Grad Coll Grad+</td>
</tr>
</tbody>
</table>

**Audience**
- 27 29 25 24 26 23
- 31 24 26 27
- 29 26 24 27

**Nationwide**
- 12 13 11 10 10 6
- 8 11 12 11
- 9 11 12 11
TABLE 4: Percentage Distribution of "Definitely Would Order" Responses for Both Surveys Across Age, Education, and Income Characteristics

<table>
<thead>
<tr>
<th>AGE</th>
<th>24-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience</td>
<td>17.5</td>
<td>18.7</td>
<td>16.3</td>
<td>15.3</td>
<td>16.7</td>
<td>15.2</td>
</tr>
<tr>
<td>Nationwide</td>
<td>19.1</td>
<td>20.7</td>
<td>17.9</td>
<td>16.2</td>
<td>15.8</td>
<td>9.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th>Some HS or less</th>
<th>HS Grad</th>
<th>Some College</th>
<th>College Grad or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience</td>
<td>28.9</td>
<td>22.5</td>
<td>23.6</td>
<td>24.7</td>
</tr>
<tr>
<td>Nationwide</td>
<td>19.2</td>
<td>26.1</td>
<td>27.3</td>
<td>27.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOUSEHOLD INCOME</th>
<th>$10K</th>
<th>$10-15K</th>
<th>$15-20K</th>
<th>$20K+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience</td>
<td>27.4</td>
<td>24.5</td>
<td>22.8</td>
<td>25.1</td>
</tr>
<tr>
<td>Nationwide</td>
<td>20.4</td>
<td>25.4</td>
<td>27.8</td>
<td>26.3</td>
</tr>
</tbody>
</table>