Consumer Behavior Research Methods
MAR 3503
January 12, 2012

Why is research important?

• Pringles
• Pampers
• Eye level

Perspectives on consumer behavior research

• Psychology: The scientific study of behavior
  – Cognitive psychology: perception, learning, thought, memory, judgment
  – Social psychology: influence of other people, both direct (persuasion) and indirect (being a person among others)
• Economics: The study of how societies and people manage scarce resources
  – Microeconomics: allocation of individual resources
  – Macroeconomics: system-level factors that affect resource allocation
Perspectives on consumer behavior research

- Sociology
  - The study of social institutions and group relationships
- Other perspectives
  - History
  - Cultural anthropology
  - Lots more
- Notice difference between “macro” and “micro” orientations

The science of (consumer) behavior

- Research helps us...
  - Understand: “What happened?”
  - Predict: “What will happen?”
    - Predictions require an understanding of WHY something happened
- Important terms to know:
  - Data: classified observations of behavior; your results
  - Hypotheses: a predicted relationship between variables

Types of research questions

- Applied research
  - Answers specific questions about a product, a store, a market, etc.
    - This research is conducted...
      - In house
      - By an external market research firm
      - By watchdog agencies
Types of research questions

- Basic research
  - Answers questions independent of specific products, etc
  - Questions like...
    - What affects your perception of taste?
    - What makes a spokesperson credible?
    - How can attitudes be changed?
    - How do peer groups exert influence?
  - This research is conducted...
    - At universities
    - By governmental agencies
    - In “think tanks”
  - Hopefully, basic research can be applied to many products, consumers, and situations

Three kinds of research

- Descriptive
  - Basic purpose: To observe and record behavior
  - How? Case studies, surveys, or observation

Research methods: Observation

- Watching how people interact with some aspect of their environment (i.e., a product)
- Can be unobtrusive
  - Watching shoppers in stores
- Can be very intrusive
  - Watching people in their homes
- Advantages?
- Disadvantages?
Research methods: Focus groups

- A group gathers, led by a trained moderator, to discuss a product (or an ad, etc.)
- Can be done over the phone or online, even
  - Frees you from location restraints and gives people more freedom to disagree with the group
  - But you lose valuable data like body language, nonverbal reactions
- Advantages?
- Disadvantages?

Research methods: Surveys/interviews

- Each person responds to a preset list of questions
  - One-on-one, by mail, by phone, by computer
- They might ask...
  - Quantitative questions:
    - Have you tried this product? How often? How long ago?
  - Qualitative questions:
    - What do you think of this product?
- Advantages?
- Disadvantages?

Three kinds of research

- Descriptive
  - Basic purpose: To observe and record behavior
  - How? Case studies, surveys, or observation
  - Possible problems
    - What if you observe a weird sample?
    - What if you don’t watch the right things, or worse, watch only what you want (confirmation bias)?
      - Ask the right questions, or the answers you get will be uninformative
Danger of surveys and focus groups

• The biggest disadvantages of both
• 1. Introspection cannot always tell us “why”
  – Ex. Shoppers were presented with 4 identical pairs of socks, displayed left to right
  – They preferred the stocking on the right 4x as much as the stocking on the left
  – NO ONE believed their preferences were driven by the position of the socks
  – Experimenters were able to manipulate choices, but people weren’t able to report why they made the choices they did

  Nisbett & Wilson, 1977

Danger of surveys and focus groups

• 2. Memory is error-prone
  – Subtle changes in question wording can influence reporting of behaviors
  – A. How many products have you tried? 1, 5, 10?
    • Average answer for A:
    – VERSUS
  – B. How many products have you tried? 1, 2, 3?
    • Average answer for B:

  Loftus, 1975

So now what?

• Asking people why may lead you astray
• Even asking them what can lead to problems
• “Self-report” isn’t always enough
• To understand changes in behavior, we must be more systematic
  – See how changes along a selected dimension are associated with changes in behavior.
Three kinds of research

• **Correlational**
  – Basic purpose: To detect naturally occurring relationships; to see how well one variable predicts another
  – How? Computing statistical relationships, in surveys, etc.
  – Ex. Smoking and cancer, etc.

Example: Advertising data

• A company with a fluctuating ad budget looks at the relationship between ad dollars and sales

Three kinds of research

• **Correlational**
  – Basic purpose: To detect naturally occurring relationships; to see how well one variable predicts another
  – How? Computing statistical relationships, in surveys, etc.
  – Ex. Smoking and cancer, etc.
  – Possible problems
    • Doesn’t specify cause and effect!
      – Kids with bigger shoes are smarter?
    • Also, doesn’t specify cause and effect!
The third variable

- We know that watching violence on TV and aggression in kids is correlated
- But what causes what?

Three kinds of research

- **Experimental**
  - The crème de la crème of consumer behavior research
  - Basic purpose: To explore cause and effect
  - How? Manipulate one or more factors; use random assignment; always have a control group
    - Independent vs. dependent variables—know which is which!

An example of an experiment

- Suppose you want to know whether commercials make people enjoy TV shows less
- This means you’ll want to have some shows without commercials, and some shows with them
  - Therefore, commercials (or not) is the independent variable
- And you’ll want to measure enjoyment of the TV shows they watch
  - Therefore, enjoyment is the dependent variable
An example of an experiment

• The hallmark of an experiment is random assignment to conditions
  - Let’s say the groups (the commercial watchers and the people who watch it straight through) now look different!
  - Random assignment means that the two groups should not have differed systematically at the start
  - It also means that only your independent variable was different between groups
• Random assignment and manipulation of the IV mean that you can infer that the IV causes a change in the DV

An example of an experiment

• Question: do commercials make you enjoy a TV show less? Do people correctly predict this?
• Randomly assign your participants to groups
  - Half will predict how they enjoy a TV show with or without them, half will actually experience it and report how they feel
  - Half will watch a TV show with commercials, half will watch the same show without them
• Measure enjoyment or predicted enjoyment

An example of an experiment

- Nelson, Meyvis, & Galak, 2009
Three kinds of research

- Experimental
  - The crème de la crème of consumer behavior research
  - Basic purpose: To explore cause and effect
  - How? Manipulate one or more factors; use random assignment; always have a control group
    - Independent vs. dependent variables—know which is which!
  - Can be done large- or small-scale, in lab or in field
  - Possible problems
    - Sometimes not possible ethically
    - ...or practically

Ethics in research

- Need to protect participants
  - Obtain informed consent
    - Dilemma—how much to tell participants ahead of time?
  - Protect privacy
- “Mere-measurement” effect—innocuous questions may themselves influence behavior
  - Half of participants in sample were surveyed as to their intentions to purchase a car in the next few months
  - All participants (including those who weren’t surveyed) were contacted six months later

Things to watch out for...

- Temptation to resist research results
  - May clash with intuition
    - “I know (or I am) an exception”
    - Most results are general trends—not every person, every time!
  - Yet, it’s important to be a critical consumer of research
    - Don’t believe every result you read
      - Look for leading questions
      - Look for good experimental design and random assignment
Confirmation bias

- We “normally see things and not the holes between them” (Kurt Koffka)

- We are more sensitive to the presence (vs. absence) of features and objects, the occurrence (vs. non-occurrence) of events

- When evaluating evidence or seeking information regarding a hypothesis, people are often biased toward information regarding the presence of the feature in question

Confirmation bias causes

- Positive-test strategy: When we look for the presence of cases that confirm the hypothesis, e.g., when trying to determine if someone is an extrovert, look for evidence of extraversion

- Ambiguous Information: Biased conclusions especially likely when stimuli are complex such that cases exist to fit the hypothesis, regardless of whether the hypothesis is true—e.g., horoscopes, palm reading

Confirmation bias

- Does temperature at launch cause O-ring damage?
- Look at cases where damage occurred

<table>
<thead>
<tr>
<th>Damaged O-rings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 55 degrees F</td>
<td>6</td>
</tr>
<tr>
<td>Below 55 degrees F</td>
<td>3</td>
</tr>
</tbody>
</table>
Confirmation bias

- Does temperature at launch cause O-ring damage?
- Don’t forget to look at cases where NO DAMAGE occurred!

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Damaged O-rings</th>
<th>No damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 55°F</td>
<td>6 (26%)</td>
<td>17 (74%)</td>
</tr>
<tr>
<td>Below 55°F</td>
<td>3 (100%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

Summary

- Research is vital—intuition can’t always be trusted
- Consumer research
  - ...arises from many disciplines
  - ...involves basic and applied questions
- Observations, focus groups, and surveys may be useful, but they rely on people’s (potentially incorrect) assessments of “why”
- Correlational studies and experiments systematically associate changes in marketing strategy with changes in behavior
  - But only an experiment can truly isolate the CAUSE of those changes
- Don’t seek to confirm your ideas—seek to disconfirm them!
- Next time: How do we get consumers’ attention?