Measuring the Construct

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2012-03-22
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Outline

• Understanding the concept of Measurement
• The Marketing Research Process
• The Measurement Process
Understanding the concept of Measurement

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
Measuring Happiness
# Measuring Happiness

## Top Five Picks for Definition of Happiness

<table>
<thead>
<tr>
<th>Happiness (Ranking 1 = Most Selected)</th>
<th>U.S.</th>
<th>U.K.</th>
<th>India</th>
<th>Canada</th>
<th>Europe (mainland)</th>
<th>Scandinavia</th>
<th>China</th>
<th>Japan</th>
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<tr>
<td>Being physically fit and active throughout my life</td>
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<td>Enjoyment, fun, and laughter throughout my life</td>
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<td>Having enough time and money to be content</td>
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<td>Having enough time to enjoy all that life has to offer</td>
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<td>Having good friends and good times</td>
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## Source of Happiness

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<th>Source of happiness (Ranking 1 = Most Happy)</th>
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<th>U.K.</th>
<th>India</th>
<th>Canada</th>
<th>Europe (mainland)</th>
<th>Scandinavia</th>
<th>China</th>
<th>Japan</th>
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<tbody>
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<td>My family life</td>
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<td>My romantic life</td>
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<tr>
<td>My social life</td>
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<td>4</td>
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<td>4</td>
<td>6</td>
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</tbody>
</table>

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
Measurement

• The **process of assigning numbers or labels** to persons, objects, or events in accordance with **specific rules** for representing quantities or qualities or attributes.

• **Rule:**
  – The guide, method, or command that tells a researcher what to do.

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
Constructs

• Specific types of concepts that exist at higher levels of abstraction.

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
Concept & Construct

• Concept and Construct are abstractions of reality.

• Concept
  – expressed in every-day terminology.
    • This requires the researcher to generalize/categorize.

• Construct
  – theoretical abstraction that can’t really be observed
    • (e.g., love, trust, social class, personality, power).

Example of Concept & Construct

• Question – Why do some customers buy Air Jordan athletic shoes over and over again?

• Concept
  – Repeat purchase

• Construct
  – Brand loyalty

The Marketing Research Process

1. Problem Definition (Research Objective)
2. Research Design
3. Method of Research
4. Sampling Procedure
5. Data Collection
6. Analysis of Data
7. Writing and Presentation of the Report
8. Follow-up

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
The Measurement Process

1. Identify the concept of interest
2. Develop a construct
3. A constitutive definition
4. An operational definition
5. A measurement scale
6. Evaluate the reliability and validity of the scale
7. Utilizes the scale
8. Research findings

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
The Measurement Process

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Concept of interest

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
The Measurement Process

1. Identify the concept of interest
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Specific types of concepts that exist at higher levels of abstraction.
The Measurement Process

1. Identify the concept of interest
2. Develop a construct
3. A constitutive definition
4. An operational definition
5. A measurement scale

Statement of the meaning of the central idea or concept under study, establishing its boundaries; also known as theoretical, or conceptual, definition.
The Measurement Process

(1) Identify the concept of interest

(2) Develop a construct

(3) A constitutive definition

(4) An operational definition

(5) A measurement scale

(7) Utilizes the scale

Evaluates the reliability and validity of the scale

Statement of precisely which observable characteristics will be measured and the process for assigning a value to the concept.

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
The Measurement Process

1. Identify the concept of interest
2. Develop a construct
3. A constitutive definition
4. An operational definition
5. A measurement scale
6. An operational definition
7. Evaluate the reliability and validity of the scale
8. Utilizes the scale

Set of symbols or numbers so constructed that the symbols or numbers can be assigned by a rule to the individuals (or their behaviors or attitudes) to whom the scale is applied.

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
The Measurement Process

1. Identify the **concept** of interest
2. Develop a **construct**
3. A constitutive definition
4. An operational definition
5. A measurement scale
6. Evaluate the reliability and validity of the scale
7. Utilizes the scale
8. Research findings

**reliability and validity**

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
Constitutive Definition & Operational Definition

• Constitutive Definition
  – A theoretical or conceptual definition that defines the concept in terms of other concepts and constructs; like a dictionary definition

• Operational Definition
  – Defines which observable characteristics will be measured and the process for assigning a value to the concept

Example of Constitutive Definition & Operational Definition

• Constitutive Definition
  – Increased propensity to purchase a brand due to previous experience with that brand

• Operational Definition
  – Rating of purchase probability, depending upon prior purchase

Concept: Repeat purchase
Construct: Brand loyalty

Definition of Role Ambiguity

EXHIBIT 10.3 Constitutive and Operational Definitions of Role Ambiguity

Constitutive Definition
Role ambiguity is a direct function of the discrepancy between the information available to the person and that which is required for adequate performance of a role. It is the difference between a person’s actual state of knowledge and the knowledge that provides adequate satisfaction of that person’s personal needs and values.

Operational Definition
Role ambiguity is the amount of uncertainty (ranging from very uncertain to very certain on a five-point scale) an individual feels regarding job role responsibilities and expectations from other employees and customers.

Measurement Scale
The measurement scale consists of 45 items, with each item assessed by a five-point scale with category labels 1 – very certain, 2 – certain, 3 – neutral, 4 – uncertain, 5 – very uncertain. Samples of the 45 items follow:

- How much freedom of action I am expected to have
- How I am expected to handle nonroutine activities on the job
- The sheer amount of work I am expected to do
- To what extent my boss is open to hearing my point of view
- How satisfied my boss is with me
- How managers in other departments expect me to interact with them
- What managers in other departments think about the job I perform
- How I am expected to interact with my customers
- How I should behave (with customers) while on the job
- If I am expected to lie a little to win customer confidence
- If I am expected to hide my company’s foul-ups from my customers
- About how much time my family feels I should spend on the job
- To what extent my family expects me to share my job-related problems
- How my co-workers expect me to behave while on the job
- How much information my co-workers expect me to convey to my boss

Source: McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley
Summary

- Understanding the concept of Measurement
- The Marketing Research Process
- The Measurement Process
References

• McDaniel & Gates (2009), Marketing Research, 8th Edition, Wiley

• Edward Fox (2008), Measurement in Survey Research, http://efox.cox.smu.edu/mktg3342/lec6-measurement.ppt