Why are research important?

- Understand human behavior
- Creating new knowledge – theory development
- Gather evidence for one’s practice
  - an important managerial tool in helping managers to make decisions.
  - Decision are based on empirical evidence not intuition.
FACTS vs OPINION

What is the difference?

http://www.youtube.com/watch?v=LAKprpl7aPo

Facts or opinion?

- Malaysia gained its independence on the 31st August 2013.
- Cats are the best pets
- The police in this country are corrupted.
- Men are less emotional than woman.
- We receive our salary on every 28th of the month
- The total number of workers in ABC company is 1500.
- Is the Late Chin Peng a freedom fighter or a terrorist?
How do you turn opinion into FACTS?

Sources of knowledge
The major sources of knowledge can be categorized under five headings:

- (1) experience
- (2) authority,
- (3) deductive reasoning – Syllogism: a thinking process in which one proceeds from general to specific knowledge through logical argument (What is the limitations to this?)
- (4) inductive reasoning - inductive reasoning you reach a conclusion by observing examples and generalizing from the examples to the whole class or category (What is the limitations to this?)
- (5) the scientific approach: Research Process

Further reading: refer to Any's book pg 2-12
Definition of research

- the **systematic process** of collecting and analyzing information (data) in order to increase our understanding of the phenomenon about which we are concerned or interested. (Leedy 2001)
- a **structured inquiry** that uses **acceptable scientific method** to solve problems and create new knowledge (Kumar, 2011)
The research process

Why do we do research? - Scientific goals

<table>
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<th>Scientific Goals of Research</th>
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<tr>
<td>Describing behavior</td>
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<td>Explaining Behavior</td>
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<td>Predicting Behavior</td>
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<td>Controlling Behavior</td>
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Description

One evening in 1964, a woman named Kitty Genovese was attacked and murdered while walking home from work. 38 people saw what was happening, but nobody helped or called the police.

Two psychologists (e.g., Latané and Darley, 1970) wondered why this might happen. Their first step in understanding this phenomenon was to describe the behaviors of the bystanders.

Explanation

Darley and Latané noted, when there are more people around, we are less likely to offer aid.

The researchers called this failure to act diffusion of responsibility; that is, when others are around, we can pass blame for our inaction to them, assuming less (or none) for ourselves.
Prediction

We can determine when helping behavior is likely to occur.

- Helping occurs as people try to avoid feeling guilty.
- Helping diminishes if people have been relieved of guilt.

Control

- From our research we may identify appropriate intervention strategies to control certain behavior from our research findings.
  
  - Example: the influence of religiosity on
Scientific Method

- Scientific methods involves:
  - Systematic observation
  - Systematic classification
  - Systematic interpretation

- Thinking systematically and according to specific plan to generate ........

Characteristics of a Scientific Research

- Controlled
- Rigorous
- Systematic
- Valid and verifiable
- Empirical
**Characteristics of a Scientific Research**

- **Controlled**
  - Minimize the effect of other factors
  - More easier in laboratory studies

- **Rigorous**
  - Follow procedures

- **Systematic**
  - Procedures has logical sequence

- **Valid and verifiable**
  - The study conclusion is correct and can be verified by the researcher

- **Empirical**
  - Use hard evidence collected from respondents/observations

- **Critical**
  - The process or procedures used can be withstand critical scrutiny

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**What Constitutes Scientific Knowledge**

**Four Characteristics of Scientific Knowledge**

- **Objective**—Clearly specified and well defined
- **Data driven**—Conclusions are based on the data
- **Replicable**—Other investigators can repeat the research to see if the same results occur
- **Public**—The research is made public, in detail, so others can scrutinize it.
Looking at research for different perspectives

Interrelations between research paradigm, research orientation and inquiry mode

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<tr>
<th>Research paradigm</th>
<th>Research orientation</th>
<th>Inquiry mode</th>
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<tbody>
<tr>
<td>Positivist - Reality is singular, tangible, &amp; and can be dissected</td>
<td>Deductive</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Naturalistic - Realities are multiple, pluralistic, and holistic</td>
<td>Inductive</td>
<td>Qualitative</td>
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</tbody>
</table>
Deduction: reasoning from general premises, which are known or presumed to be known, to more specific, certain conclusions.
- Build theory/hypothesis first from existing knowledge
- Test the theory/hypothesis
- Accept or reject the theory/hypothesis

Induction: reasoning from specific cases to more general, but uncertain, conclusions.
- Make observation
- Build theory based on the findings of the observation

Research in Human Resource Development

- Staff development: leadership, motivation, career, recruitment, performance appraisal, counseling, commitment, work stress, job satisfaction, competencies
- Organizational development: learning organization, human resource management, quality management
- Adult education: adult learning, motivational orientation, learning styles
- Training: need analysis, evaluation, effectiveness
- Youth development, gender studies, community development, policy studies
Unethical Research Practices—Past and Present

- The Nazis conducted horrific research during World War 2
- American scientists exposed developmentally disabled children to radiation without parental consent in the 1950s
- Researchers exposed terminally ill patients to radiation without informed consent in the 1950s.
- Contemporary researchers have violated norms regarding giving informed consent to participants and patients.
Unethical Research Practices—Past and Present

- Researchers have engaged in other unethical behaviors
  - Claiming others’ work as their own (plagiarism)
  - Falsifying or making up data
  - Inventing studies that were never done
  - Adding names to studies that others had done

Cases of violations of research ethics investigated by the U.S. Office of Research Integrity (2001-2006)
Ethical Guidelines Created by APA

- Guidelines first created in the 1950s
- Revisions have appeared regularly.

<table>
<thead>
<tr>
<th>APA's Ethical Standards</th>
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<tbody>
<tr>
<td>Beneficence and non-maleficence--Working for the benefit of people and avoiding harm to them</td>
</tr>
<tr>
<td>Fidelity and responsibility--Support for the discipline and working for the benefit of the community</td>
</tr>
<tr>
<td>Integrity--Honest application of psychology in research, teaching, and practice.</td>
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<tr>
<td>Justice--Recognizing the implications one’s actions and striving to make good professional judgments</td>
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<tr>
<td>Respect for people’s rights and dignity--Striving to eliminate biases in dealing with people</td>
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Ethical Guidelines Created by APA

<table>
<thead>
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<th>Ethics in Research</th>
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<tr>
<td>Provide informed consent, minimize the use of deception, report data accurately</td>
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<tr>
<td>Share data with other researchers if it does not violate confidentiality</td>
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<tr>
<td>Get approval of the Institutional Review Board before beginning research</td>
</tr>
<tr>
<td>Maintaining anonymity and confidentiality of participants</td>
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Ethical Issues in Special Circumstances

- **Survey research** raises questions about
  - Confidentiality—making sure that only those involved in the research have access to data and to information about participants
  - Anonymity—making sure that responses cannot be traced to the person and, ideally, that nobody can identify who participated in the research.
  - Voluntary participation—Participants must not feel forced to participate, which can happen if the researchers is standing next to them when they respond


Ary’s book.