Chapter 14: Evaluation Studies: From Controlled to Natural Settings

Anna Loparev
Intro HCI
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Usability Testing
Usability Testing: Types of Tasks

Search for information
Read different typefaces

http://www.impactpromotions.com/embroidery/em_typefaces.htm

Navigate through different menus

http://docs.oracle.com/cd/E19316-01/820-7194/gifqv/index.html
Usability Testing: Quantitative data

Time to complete task
Time to complete task after time away from product

# and type of errors per task
# errors per unit time

# navi to online help / manuals

# users making particular error

http://starwars.wikia.com/wiki/Stormtrooper,
http://kotaku.com/5650591/then-why-we-still-got-ewoks,

# users successfully complete task

http://starwars.wikia.com/wiki/Stormtrooper,
http://kotaku.com/5650591/then-why-we-still-got-ewoks,
Conducting Experiments

Conducting Experiments: Hypothesis Testing
Hypothesis Testing

Independent variables

http://franthony.com/2012/08/the-confessions-of-an-independent-alcoholic/

Dependent variables

https://louisdietvorst.wordpress.com/2012/10/28/from-dualism-to-dependent-origination/
Conditions

Null hypothesis

A  B
Alternate hypothesis: One-tailed

Alternate hypothesis: Two-tailed

OR
Conducting Experiments: Experimental Design

Bias
Between-subjects design

Within-subjects design
Pair-wise design

A

B

Mixed

A

B
Hypothesis Testing

Statistics: t-test