Reading Comments for T602 Research Methods for Telecommunications, November 26, 2018 Hongtao Hao

Table: Comparisons between laboratory experiments and field experiments

	Laboratory Experiments	Field Experiments
Settings	Labs	Natural settings
Level of applicability to real-life situations	Low	High
Participants -	Aware that they are being observed and studied	Not aware
	Get paid or awarded	No compensation
Measures -	Self-report, questionnaires	Realistic measures
	Obtrusive	Less obtrusive
Level of control for outside factors	High	Low
Level of replicability	High	Low
Internal validity	High	Low
External validity	Low	High
Cost	Inexpensive	Expensive
Size of samples needed	Relatively small	Relatively large
Capability to examine long-term effects	Limited	Strong
Capability to study complex social behavior	Limited	Strong

^{1.} In field experiments, participants will be randomly assigned.

- 2. If conducted correctly, field experiments allow researchers to establish causality.
- 3. Field experiments can be classified into three main categories: artefactual, framed and natural. Artefactual field experiments use a nonstandard subject pool. In framed filed experiments, participants know that they are being studied; Participants in natural field experiments are unaware that they are being studied.
- 4. One of the advantages of field experiments is that it is conducted in natural settings, which allows the researchers to generalize the findings. It should be noted, however, that the naturalness of field experiments varies. Also, this advantage is a disadvantage. Participants in field experiments don't know that they are being observed and studied and yet they are. Researchers don't get participants' consent before doing that. This might infringe on participants' privacy and their right to know. In addition, they are not paid as those in laboratory experiments.
- 5. The difference between field studies (FSs) and field experiments (FEs): First, FSs use nonexperimental designs, and thus they do not involve direct manipulation of the environment, whereas FEs use experimental design and they will involve this manipulation. Second, FSs study preexisting conditions, whereas FEs study conditions created by researchers which do not exist before the experiment.
- 6. Causality cannot be reached in quasi-experiments since participants are not randomly assigned.