



天津大学
Tianjin University

管理与经济学部

College of Management and Economics



研究语言 (Research Language)



管理学研究类别 Business Research Type



研究的主要分类方法 Classification of main types of research

研究类型 Type of research	分类标准 Basis
应用/基础 Applied or Basic research	结果Outcome
演绎/归纳Deductive or Inductive research	逻辑Logic
定量/定性 Quantitative or Qualitative research	过程Process
一手/二手 Primary or Secondary research	数据来源Data source
描述/探索/分析/预测Descriptive, Exploratory, Analytical or Predictive research	目的 Purpose

Business Research Type --*outcome*



基础研究Basic Research

- 扩展知识范畴 Attempts to expand the limits of knowledge.
- 不直接解决实际问题 Not directly involved in the solution to a pragmatic problem.
- *Examples*
 - ✓ 管理者的成功是否与高内在动机相关? Is executive success correlated with high intrinsic motives?
 - ✓ 领导者的管理风格是否能影响员工的知识分享意向? Do leaders' management style affect the employee' s knowledge sharing intention?



应用研究 **Applied Research**

■ 针对现实生活中的具体问题 Conducted when a decision must be made about a specific real-life problem

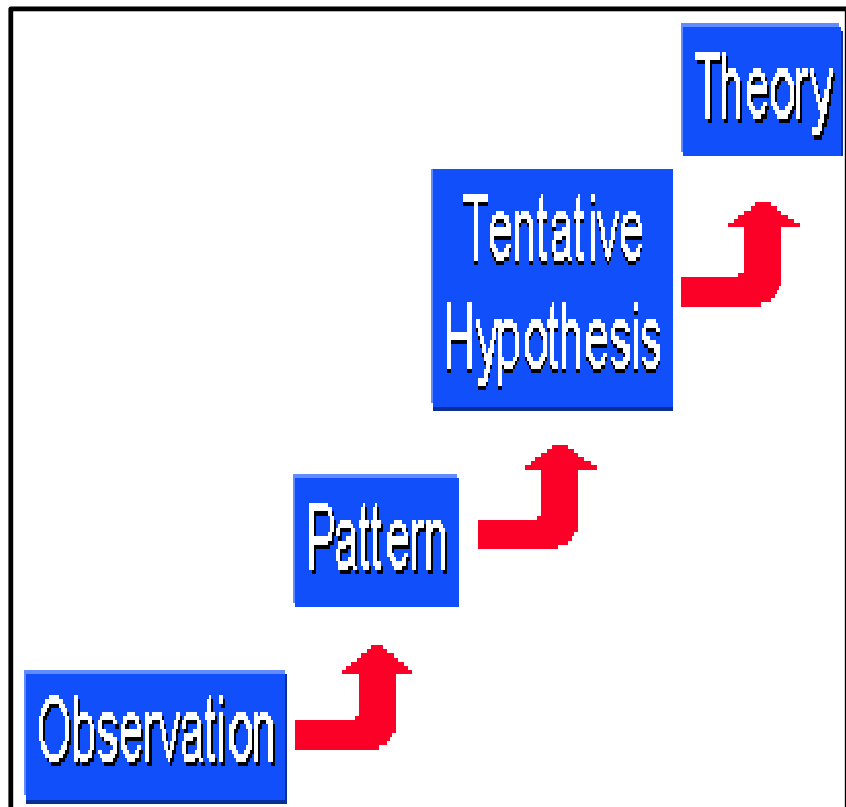
■ *Examples*

✓ 字节跳动是否需要天津建立研发中心? Should Bytedance establish a new R&D research center Tianjin?

Business Research Type --logic



归纳法 Inductive Approach

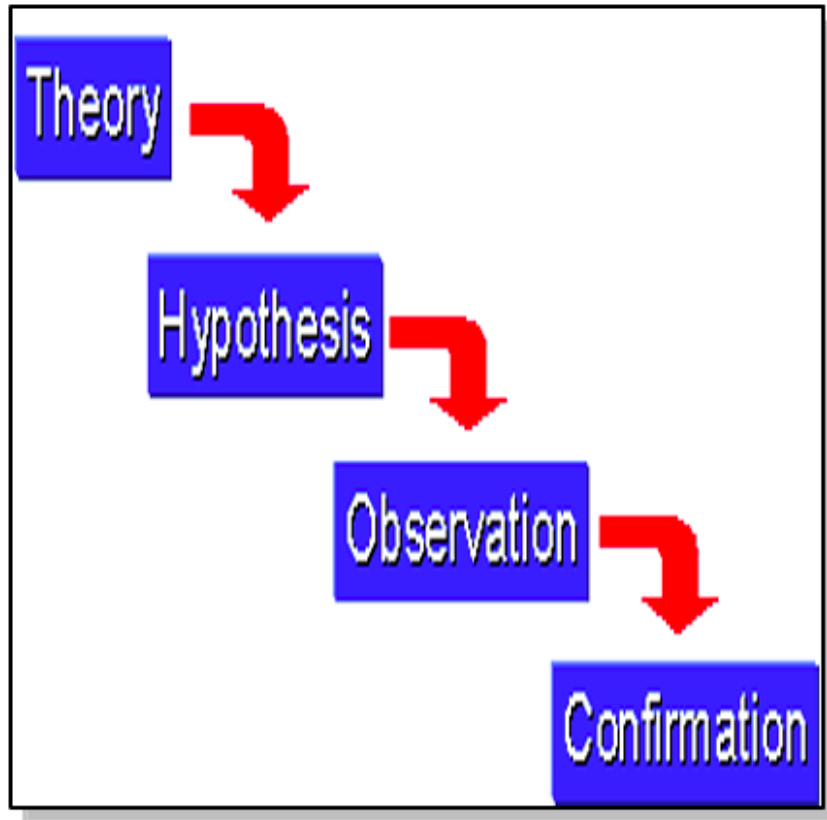


- 从特定的现象观察到广泛的理论概括 from specific observations to broader generalizations and theories
- 自下而上 “bottom up” approach.
- 结论建立在一定的前提上
Conclusion is likely based on premises
- 情绪事件理论 affective event theory

Business Research Type --logic



演绎法 Deductive Approach



- 从一般性概括到具体问题 from the more general to the more specific.
- 自上而下 "top-down" approach.
- 结论来源于具体逻辑推演 Conclusion follows logically from premises (available facts)
- 基于情绪事件理论 affective event theory 进行现象推断

Business Research Type --*process*



■ 定量研究Quantitative research

- ✓ 应用统计，公式、或数字分析 use of statistical, formulaic or numerical analysis
- ✓ 主要方式：分析、因果判断、预测、研究发现的概括 Main approach: analysis; causal determination, prediction, generalization of findings

■ 定性研究Qualitative research

- ✓ 非定量，用非数据性技术 not quantitative; use of non-numeric techniques
- ✓ 主要方式：发现、启发、理解、对相似情况的推断 Main approach: discovery; illumination, understanding, extrapolation to similar circumstances

Business Research Type --process



	定量 Quantitative	定性 Qualitative
Type of reasoning	-- 演绎Deduction -- 客观Objectivity -- 因果Causation	-- 归纳Induction -- 主观Subjectivity -- 意义Meaning
Type of question	-- 先前指定Pre-specified -- 结果导向 Outcome-oriented	-- 开放式Open-ended -- 过程导向Process-oriented
Type of analysis	-- 数据评估Numerical estimation -- 统计推断Statistical inference	-- 叙述描写Narrative description -- 静态比较 Constant comparison

Business Research Type –*data source*



■ 一手研究 （实地调查） **Primary Research (field research)**

- ✓ 数据还不存在，需要去收集原始数据 data does not already exist, research collect original data.

■ 二手研究 （文案调查） **Secondary Research (desk research)**

- ✓ 信息已经被收集 information has already been put together by someone else

Business Research Type –*purpose*



研究类型	例子
探索 Exploratory	找出促进员工提升个人绩效的因素 To find out what motives employees to increase their performance
描述 Descriptive	描述高绩效和低绩效员工间的差异 Describe the difference between employees with high and low performance.
分析 Analytical	分析薪酬奖励和员工绩效之间的关系 Analyze the relationships between rewards and employee performance.
预测 Predictive	预测什么因素影响员工绩效变化 A forecast of which variables should be changed in order to bring about a change in the employee performance.

什么不是研究 What is not a Research?



- 技术应用 Playing with technology
- 书评 Book report
- 编程 Programming project
- 重复 Doing what others have already done

但是，它们都能构成研究的一部分 Each of these can be done as part of research



研究方法分类 Methodology Taxonomy

■ 实证（Empirical）

- ✓ 案例分析Case study
- ✓ 问卷调查Survey
- ✓ 现场研究Field test
- ✓ 实验Experiment

■ 非实证研究(non-empirical)



- Concepts 概念
- Constructs 构念
- Operational Definition 操作性定义
- Variables 变量
- Propositions and Hypotheses 命题和假设
- Theory 理论
- Model 模型

Research Language--*concepts*

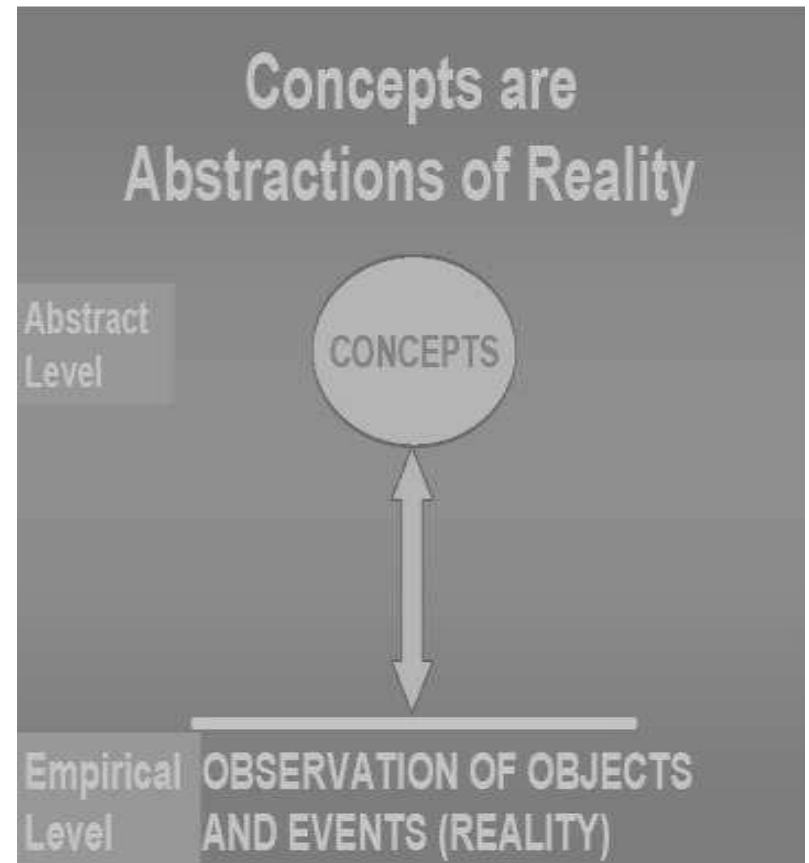


Concepts 概念

- ✓对现实的抽象 abstractions from particulars.
- ✓观念性定义constitutive definitions.
- ✓意义丰富但不能直接度量rich in meaning but cannot be measured directly.
- ✓在问题界定和假设推演中应用 concepts are used in the step of problem and hypothesis formulation.

•例子

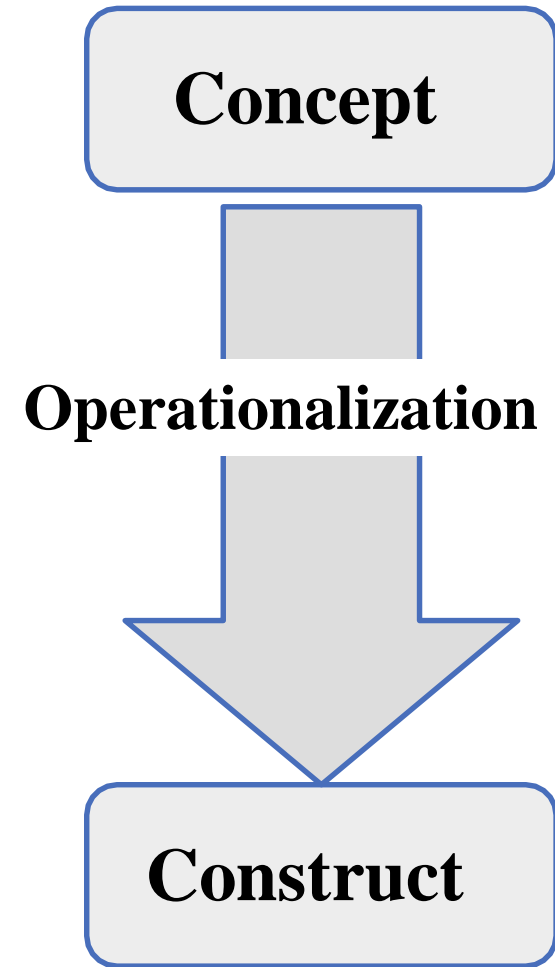
- 热/冷，时间Hot/cold, time,
- 质量、满意、态度、领导力
quality, satisfaction, attitude, leadership.





构念 Constructs

- ✓能度量的概念 concepts that are measurable.
- ✓操作化: 效度/信度 Operationalization validity and reliability
- ✓单项/多项 度量 a single-item vs. multiple-item scale.
- ✓设计度量工具 designing the measurement instrument

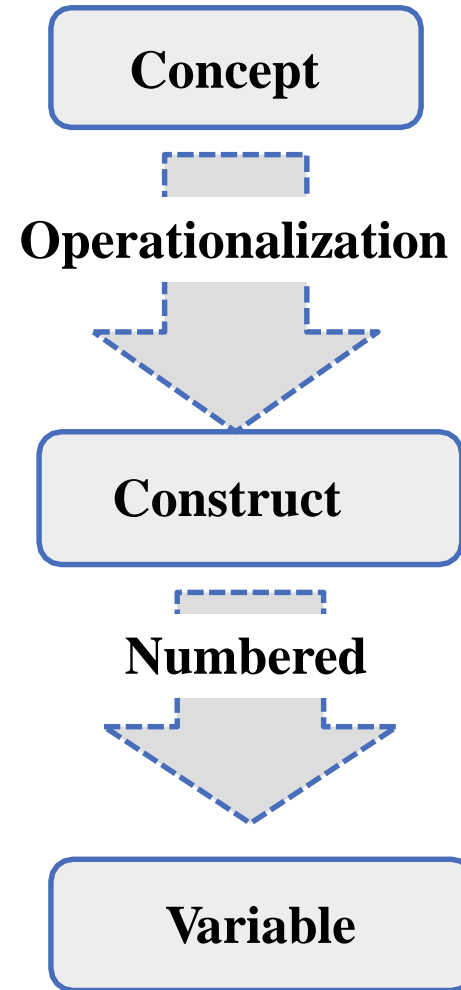




Variables 变量

通过运用度量指标从特定对象收集数据后，每个含义被量化度量指标后的概念

After using the measurement scales to collect the responses from the subjects, each response to each measurement of the scales is then coded into “number” .



Research Language--variables



Dichotomous
二分法

男/女 Male/Female
在职/离职 Employed/
Unemployed

Discrete
离散

教育程度 Educational level

Continuous
连续

收入 Income
温度 Temperature
年龄 Age



Example

Gu, Q., Jiang, W., (通讯) & Wang, G. G. (2016). Effects of external and internal sources on innovation performance in Chinese high-tech SMEs: A resource-based perspective. *Journal of Engineering and Technology Management*, 40, 76-86.

Table 1
Demographic characteristics of the firms.

Characteristics	Groups	Samples (N)	(%)	Cumulative (%)
Employees(N)	10–100	67	63.2%	63.2%
	101–200	17	16.0%	79.2%
	201–300	11	10.4%	89.6%
	301–400	5	4.7%	94.3%
	401–500	6	5.7%	100%
Firm age(years)	3–5	13	12.3%	12.3%
	6–10	62	58.5%	70.8%
	11–15	22	20.7%	91.5%
	>15	9	8.5%	100%
Industrial type	pharmaceutical industries	12	11.3%	11.3%
	Electronic Communication industries	51	48.1%	59.4%
	High-tech service industries	30	28.3%	87.7%
	New energy and new materials industries	12	11.3%	99.0%
	Environment protection technology industries	1	0.9%	100%



Types

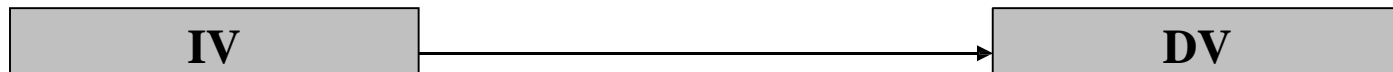
- ✓自变量/因变量Independent vs. Dependent variables
- ✓调节变量Moderating variables
- ✓中介变量Mediating variables
- ✓控制变量control variables

Research Language--*variables*



■ IV vs. DV

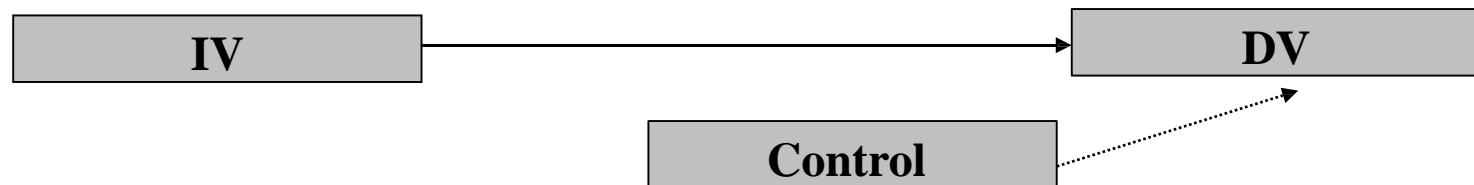
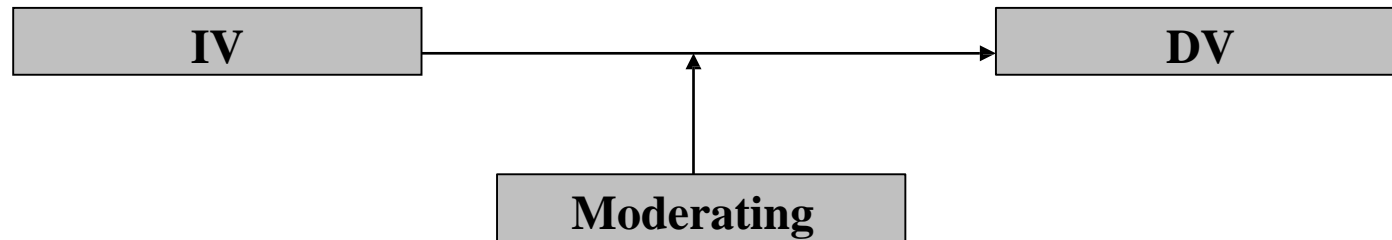
自变量 Independent variable	因变量 Dependent variable
Antecedent 前因	Consequence 结果
Presumed cause 推测原因	Presumed effect 推测影响
Stimulus 刺激	Response 反应
Predicted from...预测自	Predicted to...预测成



Research Language--*variables*



■ Moderating vs. Mediating vs. Control



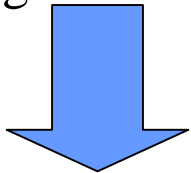
Research Language-- *Propositions and Hypotheses*



命题 Propositions

能被判断真假的，对可观察现象的陈述 A statement about observable phenomena (concepts) that may be judged as true or false

当它可以被实证验证时 When it is formulated for empirical testing



假设 Hypotheses

对两个或多个变量间关系的说明式陈述 A declarative statement about the relationship between two or more variables.



假设 Hypotheses

✓关系性假设 Relational hypotheses

•**相关性假设** Correlational hypotheses

没有指明因果 without implying that one causes the other

•**因果性假设** Causal hypotheses

一个因素的存在或改变或导致其它因素的变换 The existence of or a change in one variable causes or leads to a change in the other variable.

Example_(Qin et al., JAP)



Correlational hypotheses

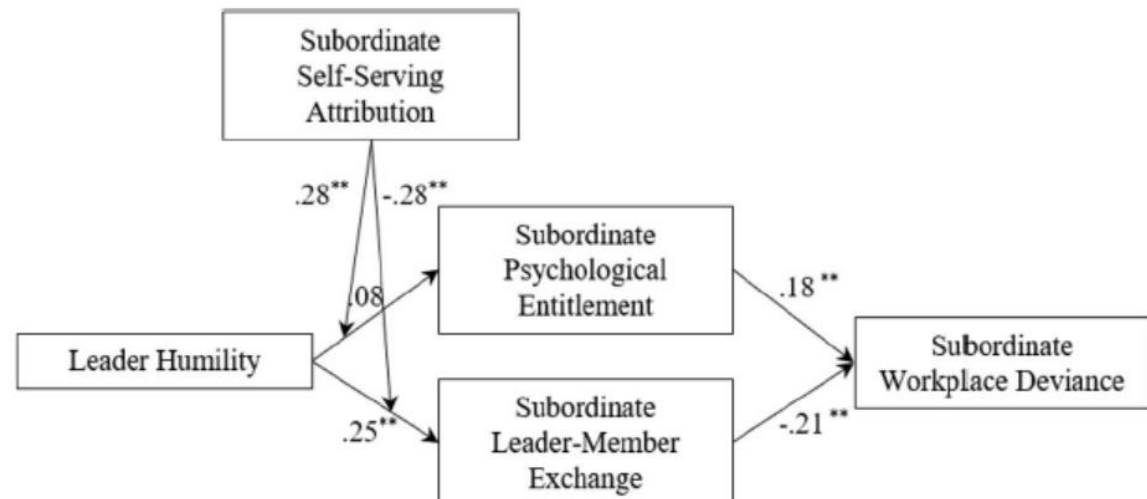
Table 1
Descriptive Statistics and Correlations in Study 1

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Subordinate gender (T1)	.41	.49									
2. Subordinate age (T1)	31.15	5.27	.13*								
3. Subordinate education (T1)	16.64	1.23	-.04	.05							
4. Dyadic tenure (T1)	3.11	3.40	.19**	.41**	-.10 [†]						
5. Subordinate negative affect (T1)	2.44	.70	.00	-.05	.06	.02					
6. Leader humility (T1)	3.39	.69	.07	-.04	-.07	.06	-.21**				
7. Subordinate self-serving attribution (T1)	3.35	.51	.05	.08	.24**	-.04	.02	.14*			
8. Subordinate psychological entitlement (T2)	3.13	.55	.02	.14*	.11 [†]	-.03	.02	.10	.26**		
9. Subordinate leader-member exchange (T2)	3.34	.50	.05	.13*	.08	.14*	-.12*	.37**	.15*	.19**	
10. Subordinate workplace deviance (T3)	1.51	.43	.11 [†]	.00	-.05	.01	.27**	-.09	-.05	.17**	-.22**

Note. $n = 275$. For subordinate gender, 0 = female; 1 = male. T1/2/3 = Time 1/2/3.

[†] $p < .10$. * $p < .05$. ** $p < .01$.

Causal Hypotheses



The Role of Hypotheses



指明研究的方向

Guide the direction of the study

确定相关事实

Identify relevant facts

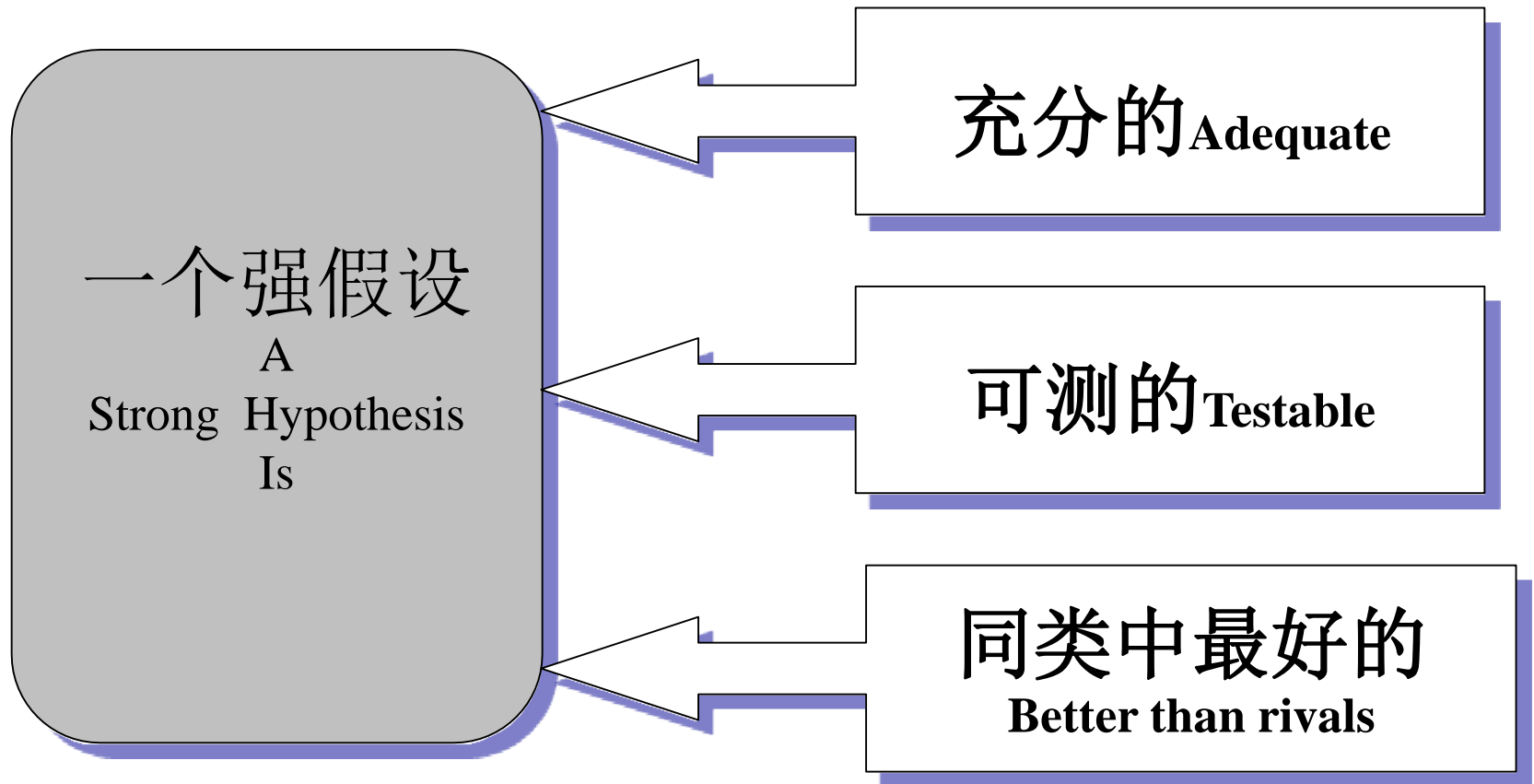
建议最合适的研究设计

Suggest most appropriate research design

为组织相关结论提供框架

Provide framework for organizing resulting conclusions

Characteristics of Strong Hypotheses

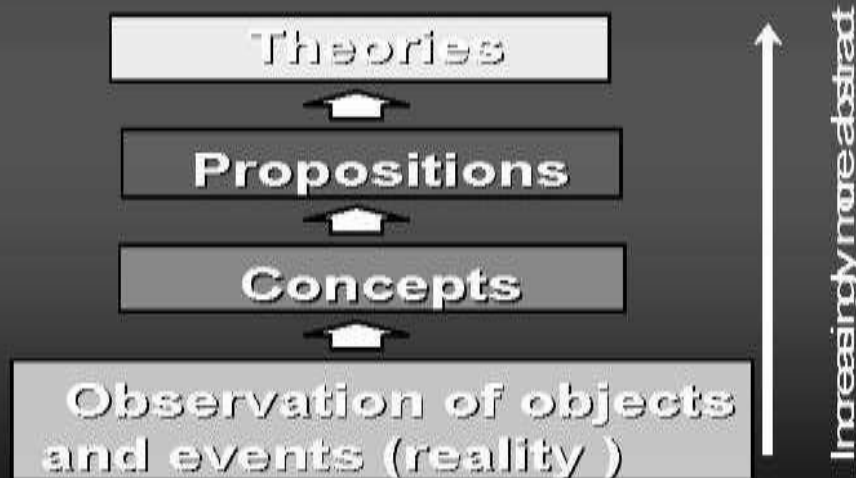


Research Language--*Theory*



- ✓ 理论通常是复杂的、抽象的、包含多个变量的
- ✓ Theories tend to be complex, abstract, and involve multiple variables.
- ✓ 假设通常是简单的、对具体事例中涉及的有限个变量关系的陈述
- ✓ Hypotheses tend to be simple, limited-variable statements involving concrete instances

Theory Building Is A Process Of Increasing Abstraction





Social exchange theory 社会交换理论

Social information processing theory 社会信息处理理论

Social cognition theory 社会认知理论

Moral self-regulation theory 道德自控理论

Research Language-variables, hypotheses, model

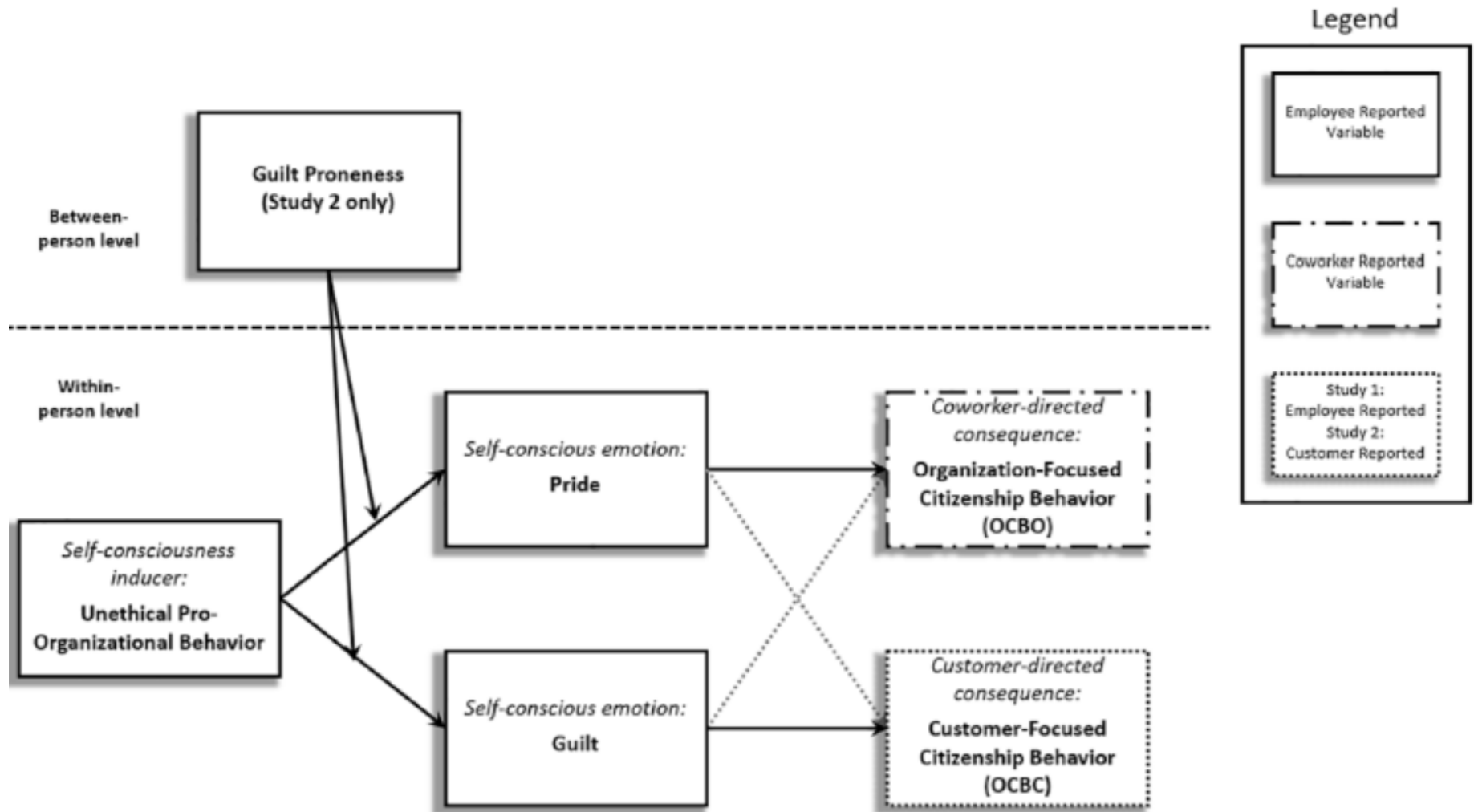


Fig. 1. Hypothesized model.

Research Language-variables, hypotheses, model



Hypothesis 1. Daily UPB is positively related to daily feelings of pride.

Hypothesis 2. Daily UPB is positively related to daily feelings of guilt.

Hypothesis 3. Daily pride mediates the indirect effect between daily UPB and daily organization-focused citizenship behavior (OCBO).

Hypothesis 4. Daily guilt mediates the indirect effect between daily UPB and daily customer-focused citizenship behavior (OCBC).

Hypothesis 5a. Guilt proneness will moderate the positive relationship between daily UPB and pride, such that this relationship will be stronger for service employee with lower (vs. higher) levels of guilt proneness.

Hypothesis 5b. Guilt proneness will moderate the positive relationship between daily UPB and guilt, such that this relationship will be stronger for service employee with higher (vs. lower) levels of guilt proneness.

Integrating our theoretical arguments presented in Hypotheses 1 – 5, we further posit the following moderated mediation hypotheses.

Hypothesis 6a. Guilt proneness will moderate the mediated relationship between daily UPB organization-focused citizenship behavior (OCBO) through pride, such that this relationship will be stronger for service employee with lower (vs. higher) levels of guilt proneness.

Hypothesis 6b. Guilt proneness will moderate the mediated relationship between daily UPB and customer-focused citizenship

Research Language-variables, hypotheses, model

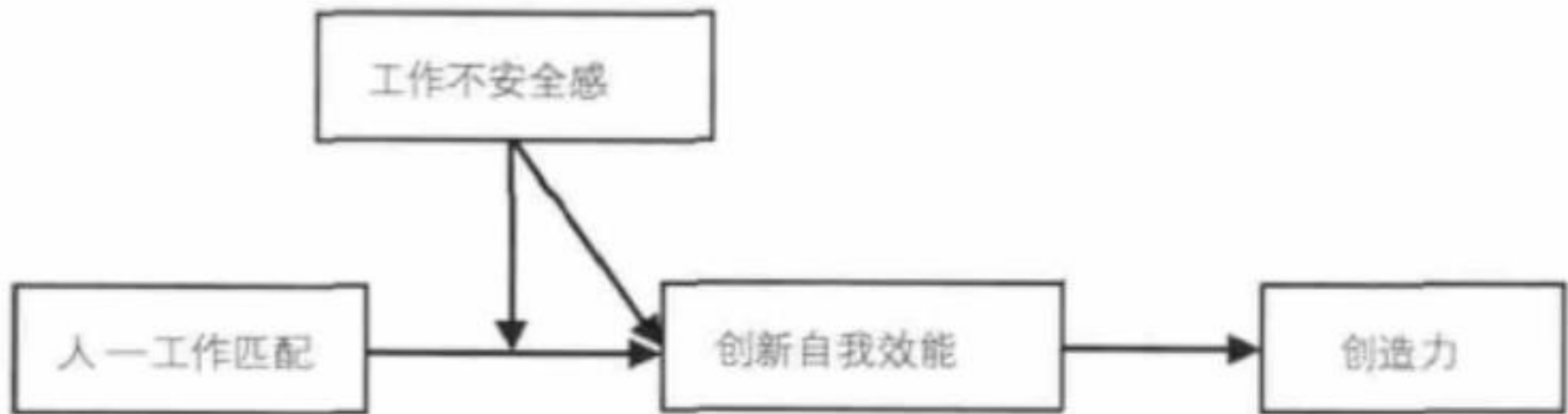


图1 理论模型



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