(12-14) Analysis and Reports

Research Methods

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Leadership/Strategic Information Management
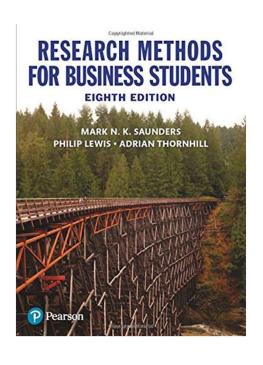
WS 2023/24

Pswd: ResMeth23

Fachbereich 3

Wirtschaft und Recht | Business and Law

Agenda

RESEARCH METHODS FOR BUSINESS STUDENTS

EIGHTH EDITION

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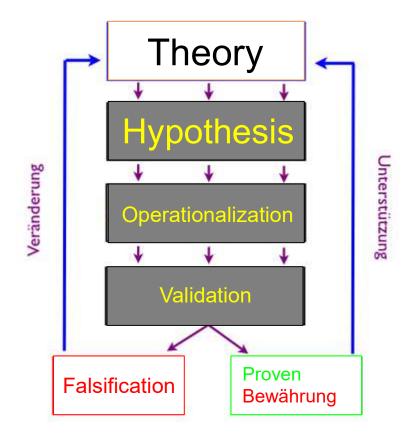
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What are the theories already in the area study?

Can a theory be transferred from another area of study?

Theory

Veränderung

Hypothesis

Operationalization

Validation

Unterstüzung

Falsification

Proven
Bewährung

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A scientific hypothesis is an assumption about real issues in the form of conditional clauses. This transcends the individual case (Generalizability, degree of generality) and are refuted by empirical data (falsifiable)

Bortz|Döring Page 8

4 Criteria of a Hypothesis:

1. refers to real facts which are empirically examinable

2. is a universally valid assertion that goes beyond the individual case or a singular incident (general statement)

3. underlying conditional clause (If/Then/Clause)

4. Conditional clause must be falsifiable

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. Hypotheses are often composed of two parts

a hypothesis, an assumption about the relationship between at least two issues, with constructs that are collectively conceptualized. (die mit Konstrukten begrifflich gefasst werden.)

|If = independent Variable | Then = dependent Variable|

The part belonging to the if section is referred to as independent variable , the part belonging to the then section is known ad the dependent variable

Statistical Methods and Techniques

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1. **Measures of Distribution**

2. **Regression Analysis**

3. **Time Series Analysis**

4. **Discriminant Analysis**

5. **Factor Analysis**

6. **Cluster Analysis**

7. **Conjoint Analysis**

8. **Variance Analysis**

9. **Rankings und Ratings**

10. **Forecasts**

NOT THIS TIME / a 3 min video with your Method and upload it to CampUAS

Topics

1. **Lineare Regression**
2. Case study
3. Ratingmethoden
4. **Clusteranalyse**
5. **Faktorenanalyse**
6. **Conjoint Analyse**
7. **Sentiment Analyse**
8. Netzwerkanalyse (social graph)
9. Künstliche Intelligenz (deep Learning)
10. Diskriminanzanalyse
11. Trendstudien
12. **Paneluntersuchungen**
13. Assoziationsanalyse
14. Ausreißererkennung
15. **Zeitreihenanalyse**
16. Sequenzanalyse
17. Testmethoden (Überblick)

18. Ereigniszeitanalyse
19. **Mittelwert**
20. Fairer Vergleich
21. Latent Semantic Analysis
22. Nächste-Nachbarn-Klassifikation
23. Monte-Carlo-Methoden
24. **Simulation**
25. **Sensitivitätsanalyse**
26. Heuristiken
27. Textanalyse Text Mining
28. **Multiple Regression**
29. Musteranalyse
30. Wechselwirkungsanalyse (Cross-Impact Analysis)
31. **Scoring Methoden**
32. Kontingenzanalyse / Kreuztabelle
33. Korrespondenzanalyse
34. Multidimensionale Skalierung
35. Rankingmethoden
36. (Labor)Experiment
37. Sekundäranalyse

Typical structure of a research article

Abstract (200 words)

Short summary of the research article

Keywords (3 to 5 words)

Words that describe the research article

Introduction (approx. 1/10 pages)

Introductions include the motivation, research question/problem, used methodology, hypotheses, findings, implications, and article structure

Background literature (approx. 1,5/10 pages)

Here, the research entities are defined and described, theories are presented, and the current state of the research is described

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. Typical structure of a research article

Research Model (approx. 1/10 pages)

Transfer of theory to the problem in practice, description and solutions for the concrete problem, establishment of hypotheses and a research model, description of the prototype/solution, possibly even critical opinions on the secondary literature, etc.

Research Design (1,5/10 pages)

Comparisons, analysis, empirical approaches (primary and secondary analysis), critical comparison of the used model/approach with other approaches, operationalization, data collection

Results (approx. 2/10 pages)

Used tools (e.g., software), data/measurement evaluation, analyses, presentation of findings

. Typical structure of a research article

Discussion (approx. 2/10 pages)

Interpretation of the findings, comparison to existent the existent literature, presentation of the study's limitations, description of the practical implications

Conclusion (approx. 1/10 pages)

Short summary of the research article, its findings, its practical implications, provision of an outlook on potential future research that should follow the study at hand

Bibliography

All cited references

Naturally, this structure does not always fit and only illustrates how the construction of a scientific work might look like. On the Internet, there is a wealth of additional advices and tips - just type "structure of scientific works" into a search engine of your choice …

Output: Research article

What has been done?

Why has it been done?

How has it been done?

What has been found?

What are the practical implications of the findings?