FACULTY OF POLITICAL AND SOCIAL SCIENCES

INLEIDING COMMUNICATIEWETENSCHAPPELIJK ONDERZOEK

# H1: INLEIDING

**Prof. dr. Koen Ponnet**

GHENT UNIVERSITY

FACULTY OF POLITICAL AND SOCIAL SCIENCES

# AUTEURSRECHTEN

- Alle slides en cursusmateriaal zijn auteursrechtelijk beschermd.
- Het is niet toegelaten om (delen van) studiemateriaal (bv. cursusteksten, slides, oefeningen, voorbeelden examenvragen) dat een student in het kader van zijn/haar opleiding gratis of tegen betaling heeft verkregen, digitaal of op andere wijze te multipliceren en aan anderen gratis of tegen betaling ter beschikking te stellen, tenzij met uitdrukkelijke toestemming van de auteur. Commercieel gebruik door studenten van studiemateriaal is steeds verboden. Studenten die deze regel overtreden stellen zich bloot aan het tuchtreglement.
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# STRUCTUUR

1. Wie
2. Situering
3. Planning
4. Onderwijsvorm en evaluatie
5. Waarom
6. Basisprincipes
7. Leerdoelen

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# Wie

- Licentiaat psychologie
- 2004: Doctor Psychologie

- 2016: Universiteit Gent: Communication Sciences
  - Research Group for Media, Innovation & Communication Technologies (imec-mict)
  - Koen.Ponnet@UGent.be

- Onderzoek:
  - Determinanten van online/offline gezondheids- en risicogedragingen
  - Kwetsbare groepen

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**SPEELS** **GELUKKIG** **BEZORGD**

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# SITUERING

- Reguliere bachelorstudenten:

| Nr. | Opleidingsonderdeel | Sem. | Vakgr | Titularis | Cont. Uren | Stud. Punt. | Ma | Di | Woe | Do | Vrij |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALGEMENE OPLEIDINGSONDERDELEN (STAM) : | | | | | | | | | | |
| 1 | Politicologie (K000095) | 1 | PS03 | Carl Devos m.m.v. Nicolas Bouteca | 45.0 | 6 | | 10u-12u45 | | | |
| 2 | Communicatiewetenschap (K000027) | 1 | PS01 | Stijn Joye | 45.0 | 6 | | | 11u30-12u45 | 11u30-12u45 | |
| 3 | Sociologie (K000459) | 1 | PS04 | Bart Van de Putte | 45.0 | 6 | | 14u30-17u15 | | | 16u-17u15 |
| 4 | Methodologie van de sociale wetenschappen (K000325) | 2 | PS04 | Henk Roose | 45.0 | 6 | | | 14u30-17u15 | | |
| 5 | Statistiek (K000441) | 1 | PS04 | John Lievens | 60.0 | 6 | 10u-12u45 | | 8u30-10u45[A] 13u-15u[B] | | |

# SITUERING

- Schakeljaar- en voorbereidingsjaar-studenten

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Communicatiewetenschap (K000027) | 1 | PS01 | Stijn Joye | 45.0 | 6 | | | 11u30-12u45 | 11u30-12u45 | |
| 2 | Academisch rapporteren (K001177) | 2 | PS01 | Koen Ponnet | 45.0 | 5 | | | | 10u-12u45 | |
| 3 | Statistiek (K000441) | 1 | PS04 | John Lievens | 60.0 | 6 | 10u-12u45 | | | | 10u45-12u45[A] |
| 4 | Inleiding tot communicatiewetenschappelijk onderzoek (K001240) | 1 | PS01 | Koen Ponnet | 30.0 | 3 | | | | 8u30-11u15 | |
| 5 | Kwantitatieve technieken (K001184) | 1 | PS01 | Koen Ponnet | 45.0 | 5 | | 14u30-17u15 | | [B] | |
| 6 | Kwalitatieve technieken (K001157) | 1 | PS04 | Peter Stevens | 60.0 | 5 | | | 13u-15u45 | | |
| 7 | Gevorderde analysetechnieken en onderzoekssoftware (K001196) | 2 | PS01 | Gino Verleye | 45.0 | 5 | | | 8u30-9u45<br>10u-11u15 | 13u-14u15 | |
| 8 | Media- en auteursrecht (K001186) | 1 | PS01 | Katrien Van der Perre | 45.0 | 5 | | | | 14u30-17u15 | |
| 9 | Onderzoekspaper (K001158) | J | PS01 | Sara De Vuyst | 60.0 | 7 | | | | | |

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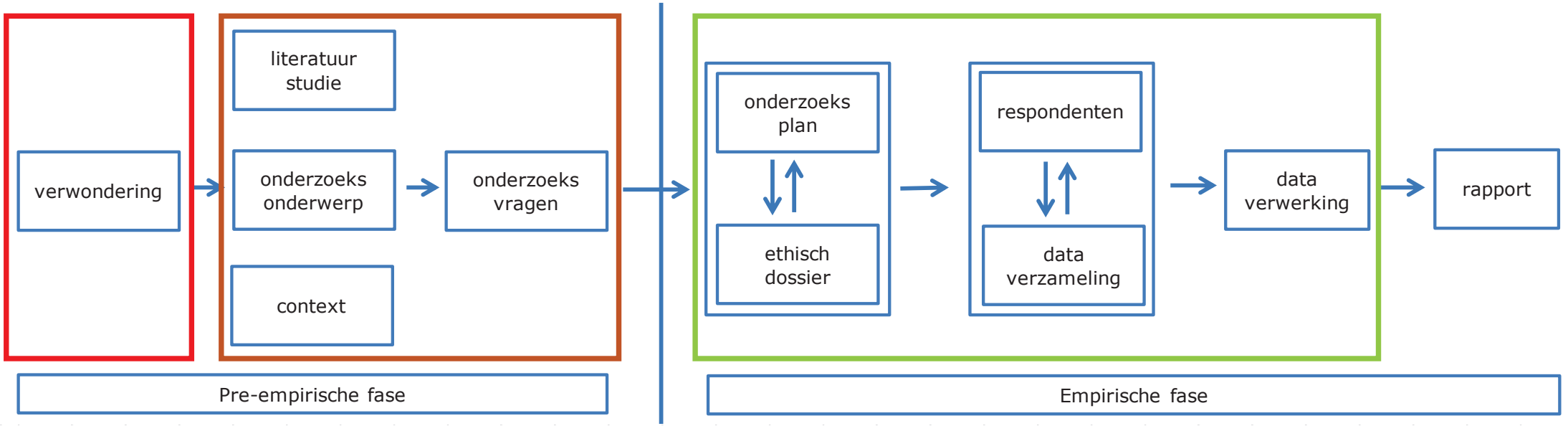
# SITUERING: PRAKTIJKVAKKEN




**Ideeën ontwikkelen**

**Ideeën verfijnen**

**Ideeën testen**

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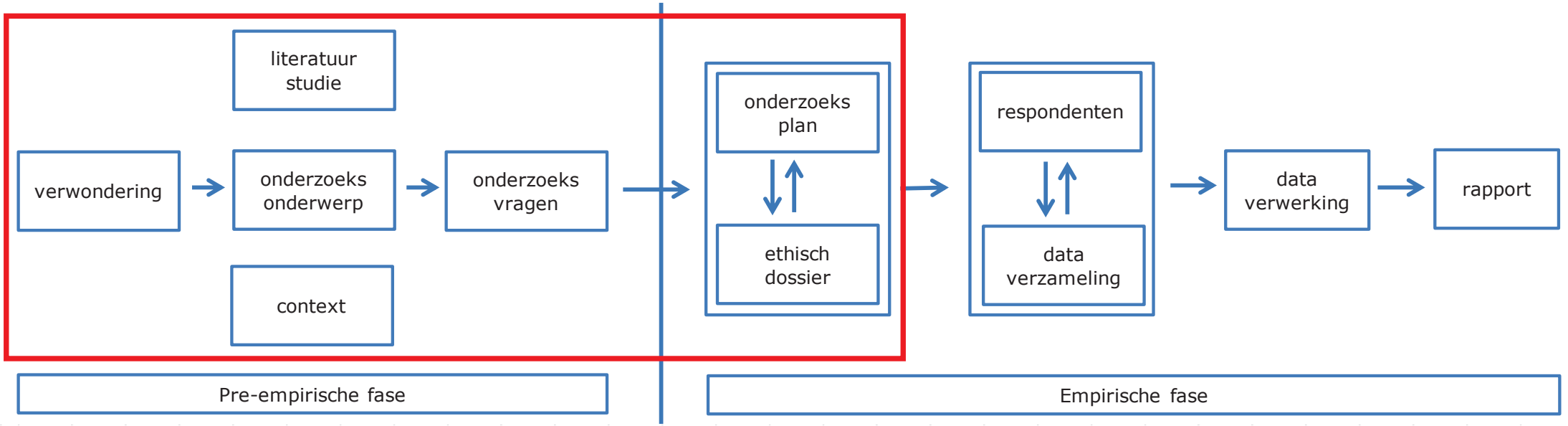
# SITUERING: THEORETISCHE VAKKEN




**Academisch rapporteren**

**Methodologie van de sociale wetenschappen**

- bachelorstudent (1 BACH, 2 sem)

**Inleiding communicatiewetenschappelijk onderzoek**

- schakeljaarstudent (**verkort programma – 3 stp**)

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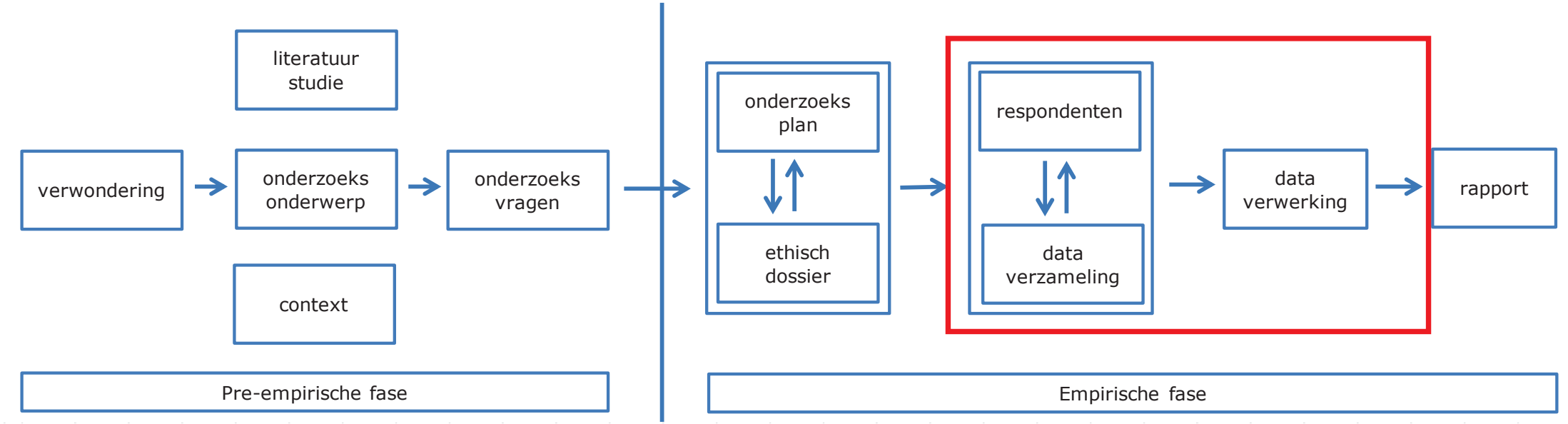
# SITUERING: THEORETISCHE VAKKEN




**Kwantitatieve technieken (BACH2)**
**Gevorderde analysetechnieken (BACH3)**

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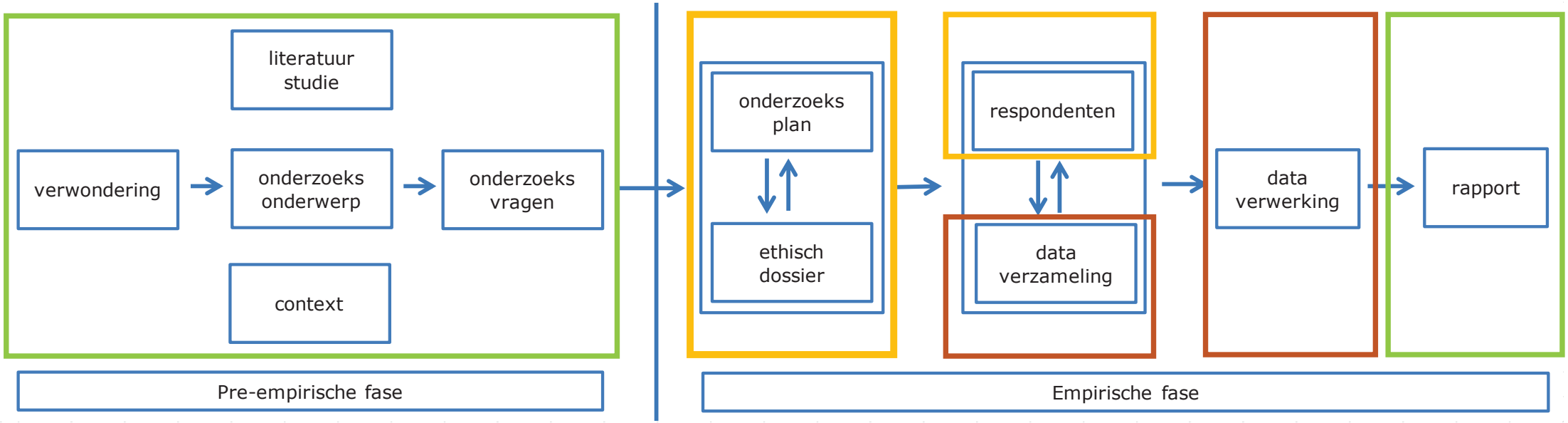


**Groen:** **Praktijkvak 'Academische rapporteren'**

**Groen + Oranje:** **Praktijkvak 'Onderzoekspaper'**

**Groen +Oranje + Bruin:** **Praktijkvak 'Masterproef'**

**'**

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# PLANNING

- **Inleiding CW onderzoek (enkel schakeljaarstudenten) – 3 stp**
  - Week 1 tot week 5/6
  - Elke donderdag (lokaal AUD C): 8u30 tot 11u15

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# CURSUSMATERIAAL

- Slides
  - Per hoofdstuk, beschikbaar op Ufora (downloaden voor de les)
- Cursustekst
  - Capita selecta, beschikbaar op Ufora
- Leeswijzer
- Vrijblijvende literatuur
  - Ter informatie op Ufora, als randinformatie
  - Geen examenstof. Niet verplicht om te lezen

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# CURSUSMATERIAAL

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# BIJ VRAGEN...

- **Inhoudelijke vragen**:
  - Persoonlijk, na de les of tijdens pauze
  - GEEN telefonische afspraken
  - Uitzonderlijk per e-mail (indien u het antwoord niet vindt bij collega's):
    - Vermeld in 'onderwerp': ICWO (schakeljaar)
    - Surf eerst naar volgende site, voor je een mail stuurt: https://www.ugent.be/student/nl/studeren/taaladvies/mail
  - Tot voor de kerstvakantie worden er vragen beantwoord

- **Administratieve vragen:**
  - Planning examens, bekendmaking resultaten, vrijstellingen, deliberaties, …. : FSA

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# ONDERWIJSVORM EN EVALUATIE

- Onderwijs:
  - Hoorcolleges

- Op Ufora:
  - Slides
  - Aankondigingen (opdrachten, testmateriaal, …)
  - Interessante links met demonstraties uit hoorcollege

- Schriftelijk examen multiple choice (zonder hulpmiddelen zoals rekenmachine)

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# WAAROM LEREN OVER ONDERZOEKSMETHODEN

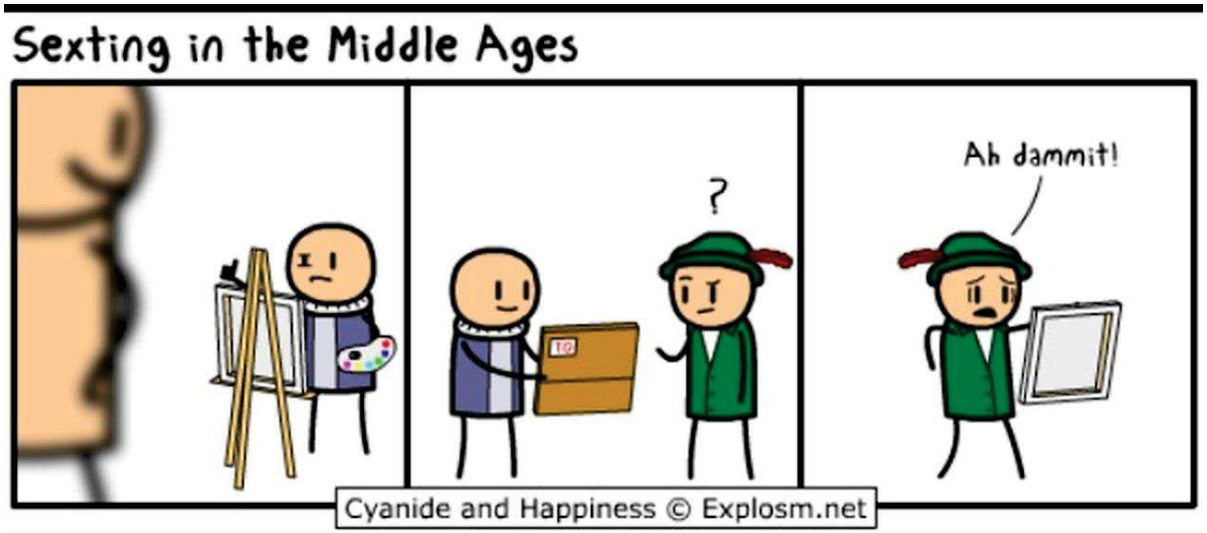
**1. Begrijpen van de wetenschappelijke literatuur**

Bv. Prevalentie van fenomenen verschilt naargelang

(a) steekproef trekking

(b) operationalisatie concept

(c) methode



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# WAAROM LEREN OVER ONDERZOEKSMETHODEN

## 2. Inzicht verwerven in fundamenten en spelregels van CW onderzoek

- Verschillende vormen van CW onderzoek
  - Kwalitatief en kwantitatief onderzoek (complementair)

- Inzicht in strikte regels en procedures om kwaliteit te waarborgen
  (= betrouwbaarheid en validiteit)

- Wat is wetenschappelijk aan wetenschappelijk onderzoek?
  - Wetenschap versus pseudowetenschap


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# PSEUDO-WETENSCHAPPELIJK BEELD OVER SOCIALE WETENSCHAPPEN

- Onderzoek Janda et al. (1998):
  - Twee vragen, willekeurig telefonisch; 141; 100 (67/33)

**1. Hoe belangrijk zijn volgende beroepen voor jou?**

bioloog, arts, scheikundige, econoom, psycholoog, fysicus, socioloog

**2. Hoe groot is het verschil in gespecialiseerde kennis tussen jou en …**

bioloog, arts, scheikundige, econoom, psycholoog, fysicus, socioloog

1 (helemaal niet belangrijk) ---------- 7 (heel belangrijk)

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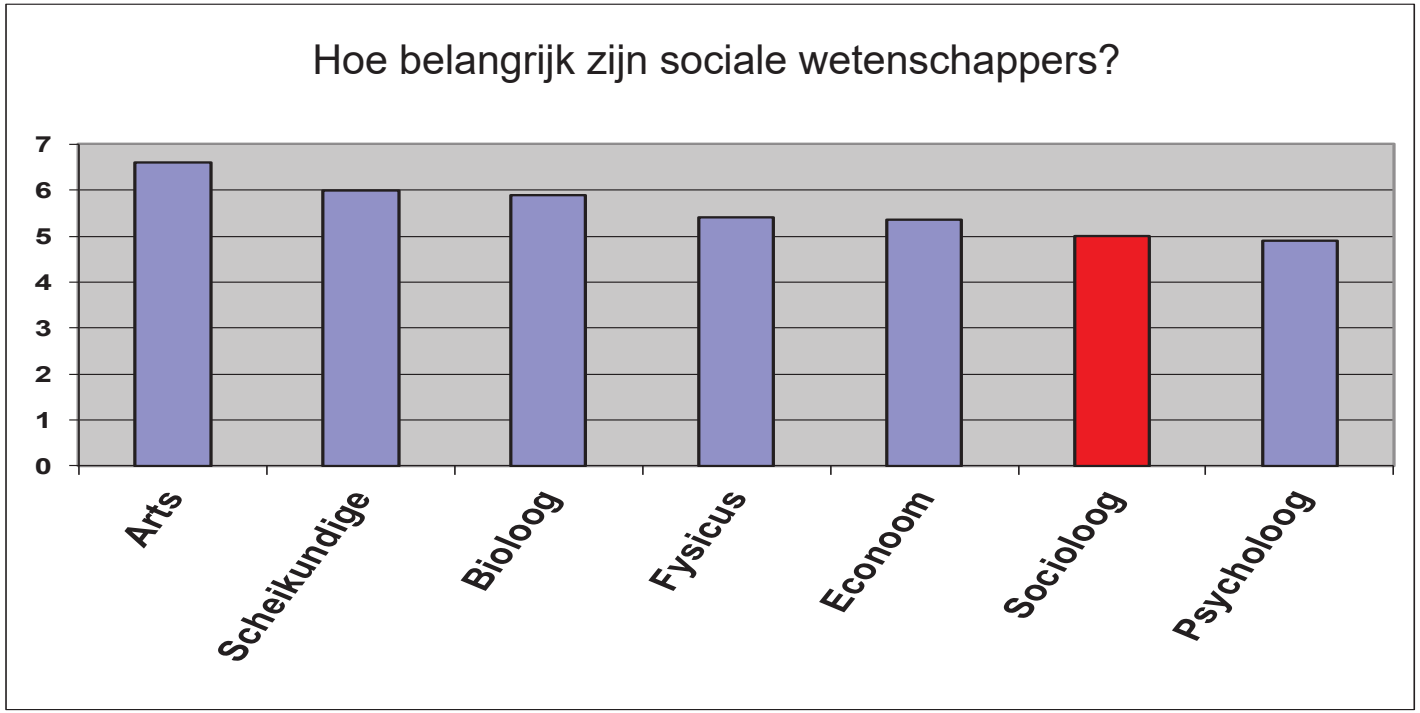
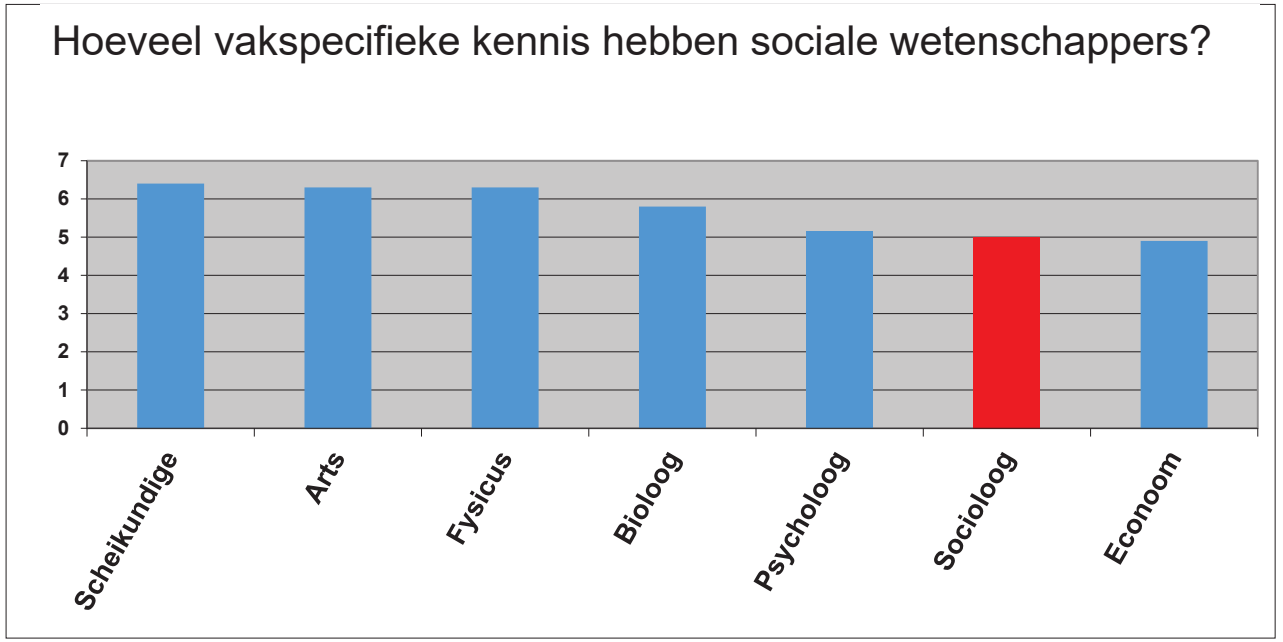
# JANDA ET AL. (1998)



# JANDA ET AL. (1998)




- "

# WAAROM LEREN OVER ONDERZOEKSMETHODEN

## 3. Onderscheid gezond verstand en wetenschappelijke theorie

Bv. Als je kinderen beloont voor iets wat ze graag doen, dan zullen ze die activiteit naderhand … uitvoeren

a) meer b) evenveel c) minder

# WAAROM LEREN OVER ONDERZOEKSMETHODEN

## 3. Onderscheid gezond verstand en wetenschappelijke theorie

Bv. Je vraagt een vriend of vriendin om een gunst - 50 Euro lenen - en hij of zij stemt daar me in. De houding van die persoon tegenover jou wordt hierdoor:

a) gunstiger b) onveranderd c) ongunstiger

Benjamin Franklin (1706-1790)

# WAAROM LEREN OVER ONDERZOEKSMETHODEN

## 4. Weerstand tegen persuasieve communicatie

- Bv. Reclame: “zoveel studies tonen aan dat ons product beter is dan Y”

Home › Nieuws › 2017

**Whitening tandpasta dure onzin**

Nieuws | Whitening tandpasta’s maken tanden niet of nauwelijks witter dan gewone tandpasta, maar zijn soms wel tot 8 keer duurder. Dat blijkt uit een onderzoek van de Consumentenbond. Alle onderzochte tandpasta’s krijgen voor witmaken een dikke onvoldoende.

# WAAROM LEREN OVER ONDERZOEKSMETHODEN

## 4. Weerstand tegen persuasieve communicatie

- Bv. Dieet-reclame: gewichtsverlies gedurende 1ste dagen vs doorzetten

# WAAROM LEREN OVER ONDERZOEKSMETHODEN

## 5. Accurater redeneren over dagelijkse realiteit & kritische analyse van berichtgeving over onderzoek

- Bv. Keelontsteking: placebo vs antibiotica (De Meyere)


Het is moeilijk een onderscheid te maken tussen een angina van virale oorsprong (70 tot 90% van de gevallen) en een angina van bacteriële oorsprong (10 tot 30% van de gevallen). Daarom werden lange tijd systematisch antibiotica voorgeschreven. Maar dat is verre van ideaal gezien de inname van antibiotica enkel nodig is bij een infectie van bacteriële oorsprong



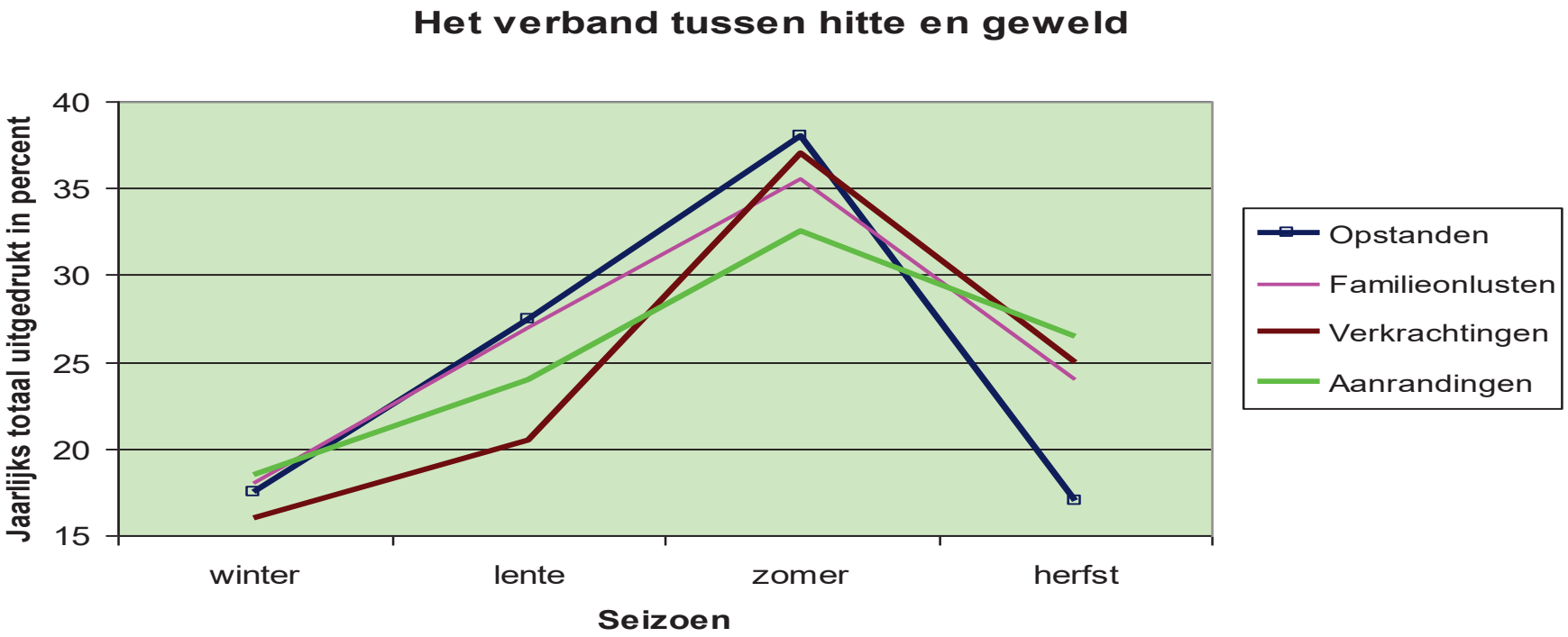
De Sutter, A., De Meyere, M., De Maeseneer, J., & Peersman, W. (2001). Antibiotic prescribing in acute infections of the nose or sinuses: a matter of personal habit? Family practice, 18, 209-213.

# WAAROM LEREN OVER ONDERZOEKSMETHODEN

## 5. Accurater redeneren over dagelijkse realiteit & kritische analyse van berichtgeving over onderzoek

- Bv. Vinden in de zomer meer gewelddadige delicten plaats dan in de winter?

# WAAROM LEREN OVER ONDERZOEKSMETHODEN



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# STRUCTUUR

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   - Empirisch
   - Systematisch
   - Intersubjectief en repliceerbaar
   - Cylisch en zelf-corrigerend
7. Leerdoelen

# BASISPRINCIPES: 1. EMPIRISCH

- Empirie:
  - Het observeren van de wereld (menselijke gedragingen, attitudes, media inhoud, …) om de wereld beter te begrijpen
  - De waarnemer is inwisselbaar
  - Geen plaats voor rede, intuïtie en geloof



Source: Boyle & Schierbach (2015). Applied Communication Research methods. Unit 1.

# BASISPRINCIPES: 1. EMPIRISCH

- Empirisch te werken gaan betekent 'mogelijkheden elimineren'
  - Bv. iemand geeft een slechte speech

- Overte en coverte gedragingen (attitudes, opinies, waarden, …) zijn meetbaar



Source: Boyle & Schierbach (2015). Applied Communication Research methods. Unit 1.

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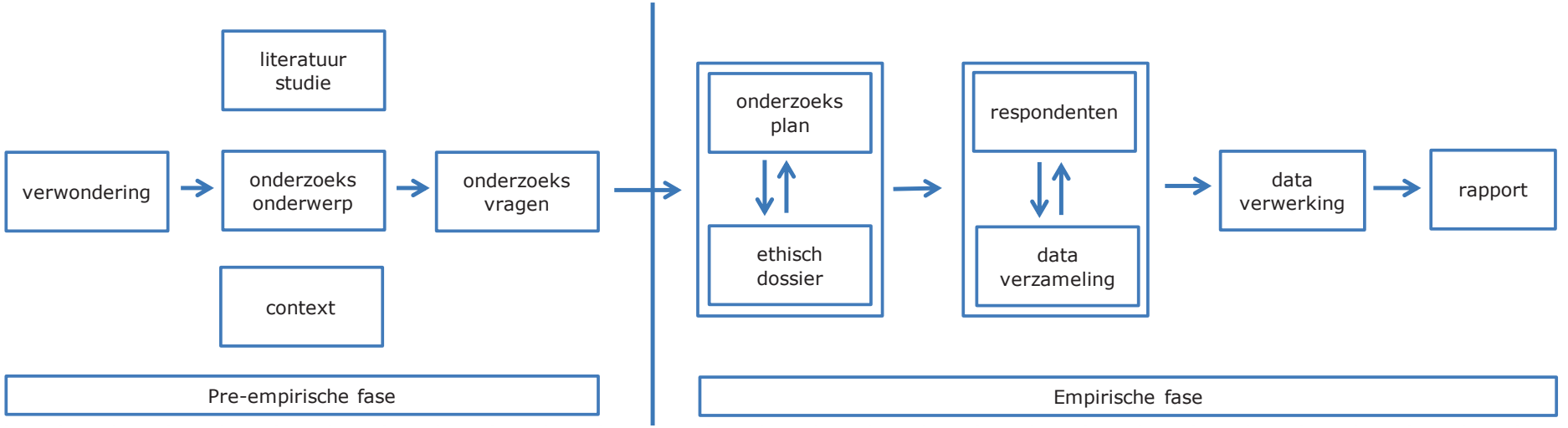
# BASISPRINCIPES: 2. SYSTEMATISCH EMPIRISCH

- Systematisch onderzoek is georganiseerd en planmatig.
  - Op verschillende momenten, bij verschillende mensen, verschillende situaties, …



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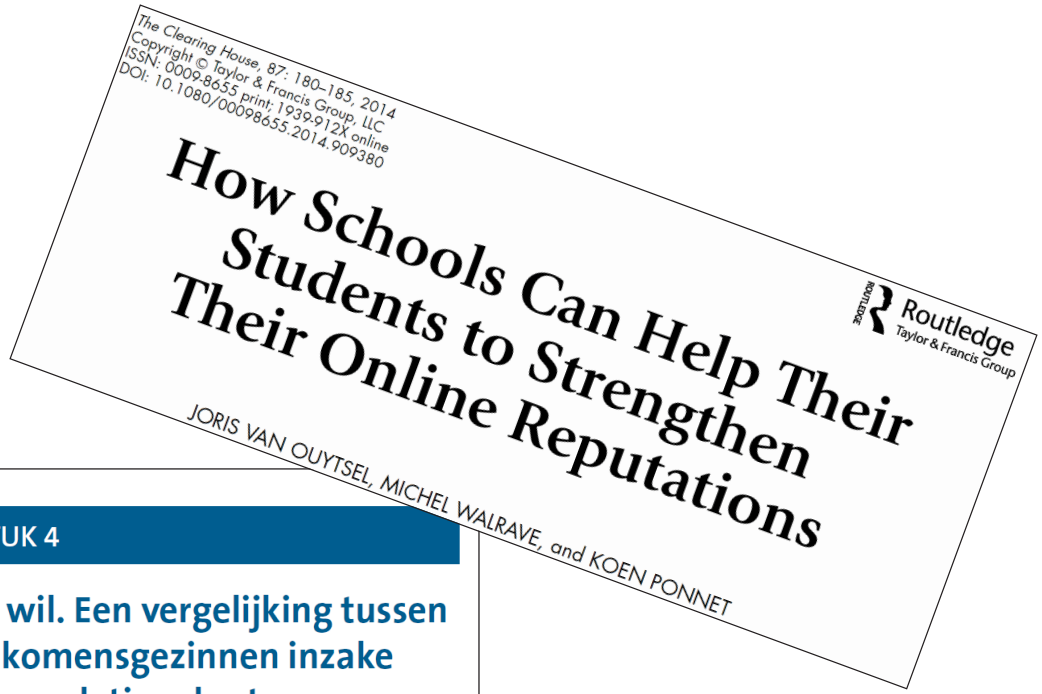
# BASISPRINCIPES: 3. INTERSUBJECTIEF EN REPLICEERBAAR

- Onderzoek is intersubjectief (niet objectief)
- Wetenschap is niet vrij van ideologie - Onderzoek is vaak actiegericht



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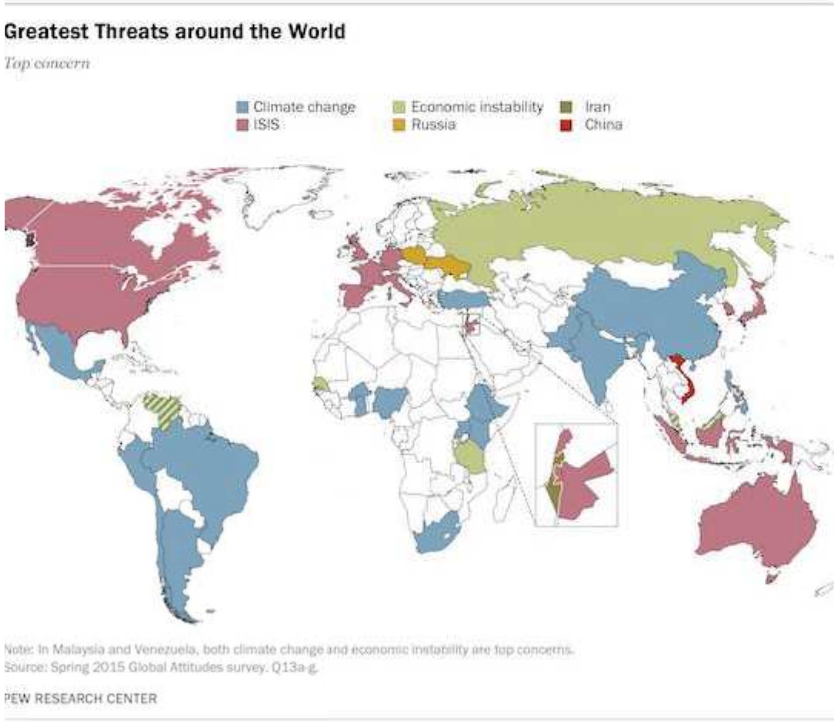
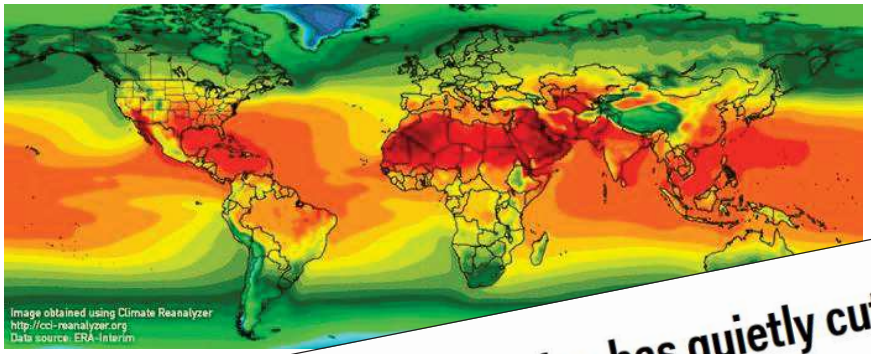
# BASISPRINCIPES: 3. INTERSUBJECTIEF EN REPLICEERBAAR

- Vertrouwen in wetenschap kalft af aan de politieke rechterkant
- Sinds 2000: Stijgend onderzoek naar veranderende klimaat (links thema)
- Sinds 2010: Stijgend onderzoek naar radicalisering, security and safety
- Sinds Trump: Daling financiering preventief onderzoek seksuele voorlichting USA




The Trump administration has quietly cut more than $213 million from teen pregnancy prevention programs

Veronika Bondarenko
Jul. 18, 2017, 5:25 AM 180

FACEBOOK LINKEDIN TWITTER EMAIL PRINT

# BASISPRINCIPES: 3. INTERSUBJECTIEF EN REPLICEERBAAR

- Onderzoek is intersubjectief (niet objectief)

- Opletten met confirmatorische hypothesetoetsing (beginnersfout?)
  - Selectieve manier van vragen stellen
  - Experiment Snyder & Swann (1978): Personen mogen iemand interviewen
    - Geinterviewde is 'extravert'
    - Geinterviewde is 'introvert'
    - Neutrale observatoren die bandopname beluisteren, kregen ten onrechte de indruk dat geinterviewden introvert/extravert waren

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# BASISPRINCIPES: 3. INTERSUBJECTIEF EN REPLICEERBAAR

- Tijdschriften willen graag originele bijdragen: veel te weinig replicatieonderzoek!

- Martin & Clarke (2017):
  - Slechts 3% (n=33) van de 1151 onderzochte tijdschriften accepteert replicatiestudies
  - Er was geen verschil tussen tijdschriften met hoge en lage impactfactor
  - Negatieve resultaten (nulhypothese wordt niet verworpen) worden zelden aanvaard
  - Aanbevelingen voor tijdschriften:
    (1) explicitly state that they accept the submission of replications
    (2) explicitly state that they accept replications which report negative results


frontiers in Psychology

ORIGINAL RESEARCH
published: 11 April 2017
doi: 10.3389/fpsyg.2017.00523

**Are Psychology Journals Anti-replication? A Snapshot of Editorial Practices**

G. N. Martin[1]* and Richard M. Clarke[2]

[1] School of Psychotherapy and Psychology, Faculty of Humanities, Arts and Social Sciences, Regent's University London, London, UK, [2] Department of Infectious Disease Epidemiology, Faculty of Epidemiology and Population Health, London

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# BASISPRINCIPES: 4. CYCLISCH EN ZELFCORRIGEREND

- Wetenschap is cyclisch/cumulatief
- *"Wetenschap is gebaseerd op feiten, zoals een huis op stenen, maar simpelweg feiten bij elkaar verzamelen is niet voldoende, zoals een hoop stenen niet hetzelfde is als een huis"*
  (Henri Poincaré)

*Article*

Journal of Family Issues
2016, Vol. 37(4) 574–597
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DOI: 10.1177/0192513X13514409
jfi.sagepub.com
SAGE

**Family Financial Stress, Parenting and Problem Behavior in Adolescents: An Actor-Partner Interdependence Approach**

**Koen Ponnet[1,2], Edwin Wouters[1], Tim Goedemé[1],**

The current study proceeds from the extended family stress model developed by Conger and colleagues (Conger & Conger, 2002; Conger et al., 2010). It expands upon previous studies on family stress processes by including data from both parents and an adolescent, as well as by studying separate pathways through which financial stress experienced by parents might affect the psychological distress, interparental experience, and parenting of parents and their partners, which might subsequently affect the behavioral adjustment of adolescents. To test our theoretical model (shown in Figure 1), we applied the actor–partner interdependence model (APIM) approach (Kenny, Kashy, & Cook, 2006). The APIM approach to examining family functioning

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# BASISPRINCIPES: 4. CYCLISCH EN ZELFCORRIGEREND

- Wetenschap is zelfcorrigerend (controleerbaar)

Contents lists available at ScienceDirect

Journal of Adolescence

journal homepage: www.elsevier.com/locate/jado

Brief report: The association between adolescents' characteristics and engagement in sexting

Joris Van Ouytsel [a, *], Ellen Van Gool [a, 1], Koen Ponnet [b, c, d, 2], Michel Walrave [a, 3]

A B S T R A C T

The potential emotional and legal consequences of adolescents' engagement in sending sexually explicit pictures through the internet or the mobile phone (i.e., sexting) have caused significant concern about the behavior among practitioners and academics. The present study compares the characteristics of students who engage in sexting to those who do not. A survey among 1028 adolescents of 11 secondary schools in Belgium was administered. Logistic regression analyses suggest that sexting is significantly linked with sensation seeking, experiential thinking styles and depression, while controlling for gender, age, family status and students' response to economic stress. The results are of importance to practitioners who could adapt their prevention and intervention campaigns to better reach this complex youth. Differences with the findings of previous studies highlight the importance of continuing research on sexting and the need to pay attention to the specific context in which adolescent sexting takes place.

# BASISPRINCIPES: 4. CYCLISCH EN ZELFCORRIGEREND

Het cyclisch en zelfcorrigerend proces: **inductie** en deductie staan in interactie met elkaar

- **Inductie = van empirie naar theorie**
  - Van het bijzondere naar het algemene
  - Theorie opbouwend

**BOTTOM-UP**

Combineren en interpreteren als een geheel

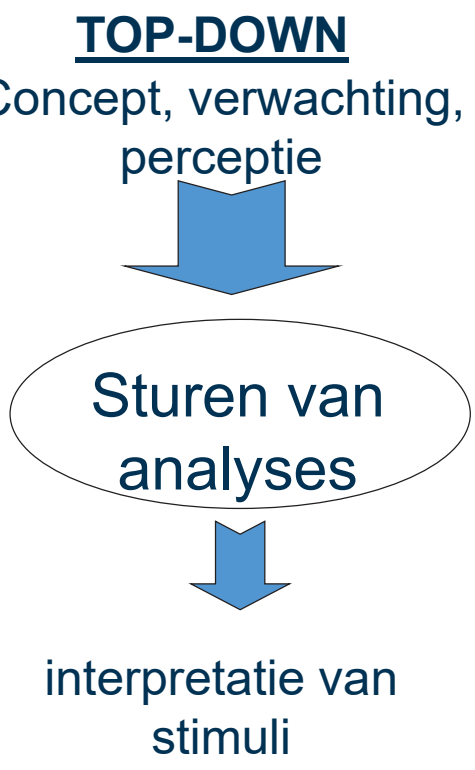

waarnemen van individuele stimuli kenmerken

Bekijk deze foto. Wat zie je erin?

# BASISPRINCIPES: 4. CYCLISCH EN ZELFCORRIGEREND

Het cyclisch en zelfcorrigerend proces: inductie en **deductie** staan in interactie met elkaar

- **Deductie = van theorie naar empirie**
  - Van het algemene naar het bijzondere
  - Hypothese toetsend



# DEDUCTIE: VAN HET ALGEMENE NAAR HET BIJZONDERE

- Het belang van context voor interpretatie van een stimuluspatroon
- Afhankelijk van context wordt eenzelfde stimulus anders waargenomen

# DEDUCTIE: VAN HET ALGEMENE NAAR HET BIJZONDERE

# DEDUCTIE: VAN HET ALGEMENE NAAR HET BIJZONDERE

Wat zie je ?

# STRUCTUUR

1. Wie
2. Waarom
3. Situering
4. Planning
5. Onderwijsvorm en evaluatie
6. Basisprincipes
7. Leerdoelen

FACULTY OF POLITICAL AND SOCIAL SCIENCES

# LEERDOELEN

- De vijf redenen waarom leren over onderzoeksmethoden relevant is kunnen beschrijven
- De vier basisprincipes van wetenschappelijk onderzoek kunnen toelichten
- De verschillende deelfasen van de pre-empirische en empirische cyclus kunnen situeren
- Het principe van inductie en deductie kennen

# unit 1

# basic principles of research and a guide to using this book



## Principles of Research

Research methodology can be a complex topic, but it is also one of the most rewarding subjects you can study. To understand why, it's important to answer two critical questions: what is "research," and why would you want to study it?

The short answer to both questions is that research is the process through which *science* is conducted. The approach to research described throughout this textbook is rooted in the scientific method—perhaps the greatest human accomplishment of the last millennium. Amazing things have been created through chemistry, technology, and industry. Remarkable wonders of the universe have been seen by astronomers and described by physicists. Medicine and agriculture have extended human lives and reduced the suffering of billions. But at the heart of these accomplishments and myriad more is the fundamental principle that understanding any phenomenon requires following a clear process whose core practices are shared by all scientists, including those who engage in communication research.

You may not think that the kind of research conducted by most communication scholars is the same as that carried out by biologists, chemists, or even psychologists. It is true that because communication research involves human behavior and not natural laws, the findings we obtain are less certain and absolute. But the logic at the heart of communication research is the same as that behind the establishment of the theory of relativity, the unraveling of the human genome, or the discovery of continental drift. All true research meets four important standards: it is (1) **empirical**, (2) **systematic**, (3) **intersubjective and replicable**, and (4) **cyclical and self-correcting**. Communication research is no exception. By following these four standards, *any* research produces superior answers to whatever questions you might ask, whether about the "laws" of the universe, the effects of playing violent video games, or the power of advertisements to influence behavior.

To understand why, we need to briefly explain each of these four standards. The remainder of this book explains a diversity of key terms in research, and everything stems from these basic principles. At the end of this section, we will return to the question of why this helps ensure that research provides optimal answers and, in turn, why understanding research makes you better equipped for the challenges of the modern world.

### Empirical

Research is a way to understand the real world. As such, it must draw upon observations or measurements of that world. Researchers want to learn directly about the things they are studying. If we want to understand how moviegoers will react to a film, we should watch them as they view it. If we want to know

whether customers will frequent a business following an ad campaign, we should monitor sales. In short, we need to measure behaviors, attitudes, communication patterns, media content, and anything else that matters to our research question. As much as possible, these measures should be direct and unfiltered. Empirical inquiry requires minimizing, if not eliminating, the number of "filters" between what we're studying and our descriptions of those things. By getting rid of those filters, we cut down on the chances that personal biases will affect our results, whether those biases are held by researchers or by other people who influence the measurement.

In the following pages, we will talk about the best ways to directly measure a variety of individual attitudes and behaviors as well as to categorize the forms of communication that people use every day, whether it be watching television, posting on Facebook, conversing face to face with friends, or giving a speech in public. A major portion of research methods is focused on improving our measurement, but at the core we believe that you must get as close as possible to the thing you want to measure. Inventing hypothetical or ideal examples is never as good as collecting real data.

**research questions**
→ Unit 3

**bias**
→ Unit 2

## Systematic

Research is about more than observing and measuring. It takes a systematic approach to gathering and analyzing data. Researchers follow a set of rules, dictated both by the standards of science and by the researchers themselves, to ensure that they can make sense of empirical data. In short, systematic research is organized, involves planning, and follows procedures to minimize the likelihood of mistakes. For example, scholars who are interested in studying the effects of violent movies on children would not simply throw groups of children in front of a television and hope that a violent movie comes on. They would develop a plan for how to select the children, what kinds of content to show them, and how to measure the children's responses. This would give them a set of usable data in which the researchers could seek patterns. Research is systematic because it follows a plan, whereby researchers develop and employ logical guidelines to shape and limit their data gathering. The terminology of research methods presented throughout this textbook will help you construct an effective plan for answering questions and explain your plans to others so they can understand your findings.

**results**
→ Unit 3

**objective**
→ Unit 2

## Intersubjective and Replicable

Research is a collective process. Knowledge is built gradually, one study at a time. Therefore, no single study stands on its own. When you investigate a question, you will look to see what others did before you to approach similar questions. When you write your results, you will do so in a way that others can understand





and that helps the reader understand how your results fit into the bigger picture that you are trying to understand. Many of the ideas we study in communication are not natural laws, with absolute meaning and objective definitions. But as a research community, we need to be able to compare our findings. To do this, we must define each idea we study in a clear fashion, so that our "subjective" meaning can be shared with others. By explaining the context of our study, the meaning of our terms, and the assumptions under which we operated, we allow others to test our results.

It's important not to assume that other people would approach questions the same way we do; we have to explain what we did and why. In doing so, we make it possible for people to replicate our findings. The idea of replication, and the terminology we use to share our findings in a reproducible manner, is considered in later units.

**replication**
→ Unit 2

## Cyclical and Self-Correcting

Allowing other scholars to check our work is a core aspect of science. Individual studies can be wrong. Even very smart people make mistakes, based on the limited data available to them. Isaac Newton and Albert Einstein were two of the smartest physicists ever, and yet their models of the universe are at odds—and it's probably the case that neither is entirely correct. The collective process of research offers a way to identify these mistakes and develop more effective approaches to understanding the world around us. Because we can replicate prior research, we can decide whether the results of one study apply to a larger context or are attributable to chance. If you follow the practices described in this text, you, too, will contribute to this cumulative development of knowledge.

**theory**
→ Unit 3

**empirical**
→ Unit 1

**authority**
→ Unit 2

**qualitative**
→ Unit 2

**quantitative**
→ Unit 2

Maybe you heard about a theory in your intro class that seemed wrong to you? Maybe you read a study for a research paper and felt it was poorly done? By learning about research, you can revisit those ideas, test them further, and help us understand what's really going on. Remember, research is empirical. We have to observe the real world. No idea about communication phenomena is valid if it doesn't match what really happens, and we can only find out what really happens by continually measuring and testing our ideas.

Cumulatively, then, research involves following basic rules to find information about the real world. Abstract models or theories are only as good as the real observations that support them, and no single study can stand on its own. This does not mean that every research article you read or every study you carry out will be perfect. The strength of science lies not in a single trial but in the process as a whole. Science is sometimes wrong, but the reason we know this is thanks to the further efforts of science. Consider that there was a time in history when the Earth was "known" to be the center of the universe. All theories about the seasons, night and day, and our place in the universe were dictated by this

core belief. Although there were certainly political reasons these beliefs persisted, science eventually caught up with things as better measures and approaches were developed to confirm that the Earth rotates around the sun and not the other way around.

This example also illustrates how people who base their beliefs on something other than research may sometimes be right. They may even be right when single research studies are wrong. The only way we can really *know* whether they are right is through further research. No other way of answering questions can claim this. You might want to trust an authority, but those experts are only as right as the source of their expertise. If they are drawing on prior research, it's better to learn to understand and critique that research yourself. Only the scientific process provides a clear way to decide whether to accept our existing beliefs or to embrace new ones. People have believed incorrect things in the past and will do so in the future, but carefully following the ideas in this book will help us steadily decrease those false beliefs and have confidence that when we change our views, we do so for good reason.

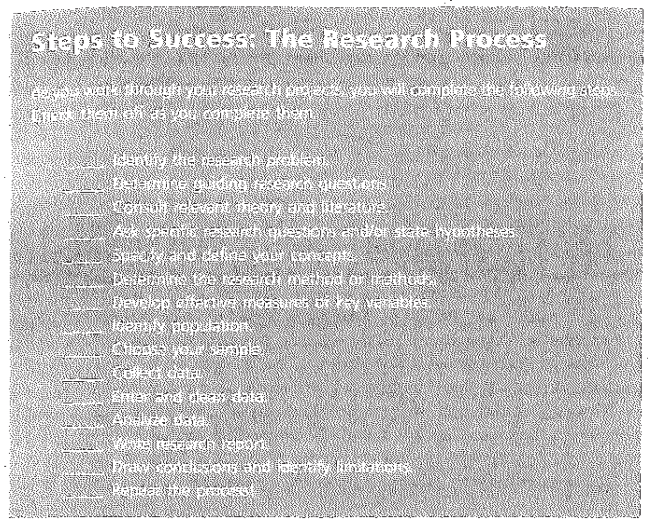
This is the best answer for why you should study research methods. The choices we make are only as good as the tools we use to make them. In the long run, research conducted through the scientific method is the best set of tools we have. If you want to make smart decisions—whether those decisions are for your family, for a company, or for society—you need to know how to gather information and evaluate the information gathered by others.

As a more practical matter, understanding research methods will help you make sense of the ideas you encounter in your classes and in your life. Communication phenomena are everywhere at all times. Ours is a communication-driven species, constantly sharing ideas through ever more complex technologies. Future leaders need to know how to connect with the public. Companies need ways to reach their customers. Citizens need to be able to see through deceptive messages and understand what's really going on. Couples need effective tools to help them deal with conflict. Communication directors need effective strategies to speak to large groups or the press. All of these situations, and many more, require the best information we have about how communication works. If you understand research methods, then you will have access to that best information.

You can evaluate studies done by others and carry out studies of your own. You can understand findings, whether from descriptive, qualitative studies or from the increasingly common quantitative data sets that describe every aspect of modern society. You can explain these studies to an employer, a family member, or yourself and your employees. You can make smart choices about how to communicate interpersonally or within organizations, how to use media and how to make your way through an increasingly media-shaped future—provided you have a good understanding of communication research.








## Using This Book

Understanding why research is valuable and what unites it is the first step. As you move through this book, you will discover many important ideas, techniques, and resources to help your learning and to help you realize how much you already know about research and why it matters. A central premise of this text is that research is an everyday experience. That is, people use research in many situations—from the mundane to the serious—to help make decisions. Just as an advertising agency might use formal focus groups to test which advertising slogan they should use, you might consult friends and family members when deciding which book to read next, where to go to college, or what to write in an e-mail to your professor. Often, what separates the kind of research we do on an everyday basis from what we might do in a more professional setting (or scientific approach) is the amount of preparation, the use of theory to guide our understanding, and the formality of the process. Making good decisions can be the difference between the success and failure of your company. Gathering information through well-thought-out research makes it much more likely that you will both collect quality information through your research and make good decisions based on that research.

**focus groups**
→ Unit 12

**empirical**
→ Unit 1

**theory**
→ Unit 3

**validity**
→ Unit 6

**concept explication**
→ Unit 5

**surveys**
→ Unit 10

**experiments**
→ Unit 9

As we discuss the distinction between everyday research and more scientific research, we will consider key concepts such as validity (the accuracy of our measures and findings), concept explication (the process of deciding how to define and measure the things we are studying), surveys, experiments, and many others. In each case, we will provide clear definitions of what those terms mean and how they relate to other terms listed in the text. We'll also give examples of the terms in research situations. This will allow you to see how the terms apply not only to everyday situations—and how you might already be doing what you are reading about—but also to more scientific research that is used to guide decisions in the professional world.

Each unit starts with a research situation to spur critical thinking about the topic of that unit and to provide examples of research problems you might face in your career as a communication professional. Following that, the first entry in each unit is the master term. We not only define this term but also use the definition as an opportunity to show how all of the terms in that same unit are interconnected. This helps reinforce the integrative nature of the research process and clarify the specific concepts you should understand for the broader topic covered in that unit.

Throughout each unit, we provide additional information to help you learn more about the topic. This additional information fits into one of four categories: (1) *Reflect & React*, (2) *Research in Depth*, (3) *Steps to Success*, and (4) *Voices from Industry*. These elements are designed to provide greater depth to the topics discussed in the textbook. They also provide an opportunity for you to learn more about the topic at hand and push you to consider the everyday application of the terms.

Specifically, the *Reflect & React* material gives you a prompt to think about, drawing upon your personal experience and everyday observations to see the logic of research in action. The *Research in Depth* sections give additional information about actual research, taken from published studies, organization reports, and more. These can help you learn more about topics mentioned in the text and point you to resources and examples to explore further. The *Steps to Success* entries provide checklists and overviews of key steps at pivotal points in the research process, helping you make sure your own studies are on track. Finally, the *Voices from Industry* entries provide clear examples of the important role that research plays in a variety of communication industries. We asked professionals from a range of areas, including strategic communication, social media, marketing, news gathering, and political communication, to tell us not only how they use research but also what kinds of research they use. You will hear directly from these professionals about the value of research in their success as communication professionals, and they will give you advice on how to





use research more effectively as you prepare for your own career as a communication professional.

At the end of each unit, we provide detailed *Activities* and *Suggested Readings for Further Exploration*. The *Activities* are designed to promote deeper and more integrative thinking about the content from the textbook. The goal is to see the real ways that you already use research to inform your life and to think critically about the research you are already conducting. By seeing the definition of a term, its application to everyday life, and then its application to more scientific research, it is much easier to understand not only what the term means but also how to use it. *Suggested Readings for Further Exploration* provides opportunities for you to extend your learning—and reading—outside this book through magazine articles, books, and journal articles. A number of the suggested readings include *examples* of the methods and procedures discussed in this book. Other suggested readings present opportunities for *advanced discussion*, exploring these topics in greater depth and at a more advanced level. They are by no means required reading, but if a topic piques your interest, these suggestions will give you good places to continue exploring the many topics presented in this text.

Taking the time to complete the activities that are included in this book will help you better understand and remember the meaning of the terms. You'll find yourself doing better on exams and building skills you'll need in future classes and the professional world. The more you can connect what you read about in this book and learn in your class to everyday life, the better off you will be. Even if these activities are not directly assigned by your instructor, they are beneficial as you study the course material. Besides, they can also be fun!

Terms provided in each unit (and listed at the opening of each unit) provide the basic tools to carry out the activities and assignments you will encounter throughout this course—or in your own research projects. As we see it, the best way to learn how to do research is to think about research, talk about research, and do research. Doing the reading and then doing the activities will help you see how aspects of the research process are connected. The glossary-style presentation of the terms, and the activities provided throughout, work together to give you the basic tools and terminology of communication research and to provide mechanisms through which those tools can be applied in real-world research situations. The integrative and applied nature of this text make it a valuable tool for you in not only understanding what key research terms mean but also knowing how to use the defined ideas once you get into the "real world" and need to do research as part of your job.

## Voices from Industry

### Jessica and Ziggy Zubric—Customer Experience Consultants

Jessica and Ziggy Zubric have been conducting research together for more than 15 years. After running their own business, they joined the team at White Clay—a consulting firm focused on information solutions, customer assessment, and management consulting—where they spend their days improving their clients' customer experience through a variety of research and training techniques.

#### A Multimethod, Multi-Application Approach

Achieving success in corporate research is much easier for those with a flexible, multimethod approach to their endeavors. Throughout our careers, we have come to realize that there is no best research method, as every method has its strengths and weaknesses and is effective at answering some questions but not others.

As you read this textbook and conduct your own research, pay particular attention to the benefits and blind spots of every method. As a researcher, your ability to deeply understand and clearly communicate these trade-offs can set you apart from others and help you make better and more informed decisions for your company or client.

"When your only tool is a hammer, every problem becomes a nail." Locking yourself into one research approach limits your ability to effectively answer questions.

For instance, if you focus solely on survey research, what happens when your company needs to you acquire a deep, rich understanding of how customers feel about a new product line? Sure, you could try to field a telephone survey with 25 open-ended questions (we've seen crazier things), but think about the drawbacks. Your completion rate will suffer as fatigue sets in and respondents hang up. The respondents will be less thorough and thoughtful over the phone than they would be in person. And conducting the interviews in isolation negates the opportunity for respondents to engage with each other and build off of each other's comments. This just isn't a problem that quantitative work can solve. And if you concentrate only on qualitative research, what do you do when your company asks you to answer three quick questions on a tight budget with an even tighter timeline? Focus groups would take far too long, break the budget, and have no hope of being representative of the larger population.

Ultimately, the best method is the one that maximally aligns your objectives, budget, and timeline.

Finally, always remember to integrate your findings into larger contexts. Make your research as useful to your employer as possible. In politics, this is so easy that no one ever gets it wrong . . . clearly, the end goal of political research is to get a certain candidate elected or help a particular ballot initiative succeed.





But such connections are easily overlooked in the corporate world. Too often, the research team is assigned a specific problem, they collect data to solve that problem, and then they analyze their data and report back. And that's great.

But so often there are ideas in that data that could transform an entire organization if only someone were proactive enough, curious enough, and had a broad enough perspective to look. So we encourage you to always elevate your thinking to consider all of the implications of your research, not just how the results apply to the problem at hand.

For instance, do the results of your ethnographic research give insights into product development? How about customer service and frontline employee training? Would the marketing department benefit as they develop the next ad campaign?

Your ability to proactively seek opportunities to use your research can set you apart in the business world. It demonstrates your ability to think at an organizational level and to maximize the return on investment of every research project.

## Suggested Readings for Further Exploration of Unit 1 Topics

### Examples

Benko, J. (2013, November 12). The hyper-efficient, highly scientific scheme to help the world's poor. *Wired.com*. Retrieved from http://www.wired.com/wiredscience/2013/11/jpal-randomized-trials/

### Advanced Discussion

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Berger, C.R., Roloff, M.E., & Roskos-Ewoldsen, D.R. (2010). What is communication science? In C.R. Berger, M.E. Roloff, & D.R. Roskos-Ewoldsen (Eds.), *Handbook of communication science* (2nd ed., pp. 3–20). Los Angeles, CA: Sage Publications.

O'Keefe, D.J. (1975). Logical empiricism and the study of human communication. *Speech Monographs, 42*(3), 169–183. doi:10.1080/03637757509375892