CONDUCTING ONLINE RESEARCH
(during a pandemic...& after)

A FUN WORKBOOK

READY FOR THE NOBEL PRIZE

We may not all want to win a Nobel Prize. But within all of us is a curious mind, that sometimes wants to get to the bottom of things: a scientist. Admit it, in your childhood, your curiosity knew no boundaries. In some rare instances, we are not really scientists – sometimes other people (usually Professors) make us do research. To make things worse, often these are not real-life experiments, but online, particularly during a pandemic (and other times as well)…how fun. Social distancing teaching does enhance the funny…where is everyone?

This workbook is here and will (hopefully) help you tackle the challenge of conducting your research online – and while we are at it, make it fun. Specifically, you will understand how to pose a research questions that can be conducted online, learn ways to find the correct literature, design a groundbreaking online research design and implement it using an online software tool.
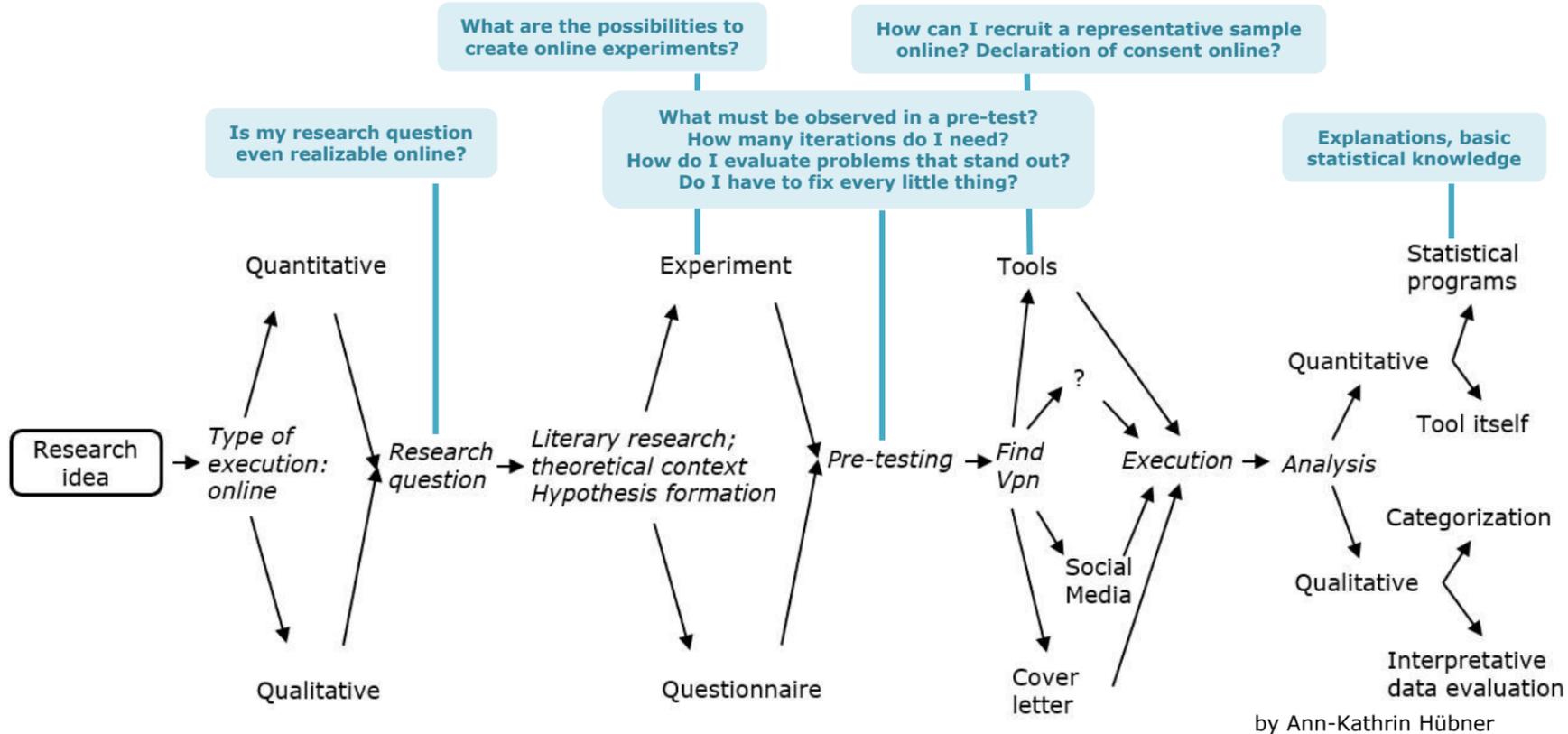
You will also dive into how to structure your research project, whether it is for your bachelor's- or master's thesis or just an ordinary empirical work your Professor forced you to do. You will also dive into challenges and obstacles that online research provides and reflect on how you will overcome these to win that Nobel Prize…or get that freaking bachelor's or master's degree…how difficult can it be? With this workbook not that difficult. We promise.

We hope that this workbook will allow you to revisit your childhood scientist and that you find this workbook useful in your endeavor to win that Noel Prize over and over again.

On a serious note: Not everyone will get a Nobel prize, but everyone can find the fun in conducting online research and maybe, just maybe, want to become a scientist. Let the games begin.

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BEFORE YOU START – GIVE YOUR PROJECT STRUCTURE

Time management is quite important. Our parents told us that a long time ago. Time to accept it. Here you have the opportunity to strucutre your research project and select time slots.

Time	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
6.00										
8.00										
10.00										
12.00										
14.00										
16.00										
18.00										

BEFORE YOU START – GIVE YOUR PROJECT STRUCTURE

A second page? WOW! We guess, time management is important.

Time	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
6.00										
8.00										
10.00										
12.00										
14.00										
16.00										
18.00										

(ONLINE) RESEARCH – IT'S NOT AS COMPLICATED AS IT LOOKS

What are the possibilities to create online experiments?

How can I recruit a representative sample online? Declaration of consent online?

Is my research question even realizable online?

What must be observed in a pre-test? How many iterations do I need? How do I evaluate problems that stand out? Do I have to fix every little thing?

Explanations, basic statistical knowledge

Quantitative

Experiment

Tools

Statistical programs

Research idea

Type of execution: online

Research question

Literary research; theoretical context Hypothesis formation

Pre-testing

Find Vpn

?

Execution

Analysis

Quantitative

Tool itself

Qualitative

Questionnaire

Social Media

Cover letter

Qualitative

Categorization

Interpretative data evaluation

by Ann-Kathrin Hübner

THE TRIP OF YOUR LIFE...OR JUST THE NEXT WEEKS

TAKE-OFF...INTO ONLINE (Online as a research context)

What is online research and when should you use it? Is it fun? Can I do something fun?

1

PACKING THE ESSENTIALS (Literature review)

Where do you find literature for on your way to win the Nobel prize? What has research done before you came into the picture?

2

SETTING THE DESTINATION (Identifying research questions)

What is a research question anyways and how do you find one? How do you find a research question that you can answer?

3

MAKING IT SCIENTIFIC *(that escalated quickly)* **(Formulating hypotheses)**

You know the literature, you know where you want to go – now it's time to formulate some hypotheses & finding scales...Wow. Doesn't that sound exciting?

4

LAYING OUT THE ROADMAP (Choosing a method)

Once you decide on the destination, the question of how the get there is raised. Experiments, surveys or something else entirely? And what are software tools?

5

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THE TRIP OF YOUR LIFE...OR JUST THE NEXT WEEKS

BEING ON THE TRIP (Recruiting participants)

Now that you know what you do, you do not want to do it alone. Findings friends (or participants…psst, they do not like to be called that) gets important.

6

ANALYZING THE TRIP (Identifying the right type of analysis)

Now, you got friends. But did you really have fun? It's time to look at the data and check out the results

7

WRITE THE TRIP DOWN (Writing an academic paper)

Seems like you had fun. Now it's time to write it down.

8

THE TRIP IS DONE...LONG LIVE THE TRIP (Tips & Tricks)

What did you learn. We will now talk about some general Do's and Don'ts in online research. Who doesn't like to be told what to do and what not to do.

9

MAKING THE TRIP & MEMORY LAST (Reflection)

Congratulation, future Nobel Prize laureate. You are now an online researcher – Yay. Let's reflect what you should avoid the next time around.

10

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THE TRIP OF YOUR LIFE…OR JUST THE NEXT WEEKS

OPEN SCIENCE (There is no other fancy word)

Hopefully, this workbooks prevents you from having a crisis. Science on the other hand, experiences a replication and transparency crisis. That's all.

11

MORE INFORMATION, REALLY?! (Supplementary information)

In the extremely unlikely event that you still have some questions, we provide you with some more information on where to find stuff.

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1
TAKE-OFF...INTO ONLINE

What is online research and when should you use it? Is it fun? Can I do something fun?

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2
PACKING THE ESSENTIALS

Where do you find literature for on your way to win the Nobel prize? What has research done before you came into the picture? And what freaky structure do they use?

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LITERATURE REVIEW

3
SETTING THE DESTINATION

What is a research question anyways and how do you find one? How do you find a research question that you can answer?

IDENTIFYING RESEARCH QUESTIONS

4
MAKING IT SCIENTIFIC
(that escalated quickly)

You know the literature, you know where you want to go – now it's time to formulate some hypotheses…Doesn't that sound exciting?

FORMULATING HYPOTHESES

5
LAYING OUT THE ROADMAP

Once you decide on the destination, the question of how to get there is raised. Experiments, surveys or something else entirely? And what are software tools?

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CHOOSING A METHOD

KNOWLEDGE TIME – RESEARCH METHODS

IT'S GETTING SERIOUS – WHAT ARE RESEARCH METHODS?

Now we are getting down to the nitty gritty of getting research done. You need to collect the right inputs to answer your research question. Of course you can pack just your swim trunks and a t-shirt for a ski trip, but as you can imagine, the outcome will not be ideal. So, it all comes down to deciding how you collect data (and no, data is not just ones and zeroes) that answers your research question. So, choose your research method wisely and don't forget to take the time required for data collection and data analysis into consideration. Just as your suitcase for a trip can only hold so many pieces of clothing, you have to make a choice for a research method and against many others.

The most frequently quantitatively used research methods include

Survey
List of questions aimed at extracting specific data from a particular group of people

Experiment
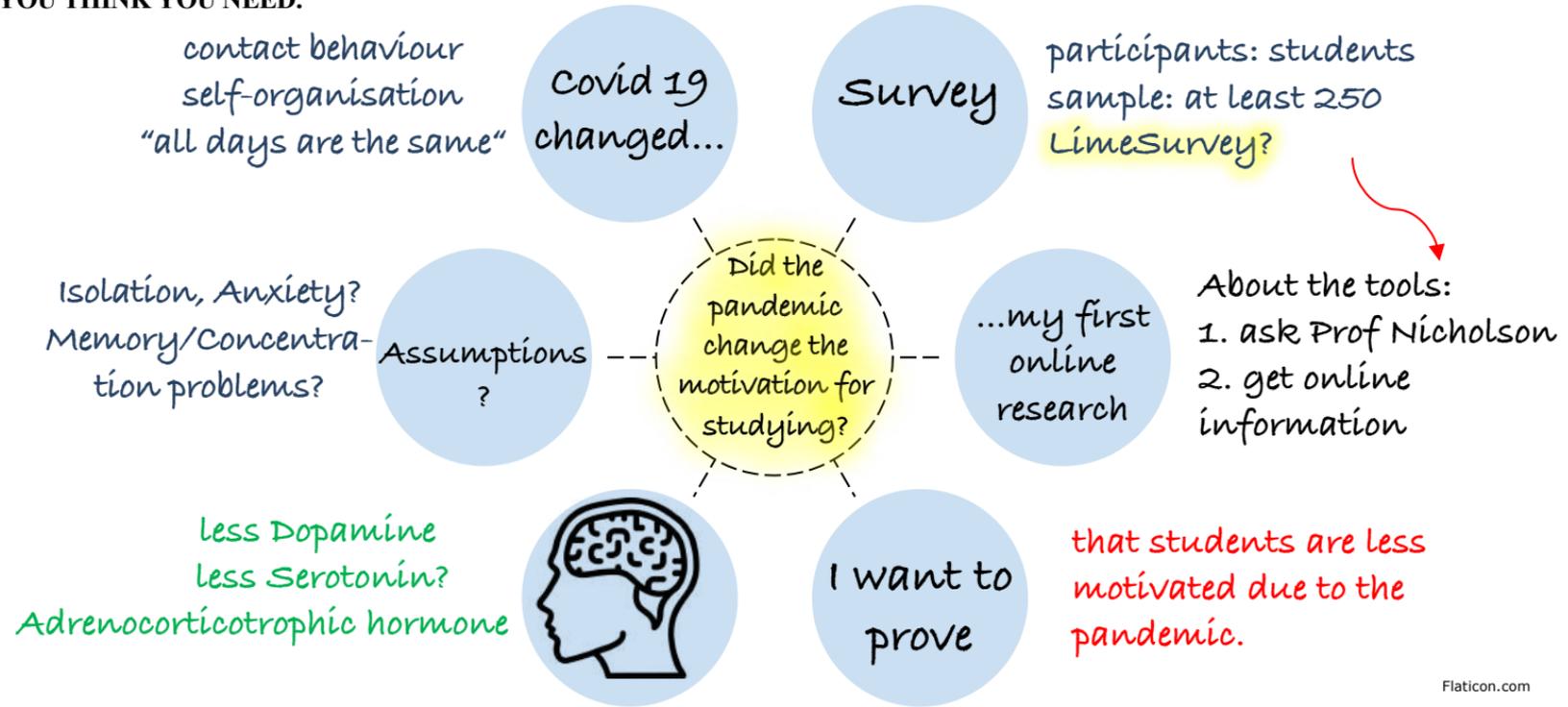An independent variable (cause) is manipulated, the dependent variable (effect) is measured

Tasks
Concrete and focussed instructions for an action to be completed

Just as your suitcase for a trip can only hold so many pieces of clothing, you have to make a choice for a research method and against many others. Depending on which method you chose, the data you collect will differ in quality and quantity. As an example, surveys are usually designed to deliver relatively short insights. A qualitative interview in contrast – which is not the focus here – will provide you with extensive responses and thus insights but also a lot of text. Like, really a lot of text.

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FIND YOUR INNER MIND-MAP

MAKING IT FUN – DO IT YOURSELF. DECIDE ON A RESEARCH METHOD AND CREATE A MINDMAP WITH WHAT YOU THINK YOU NEED.

contact behaviour
self-organisation
"all days are the same"

Covid 19
changed...

Survey

participants: students
sample: at least 250
LimeSurvey?

Isolation, Anxiety?
Memory/Concentra-
tion problems?

Assumptions
?

Did the
pandemic
change the
motivation for
studying?

...my first
online
research

About the tools:
1. ask Prof Nicholson
2. get online
information

less Dopamine
less Serotonin?
Adrenocorticotrophic hormone

I want to
prove

that students are less
motivated due to the
pandemic.

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REFLECTION – WHAT HAPPNENED?

REFLECTION – TIME TO THINK ABOUT THE CURRENT STATE. WHAT IS GOOD, BAD AND WHAT IS UGLY…BUT WILL BE BEAUTFIUL.

THE GOOD
- I kept my schedule !!! 😌
- with the online survey, I can show clear results

THE BAD
- I'm not experienced in doing research online
- Learn using the tools
- Will I reach enough participants?

THE UGLY
- I need a lot of advice or I will get demotivated myself

SOFTWARE-TOOL OR NO SOFTWARE-TOOL?

THE ANSWER IS SOFTWARE-TOOL. BUT WHICH ONE IS THE RIGHT ONE? IT'S LIKE LOVE.

Don't forget to keep in mind that not all methods are created equal. Specifically not when it comes to conducting research online. While participating in online surveys may be considered standard already, implementing them is like having to choose 1 out of 100 different hotels for your trip. The number of software tools available is humongous and ever-increasing.

There are as many different tools as there are stars in the sky. The trick is finding the one that is best suited to your needs. Questions that might get you there include: Do you want to conduct a survey or an experiment online? Do you have a budget to use a paid tool? Do you want the ability to individualize your methodology based on your programming skills? Is GDPR of concern to you? And so on…

Some of the more popular tools (having their 15 seconds of fame right now) include

If you want support in choosing the right tool as per your needs, check out the free Survey² research tool decision wizard.

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CHAPTER CHECK

1. Method

- ❑ Do you have figured out the *method of conducting* the study?
- ❑ Have you checked how you can *reach out to the participants*?

2. Material

- ❑ Do you have figured out the *tool* of conducting the study?
- ❑ Have you checked *licensing* the tool?

SUPPLEMANTARY MATERIALS

Helpful links

Introduction to research methods and methodologies, University of Liverpool
https://www.youtube.com/watch?v=nv7MOoHMM2k

Important Questions for your research project: Interview with Prof Michelle Johnson, Associate Professor of Anthropology at Bucknell University
https://www.youtube.com/watch?v=LzlRcZn0Q8c

SURELY YOU HAVE MORE QUESTIONS

YOU STILL HAVE QUESTIONS? GOOD FOR YOU – WRITE THEM DOWN AND TELL SOMEONE WHO CARES

Online Information:

- What tool to use? (LimeSurvey or SurveyMonkey?)

- How to use that tool?

- Articles from psychologists about COVID19:

  what psychological/ social phenomenons to except?

Ask Prof Nicholson:

- What tools is he usually using?

- How can I recruit the participants?

- Do we have money for recruiting?

How can I find a research buddy?

6
BEING ON THE TRIP

Now got friends. But did you really have fun? It's time to look at the data and check out the results

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RECRUITING PARTICIPANTS

7
ANALYZING THE TRIP

Now that you know what you do, you do not want to do it alone. Findings friends (or participants…psst, they do not like to be called that) gets important.

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IDENTIFYING THE RIGHT TYPE OF ANALYSIS

8
WRITE THE TRIP DOWN

Seems like you had fun. Now it is time to write it down.

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WRITING AN ACADEMIC PAPER

9
THE TRIP IS DONE...LONG LIVE THE TRIP

What did you learn. We will now talk about some general Do's and Don'ts in online research. Who doesn't like to be told what to do and what not to do.

TIPS & TRICKS

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MAKING THE TRIP & MEMORY LAST

Congratulation, future Nobel Prize laureate. You are now an online researcher – Yay. Let's reflect what you should avoid the next time around.

REFLECTION

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OPEN SCIENCE

Hopefully, this workbook prevents you from having a crisis. Science on the other hand, experiences a replication and transparency crisis. That's all.

Consider adapting Open Science principles for your research. Sharing knowledge unites the world.

Check out what Eve Sarah Müller from Leuphana University tells you about it

https://www.youtube.com/watch?v=hlZvb0FUhXI

Check out what Rachael Ainsworth tells you in TEDx Talks about the broken research culture and how Open Science fixes it

https://www.youtube.com/watch?v=c-bemNZ-IqA

SUPPLEMANTARY MATERIALS

In the extremely unlikely event that you still have some questions, we provide you with some more information on where to find stuff.

1. Some books you might find helpful & funny

Axel Bänsch und Dorothea Alewell
Wissenschaftliches Arbeiten, 12 Auflage
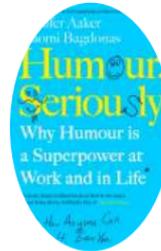
Jennifer Aaker und Naomi Bogdanas
Humour, Seriously –
Why Humour is a superpower at Work and in Life

SUPPLEMANTARY MATERIALS

In the extremely unlikely event that you still have some questions, we provide you with some more information on where to find stuff.

2. Some platforms you might find helpful (maybe not funny)

Open Education Resources

- *https://www.oercommons.org/*
- *https://www.oernds.de/oer/*

OnResToCom   ***To be continued and amazed***

CHECKLIST - WHAT NOT TO FORGET

For a trip of a lifetime it is very important to have everything you need. Here you will find a checklist with some (hopefully) helpful things we all tend to forget from time to time

1. Access is key

- ❏ Do you have access to your Universities VPN client?
- ❏ Do you have access to data banks for your literature review?
- ❏ Do you have access to software tool to collet your data online?
- ❏ Do you have access to a software to analyze your data?

2. Writing is also quite important

- ❏ Do you have a sufficient writing tool?
- ❏ Do you know the formalia your Professor makes you stick to? Have it ready & make sure you read it…twice.

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3. Make drinking and sport fun

❑ Do you have coffee or something to drink?
   (we promised - the fun doesn't stop here)
❑ Do you leave your desk from time to time? Your dog wants a pet and your legs a stretch.

4. Your computer – Your life

❑ Create a folder to store your literature in
❑ Systemize your literature (independent vs. dependent variable etc.)

5. Finish line – Almost there

❑ Give yourself a pat on the shoulder – well done
❑ Give your Nobel Prize winning piece to a friend or foe to read

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CHECKLIST - WHAT NOT TO FORGET

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Final Check – So you can sleep tight

- ❑ Did you cite everything correctly?
- ❑ Is your reference list a mess? *Off course not, but check it anyways*
- ❑ Is the format correct?
- ❑ Are there any spelling or grammatical errors? *Sorry – surely Shakespeare and Virginia Woolf were asked the same questions – don't take it personally*
- ❑ *Go to the printer and submit it – but check if the printer didn't mess everything up.*

You made it – Yay!
Now, enjoy your free time!

CONDUCTING ONLINE RESEARCH
(during a pandemic...& after – definitely after)

A INDEED FUN WORKBOOK...RIGHT?

2020 | MEIKEL * TINA * HELENA * NADINE

Find us online | MakingOnlineResearchFun.com
get our app | MakingOnlineResearchFun

LOOK OUT
FOR OUR APP

We want to develop and App that allows you to use this workbook on your phone and on the go – we know you are busy.

This App allows you to connect to this workbook on your phone and to reach out to other students with similar challenges

LOOK OUT
FOR OUR HOMEPAGE

In case you are more old school and are mot as busy, we also want to provide a homepage for this workbook.

The Homepage allows you to dive into the world of online research and access the workbook digitally – also, you connect with other students.

THE TEAM
(a.k.a. the ones responsible for all the fun)

Dr. Meikel Soliman
PostDoc
Leuphana University, Lüneburg

Tina Marie Monelyon
Research Associate
Mainz University of Applied Sciences, Mainz

Helena Lorena Winiger
Philosophy Student (M.A.)
Freie Universität, Berlin

Nadine Krüger
International Business Student (B.A.)
SRH University Heidelberg, Heidelberg