Legend

1. [REDACTED] means that the original word/fragment was deleted to ensure the anonymity of the participants.
2. [?] is a placeholder for words/fragments that could not be transcribed.
3. (?) means that the transcriber was not completely sure what the last word/fragment was, but had a guess.
4. Sentences that begin with "I:" were said by the interviewer
5. Sentences that begin with "P:" were said by the participat

Block 1: General Information

I: So, now we will start with the first block. The goal of this block is to get some general information about you. So, the first question is: Are you a PhD Student?

P: No.

I: And how many years has it been since you got your PhD?

P: Not that much but I have to think. I think it was 2 years ago, yeah. I can't really remember. Yeah, I think, 2015, I think, ja.

I: And what is your field within psychology? With field, we mean for instance social psychology, cognitive psychology . . . ?

P: Yeah, now clinical psychology. But I also have a background in experimental psychopathology.

I: Ok. And did you conduct any experiments including a Stroop task in your career so far?

P: Yes.

I: Ok. Could you describe your knowledge - or like how many experiments did you conduct?

P: Well, we conducted it a bit differently than the one here because we usually had a whole card of words. It was an emotion Stroop, so not a standard Stroop. And people had to name the colors of the words, but we only recorded the total amount of time of the whole card, not just the separate words so that was different here. But I think, during my PhD, I conducted - yeah, I think almost in every experiment so that would be like 5 or 6 experiments we also included a Stroop task but always like I just explained.

I: So, would you say that you are quite familiar with it both with carrying out the experiment and also analyzing the data of a Stroop task?

P: Ja. But not like this. Not for every separate word, but yeah.

I: Ok. And which statistical analysis programs do you use at least once a week? Multiple answers are possible. For instance, SPSS, R, Stata, SAS, Matlab, Python, or any other?

P: Only SPSS. Yeah, and AMOS but that is also, I think, from SPSS.

I: Ok. And how would you rate your knowledge of statistics relative to your peers on a scale from 1, extremely poor, to 10, excellent?

P: Well, that depends on the analysis. I know some analyses I am very good at. But I was never an excellent student when it came to statistics. But - yeah, I don't know, then around the middle - 5.

I: Ok. And how confident are you that your fabricated data will go undetected as fabricated? On a scale from 1, extremely insecure, to 10, extremely confident.

P: 2, then. I think you will easily notice.

Block 2: Timeline of Data Fabrication Process (When?)

I: Ok. Then this is is the end of the first block about general information. Now, we will start with the second block. The goal of this block is to get some information about the timeline of the data fabrication process. So, did you fabricate the data in one day or spread the data fabrication over several days?

P: Several days.

I: And on how many days did you work on fabricating the data?

P: 2 or 3, I think, yeah.

I: Ok.

P: Yeah, mostly 2. But then a little - maybe a little - final details on the third day.

I: Ok. And how much time do you estimate that it took you to fabricate the data in their entirety?

P: Puh. It was quite a lot of hours, actually. I thought I was going to do it within one hour, but I think it took me 4.

I: Ok. And how much effort do you feel you invested in fabricating the data on a scale from 1 (no effort at all) to 7 (a lot of effort)?

P: Oh, 7. I really tried.

I: Ok. And did you prepare in any way before starting to fabricate the data?

P: Yeah, I - because I was used to the total amount of time with the cards I didn't really know what normal means or standard deviations were for separate

words. So, I read a few papers and looked at the means and standard deviations there to get a feel for how - and then I also looked at some of the data I already had - and, yeah, tried to find out if I could use some of it and then change some. So, yeah, I just researched before I started.

I: Ok. And how much time do you estimate you spent on preparing?

P: Oh, that was most of the time. So, that was 3 hours of the 4, I think, yeah.

I: Ok, and did you read any literature on detecting data fabrication?

P: No, I didn't.

I: Or did you look into previous cases of data fabrication and how they had been detected?

P: No, I didn't think of that, actually. But that would have been a good idea.

I: Or like are you familiar with some of the literature or some the cases? Do you know something about them or so?

P: Well, the only thing I know is of course the Stapel fraud. And then - what I could remember is that, well, they did a lot of research after that also with experiments in social psychology were - well, kind of, I don't how to say it but ... - suspicuous, I think. And I remember from reading that paper that a lot of results were just below the p .05 level. So that's what I tried to avoid, that is was really significant. But that's the only thing, I actually know.

I: Ok. And did you think about different approaches how to fabricate the data?

P: I only could think of one, actually, just to do something - because it was only 25 participants so I kind of did it by hand.

I: Ok. And did your preparation that you did influence your approach to fabricating the data?

P: Well, yeah, because then I could find out what the mean was. So, what I did was that I kind of copied some of my data - it was not a Stroop because those data were - the means were incorrect because of the whole cards. But then I kind of adjusted them by hand to fit the normal means and standard deviations I found in the literature.

I: Ok. Then this is the end of the second block. Do you have any other comments about the timeline of the data fabrication process that you think could be interesting for us to know?

P: About the timing?

I: Yeah, about the timeline?

P: No.

Block 3: Broad Framework of Data Fabrication Process (What?)

I: Ok. Then, we will now start with the third block. The goal of this block is to get some information about the broad framework of the data fabrication process. So, could you name specific characteristics that would make data look fabricated or more fabricated in your opinion?

P: Well, first, the p-value I just talked about. And then maybe also when the data is too clean. When, for example - now, I tried to put some weird - also some weird means in between so that it would look more real because some - especially if you work with patients, for example, some are just really slow or make a lot of errors and then I tried also to put some weird data in it to make it look more real.

I: Ok. And could you name specific characteristics that would make data look genuine or more genuine in your opinion?

P: Yeah, those weird data in between the expected patterns.

I: Ok. And did you take these characteristics you just mentioned into account when fabricating the data?

P: Yes.

I: And how did you do that?

P: Yeah, I answered that.

I: Ok. And did you take into consideration relations in the data other than the Stroop effect itself?

P: No. I wouldn't know which ones.

I: So, for instance, the distribution of the scores or other aspects that could be inspected with the data set or so.

P: Oh, no.

I: Ok and what criteria did you use to determine whether you thought your fabricated data would go undetected?

P: Ja, I already answered that. With the p-value and put some weird stuff in it.

I: Ok. So, did you have any specific and different criteria for the means and standard deviations?

P: Yeah, well, like I said, I am not an expert. So, that is the problem. Some people would approach this, I think, more smart than me. I don't know. I just saw that a lot of data were around 1 second. So, that's kind of what I tried to do - between, well, 1 and 2 seconds. And then, the standard deviations were also between 100 and 300. So, I kind of varied between that.

I: Ok. And in hindsight, are there things you think you should have paid specific attention to while fabricating the data?

P: Yeah, I think, I didn't think of that but to look at literature how to detect fabricated data. I didn't think of that but that would have been smart.

I: Ok, then this is the end of the third block. Do you have any other comments about the broad framework of the data fabrication that you think could be interesting for us to know?

P: No.

Block 4: Specific Steps of Data Fabrication Process (How?)

I: Ok. Then, we will now start with the fourth block. The goal of this block is to get some information about the specific steps of the data fabrication process. So, could you indicate what steps you took to fabricate the means for the participants?

P: Yeah. That was, I copied some data from another reaction time experiment, just random - I just copied 50 trials. And then I compared them with the Stroop means I found in the literature and then I adjusted them by hand.

I: Ok. And how did you select this data set?

P: Just - I just picked a random data set that I knew had some reaction times. And then I saw those reaction times were always a bit around 500 milliseconds so that was a bit too slow. So, I just added 500 to the means, yeah.

I: And did you - so, how did you adjust the means?

P: Yeah, I just added 500 and then switched around a few means.

I: So, you like - changed it by 500 for each of the values and then afterwards, you did by hand a few further adjustments?

P: Yeah, and also put some weird data in it. So, some really slow ones, also.

I: And how did you do the further adjustment?

P: Then, of course, it was not statistically significant. So, then I changed around a few in each condition until it was significant. But then I took it a step further because then it was just below, yeah, 5 %. So, I kind of changed it a bit more. And then I just made some slower and some faster by hand in the congruent and incongruent condition until it was - I think it was p .017 or something. I don't know the exact value.

I: Ok. And could you indicate what steps you took to fabricate the standard deviations for the participants?

P: Yeah, that was exactly the same procedure. So, I copied the standard deviations from a task I already had but that was not the Stroop. And then I

saw that these were really not what I saw in the literature. So, I just adjusted them again by hand.

I: Ok. And for the means and the standard deviations, did you adjust each value or did you like adjust only some?

P: No, each.

I: Ok. And did you repeatedly fabricate data until you were satisfied with the results?

P: Yeah. Because, well, sometimes it was just below 5 %. So, then I tried again until it was correct.

I: Ok. So, the next question is then: How did you determine whether you were satisfied with the fabricated data or that they needed to be adjusted?

P: Yeah, I looked at the p-value and the means and the standard deviations until I thought, well, this looks like a real data set with my lay knowledge.

I: Ok and did you try to inspect whether the fabricated data looked weird?

P: I wouldn't know how to. So, no.

I: Ok and did you try to inspect whether the fabricated data looked genuine?

P: No, again. I wouldn't know how to.

I: Ok, and how many different mean-sd combinations did you fabricate before getting to the final fabricated dataset?

P: Pff, I don't know. I just switched around a lot of things. I don't know.

I: So like what would be like a rough guess?

P: Yeah, I don't know. It's 50 values - I don't - 200.

I: Ok. And like after you adjusted each of the values and you thought for the first time, maybe, this is my first final fabricated data set. Did you then change it again or . . . ?

P: Yeah, I kind of kept changing it. Because then I read a different paper and then I saw, oh, well, those standard deviations are much higher than theirs, so maybe mine are too low. So, I have to - yeah . . .

I: Ok, and how often did you first think, ok, I now have my final and then you changed again?

P: I think, two times.

I: Ok. And besides the supplied spreadsheet, did you use any other computer programs to fabricate data?

P: No.

I: Or did you use a random number generator to simulate data during this study?

P: No. That would also have been a good idea, actually. I didn't do that.

I: Ok. So, the next question is: Did you use real data during the fabrication study?

P: [?] in the end, no.

I: But you were kind of inspired by . . . ?

P: Yeah, that was just to have kind of a start to, yeah - so I wouldn't have to really input everything by hand. But it was just like I said 50 reactions times, not even Stroop data, and not even - it was only one condition, yeah.

I: Ok, yeah, ok. And did you pay specific attention to the difference between the two conditions except for that you wanted to have a significant difference?

P: Yeah, only that. Of course, the incongruent ones were slower. But that is, of course, related to the significance. But also that it was not the case in every participant because, of course, not everyone reacts that way.

I: Ok, then this is the end of the fourth block. Do you have any other comments about the specific steps of the data fabrication process that you think could be interesting for us to know?

P:No.

Block 5: Underlying Rationale of Data Fabrication Process (Why?)

I: Ok. Then, we will now start with the fifth block. The goal of this block is to get some information about the underlying rationale of the data fabrication process. So, did you consider fabricating these data a difficult task to complete?

P: Yes.

I: And why?

P: Yeah, because I felt that I could have done a better job if I had more statistical knowledge. So, now, I feel that I just did something and maybe it is very stupid. I don't know. So, I was a bit insecure but it was also kind of uncomfortable because you were doing something that was not right. But it is an experiment so when I named the data files like 'data fabrication experiment' it felt better already but it still was a bit weird. So, it was difficult and weird.

I: Ok. And do you think that your approach to data fabrication will be difficult to detect as fabricated?

P: I don't think so. Because - like I said - I just did something and then probably you will see that - I don't know how - like I said I am not an expert - but probably you will see that the combinations, for example, of means and standard deviations is just weird. Or that it's too random. Maybe. I am not sure how you

are going to detect it but, yeah - because I just did something very random and I - probably you will notice but I couldn't find another way to do this. So, yeah.

I: So, do you have like sort of a hunch how your fabricated data set could be detected as fabricated?

P: Yeah, maybe, you will notice that the combinations of the means and standard deviations are just too random and that it doesn't really make sense. I am not sure.

I: Ok. And why did you decide to participate in this study?

P: [REDACTED]. And also because I am really worried about this part of science. I don't think a lot of people really fabricate all the data but I do think that - because of the publication pressure - that a lot of people might feel that ok, it's not significant, maybe if I just change this participant, then my data set will be fine and I think that a lot of people will be tempted by this and that is why I think that it is really important that, for example, if you have software to detect - if you could check if data sets are real - because I think that it happens. And then also - because all the journals are always looking for the significant findings and maybe if it becomes more important that data is real than that it is significant that would be a nice change. So, maybe, this could contribute to that.

I: Ok. And did you discuss this study or the fabrication of the dataset for this study with other people?

P: [a tone indicating yes].

I: And did these people help you in fabricating the data?

P: No.

I: Ok. Then this is the end of the fifth block. Do you have any other comments about the underlying rationale of the data fabrication process that you think could be interesting for us to know?

P: No.

I: Ok, then this is the end of the interview or is there anything else you can recall about the data fabrication that you think is worth mentioning?

P: I will look at my notes because I think I told everything but ... no, I told everything.