

Researchers' Perspective on the Publication of Research Data: Semi-structured Interviews from Germany

Interview: os_012 – Translation

1	Interviewer: Soo. And that's also here already. Everything works great. Okay. Well, then I'll get started. My first question is, or my first request: Could you please tell me a little bit about your research area in which you are working.
2	Researcher: Yes, first of all I have to say that I've now been retired for about a year. But before that I worked in the research department of a... a perfectly normal radiology practice. Which just could afford a research department. And there was my specialty: Magnetic resonance imaging. That is, we have developed new procedures, ah... for the magnetic resonance imaging. I developed new sequences. Special sequences for special questions. Ah yes, and these things... we also published afterwards. Part of the research was also at the end, it was indeed... it was more, were... functional brain images. Where we were at, erm... psychological or pathological inquiries... we looked in the brain to see where the stimulus was occurring.
3	I: That really sounds very exciting. And how long have you worked in science?
4	R: All my life.
5	I: ((laugh)).
6	R: ((laugh)).
7	I: Okay, very good. Okay, and erm... With what research data did you work there? With the MRI machine, et cetera. What exactly was the research data involved?
8	R: Ahm, well. First of all, we had the data that we took with the MRI, which are just in normal radiological images now simply anatomical data. With the, ahh... functional brain imaging, of course, it's no longer anatomical data anymore, but... It is the data: What areas of the brain are active when data is being recorded at this moment. Or are particularly active. Then of course... with the patient data, everything that belongs to the patient. Gender, age, right-handed, left-handed, and and and and and. Illness status, if we have, erm... worked with, with patients who... had any, ah, known diseases. In that sense.
9	I: Hm, Aha ((affirmative sound)). And did you also publish your research data?
10	R: Yes. It's... It's. In the end, almost everything has gotten published. When we did something, the goal was always to publish it. And that's actually what we've always done. I have another one,



	that I might want to publish. But otherwise everything we've done is also scientifically published.
11	I: But by scientific publication you mean certainly, ahh ... articles, papers? Right?
12	R: Anyway, exactly.
13	I: Aha ((affirmative sound)). And the data itself? Well the//from the MRI scans, for example. Did you have this data...
14	R: Yes, we have, we have of course made it anonymous. Ah, and then have the anonymised part, I say, our data and of course we examined for age, sex, right-handedness, left-handedness or whatever. Or the intensity, erm... of certain things. This data has been published of course, but always, following the strict rules. So we always wrote in it, we... so our... our, erm... our questionnaires were similar to yours. Where it would simply say: Are we allowed to publish pictures or data. As long as they are anonymised. And that we did... erm, in most cases we put them in as examples, because they were all actually statistical procedures. So, ah, we didn't look at a single patient, rather we always had a group of at least, ahh... twenty, twenty-five patients and a control group, erm of twenty-five patients. Which we then statistically compared against each other.
15	I: Aha ((affirmative sound)). Erm, that's already...
16	R: Hello?
17	I: Yeah yeah, that's right. ((laugh)). I am still here. You just mentioned anonymisation.
18	R: Hellooo!
19	I: Can't you hear me anymore? Hello? Oh no. Nooo! Hello? Are you still there? [cut in audiofile] I: Exactly, I'm now already recording again. Right.
20	R: Yeah, no problem. I wanted to add something concerning the data.
21	I: Gladly.
22	R: Ahm. For me there have actually always been two kinds of data, if we did any, examinations on... patients, erm... or subjects, then it was actually always statistical data, as I have already explained yesterday. If I invented some new sequences for the MRI, then of course the parameters of these new sequences, erm, were the main topic of the publication. There was at most a picture of some test person, most of the time of myself, where some organ was shown. Be it prostate, brain, liver, spleen, whatever. Yes?



23	I: Yes.
24	R: These are two different types of data. There are of course also no statistics there. With the other data, if it was about any groups, then of course there were always made adequate statistics for it. And published were actually always the results of... the statistic.
25	I: Hm. What were the biggest concerns with the publication of the research data itself? Why did you not publish the data itself?
26	R: Erm... Actually there were no concerns. I would have made the data anonymised available to anyone who would have asked me.
27	I: Yes.
28	R: But I have to admit. In my whole life no one ever asked me for the data, rather in the end they were always satisfied when I explained. We have x test subjects and x test subjects or patients. Where in the group we studied, as well as in the control group and then this one, was described: Sex, age, handedness. It was described that they were not allowed to take medication. And and and. And then they were all satisfied with that. I've never been, ah... asked me for the actual data.
29	I: Hm. Ok. And, erm, is the data actually yours? Would you have been allowed to publish or share it at all?
30	R: Well, of course they all signed. No matter if in the control group or in the examination group that their data may be used anonymously for publications.
31	I: Erm.
32	R: They also signed that this also applies to cross sections pictures. So I'll do the example with the brain. Or the prostate, for example in men. If we have any pictures of it, because we have now examined the brain or prostate. Ah... then, ah... it was signed that a picture of an organ can be shown, that of course there can be nothing written on it. Neither the date of birth nor... ah... name or anything that could give any kind of conclusion back to the person.
33	I: Aha ((affirmative sound)). Okay. And do you feel that the process of publishing research data is too complicated or too opaque?
34	R: No, I don't actually. I would have a lot of criticism. Ahm... But that refers more to the fact, that this... but I also can't think of a better method. But this peer-reviewed process, ah... is in some places already, erm... Let's put it this way, if you come across an evaluator who, A: Either doesn't believe you - which happens from time to time - and writes this encoded in his report: "they have faked their data".
35	I: Okay. ((laugh)).



36	R: It of course doesn't say that like that, but then it does say something like: "No, it's got to be randomness or a variable". The other thing is that there are many people, who are used as reviewers and who publish in the same field. And erm... When they are doing in the same time an similar publication and then they also like to reject such an publication sometimes. Without that there are reasonable grounds for it. So, for example, ah... I have once, with the same method, at the same paper tried to publish within two years. The first time, eh, they accepted it. The second time it was not the same reviewer and then the reviewer said: Noo. The... He'd never believe the data, the methods wouldn't be right. Although the paper, that's... that's why it's a bit, sometimes a bit difficult. Erm. But it does not really concern the data, but the... the//the//the peer-review process. The difficulties.
37	I: Yes, whereas the first arguments you mentioned, in any case, already referred to the data. That they did not believe that the data was real. And if one...
38	R: Yes exactly, yes.
39	I: And if one would publish the data, one could then verify this even better.
40	R: Yes.
41	I: And I do think so. Yes, it is true that there are some difficulties with the peer-review. Erm, do you know whether in medicine in other countries more or less is published? Erm, according to your feeling. So more than in Germany?
42	R: Well, of course. The leaders in medicine, are definitely the USA. Also all the scientific ones, or I suppose, all of them... scientific journals with a high impact factor are almost exclusively in the USA. There are also some that are in Europe or in... Japan. Or, or... somewhere else in Asia. But, let me put it this way. By my reckoning, by... over 60%, over two-thirds of high impact papers are in the USA. In Europe, I think the Germans are the most hard-working. Apart from that, there is of course also (unintelligible)in medicine Japan publishes a lot. Korea does astonishingly much. Erm... Yes.
43	I: Very good.
44	R: And China is coming. That's in... that's on the rise. It came in between the time that I started. Like I said, you know, I'm retired.
45	I: Yes.
46	R: When I started, you didn't really see any Chinese publications. But now, erm... it's more and more increasing. It's not surprising, really. With so many people. And... I guess by now they're... at least academically, relatively well.
47	I: Aha ((affirmative sound)). Hm. And one more question: Did you yourself use the data of those



	who have been published?
48	R: Again, what do I have?
49	I: Whether you have also re-used the data of others.
50	R: No.
51	I: You never have, so... you always generate your own data.
52	R: I always, ah... generated my own data. So we had some kind of question, erm... Or partly I have to admit, the questions were also brought to me. I have had many co-operations with//with universities here in the area of the medical practice where I worked. For example the [Institution]. And ah, since I am the//the//thanks to my, my work as a researcher there in the practice, I had my hand on the equipment. At least in times when the practice was not running. That is, on weekends, in the evening. Or in the night. Many people approached me and said: Hey, couldn't we measure this or that. And, Erm... And if that was an exciting topic, then I just did that.
53	I: Yes, the best research results come out of curiosity, I think. Ahm...
54	R: Yeah. If someone comes up and says we would like to do it and erm... Couldn't we, could we maybe measure that with your methods? Then, and if it was an interesting question, then we just did that all. But as I said, also there. In such cases was it always, that we had group ah... which we compared with each other. So for example. We had a group of [sick] women and have, erm... watched what happens in their brains when they see a picture of their own bodies. And we had a group of normal control subjects and studied what happens in their brains when they see a picture of their own body in a bikini. And that was then of course, erm... accompanied by//by//psychologists, ah... and psychotherapists. We also made comparisons with the talk therapy before and after. But it was always groups like that where, statistically, a conclusion came out. Yes, it's statistically significant that the brains women with the [illness] work differently. If it sees images of the own body compared to... than the normal or control group.
55	I: Wow, fascinating.
56	R: And in so far as there is never any, ah... At most we put in an image of, as I said, a brain, and where... it was marked which brain region is active... In a normal case, as an example and in a control group. But the results have always been a statistical process. That is significantly different either in the other (unintelligible) in the brain or that the magnitude is significantly greater or smaller, ah. Yeah, whatsoever. But it is always then, in such cases ah... was always a statistical analysis. Where the individual person was no longer relevant in the publication.
57	I: Hm. Hm... Okay. I have one very last question, because I'm not sure I asked it yesterday. How long were you in research altogether? Or science.



58	R: I did, I answered it yesterday. That's when I said my whole life.
59	I: Ah yes.
60	R: Maybe that wasn't precise enough.
61	I: Gladly also in years. ((laugh)).
62	R: I//I//I was... I have about, I have to do the math. I started out about... So about 36 years.
63	I: Very good. Okay, great. Then I would like to thank you again very much for the interview. I'm sorry that we had to split it this way.

