Appendix A

Multidimensional Research Agendas Inventory-Revised (original version)

Scientific Ambition

I aim to one day be one of the most respected experts in my field.

Being a highly regarded expert is one of my career goals.

I aim to be recognized by my peers.

I feel the need to constantly publish new and interesting papers.

I am constantly striving to publish new papers.

I am driven to publish papers.

Divergence

I look forward to diversifying into other fields.

I would be interested in pursuing research in other fields.

I would like to publish in different fields.

I enjoy multidisciplinary research more than single-disciplinary research.

Multidisciplinary research is more interesting than single-disciplinary research.

I prefer to work with multidisciplinary rather than single-disciplinary teams.

Collaboration

My publications are enhanced by collaboration with other authors.

I often seek peers with whom I can collaborate on publications.

I enjoy conducting collaborative research with my peers.

My peers often seek to collaborate with me in their publications.

I am often invited to collaborate with my peers.

I am frequently invited to participate in research collaborations due to my reputation.

Mentor Influence

Part of my work is largely due to my PhD mentor.

My research choices are highly influenced by my PhD mentor's opinion.

My PhD mentor is responsible for a large part of my work.

My PhD mentor largely determines my research topics.

Tolerance of Low Funding

Limited funding does not constrain my choice of topic.

Highly limited funding does not constrain my choice of topic.

The availability of research funding for a certain topic does not influence my decision to conduct research on that topic.

I am not discouraged by the lack of funding on a certain topic.

Discovery

I would rather conduct revolutionary research with little chance of success than replicate research with a high probability of success.

I prefer "innovative" research to "safe" research, even when the odds of success are much lower.

I would rather engage in new research endeavors, even when success is unlikely, than safe research that contributes little to the field.

I am driven by innovative research.

Academia Driven

My choice of topics is determined by my field community.

I often decide my research agenda in collaboration with my field community.

I adjust my research agenda based on my institution's demands.

My research agenda is aligned with my institution's research strategies.

Society Driven

I decide my research topic based on societal challenges.

Societal challenges drive my research choices.

I often strive to engage in issues that address societal challenges.

I choose my research topics based on my interactions with my non-academic peers.

I consider my research topics myself, but this consideration often occurs after I hear what my non-academic peers have to say about these topics.

I consider the opinions of my non-academic peers when I choose my research topics.

Appendix B

Multidimensional Research Agendas Inventory-Revised (short version)

Scientific Ambition

Being a highly regarded expert is one of my career goals.

I aim to be recognized by my peers.

I am constantly striving to publish new papers.

Divergence

I would be interested in pursuing research in other fields.

I enjoy multidisciplinary research more than single-disciplinary research.

Collaboration

My publications are enhanced by collaboration with other authors.

I enjoy conducting collaborative research with my peers.

I am often invited to collaborate with my peers.

Mentor Influence

Part of my work is largely due to my PhD mentor's ideas. (after session 6 updated to: Part of my work is largely due to my former PhD mentor's ideas.)

My research choices are highly influenced by my PhD mentor's ideas. (after session 6 updated to: My research choices are highly influenced by my former PhD mentor's ideas.)

Tolerance of Low Funding

Limited funding does not constrain my choice of topic.

I am not discouraged by the lack of funding on a certain topic.

Discovery

I would rather conduct revolutionary research with little chance of success than replicate research with a high probability of success.

I am driven by innovative research.

Academia Driven

I often decide my research agenda in collaboration with my field community.

I adjust my research agenda based on my institution's demands.

My research agenda is aligned with my institution's research strategies.

Society Driven

Societal challenges drive my research choices.

I consider the opinions of my nonacademic peers when I choose my research topics.

Appendix C

Epistemic Values Scale

Reliability and Truth

I want my research to represent the truth as accurately as possible.

I want my research to serve as reliable evidence.

I want others to rely on my research because of its methodological rigor.

I want to communicate my research truthfully to others.

I believe it's acceptable to sometimes prioritize speed over thoroughness in research.*

Cumulative Collective Knowledge

I want my research to contribute reliable evidence to the literature that other researchers can build upon.

I want my research to contribute to resolving long-standing research questions.

I want my research to be relevant and useful for other researchers.

I want my research to remain valuable to the field in the future.

I want my research to be updated by the scientific community. (After participant 6 updated to: I want my research to be updated *or corrected* by the scientific community.)

I prefer developing new ideas over engaging with existing research.*

I believe that building on existing literature can constrain originality in research.*

I want my research to be distinct from the existing body of research.*

Criticism and Error Correction

I aim to identify errors in published research through careful reanalysis.

I want my research to challenge and potentially falsify existing findings.

I aim to critically examine and expose the limitations of existing research.

I prioritize original contributions over correcting the work of other researchers. (After participant 6 updated to: I prioritize original contributions over correcting the *published* work of other researchers.)

I see it as my responsibility to help correct inaccuracies in the scientific record.

Once research has passed peer review, I generally assume it's reliable.*

I believe it's often unproductive to reevaluate accepted findings.*

No study is perfect.

Note. * Indicates a reverse-worded item.

Appendix D

Descriptive Statistics of MDRAI-R and Epistemic Values Scale

 Table 1

 Descriptive Statistics of Items of the MDRAI-R (short)

No.	Item	Mean	SD	Min	Max
Scier	Scientific Ambition				
1	Being a highly regarded expert is one of my career goals.	4.44	1.42	1.00	7.00
2	I aim to be recognized by my peers.	5.11	0.83	4.00	7.00
3	I am constantly striving to publish new papers.	3.72	1.45	1.00	7.00
Dive	rgence				
4	I would be interested in pursuing research in other fields.	4.39	1.46	2.00	7.00
5	I enjoy multidisciplinary research more than single-disciplinary	4.94	1.55	2.00	7.00
	research.				
Colla	boration				
6	My publications are enhanced by collaboration with other	6.11	1.13	4.00	7.00
	authors.				
7	I enjoy conducting collaborative research with my peers.	6.33	0.91	4.00	7.00
8	I am often invited to collaborate with my peers.	4.83	1.10	2.00	6.00
Men	tor Influence				
9	Part of my work is largely due to my former PhD mentor's	3.47	1.55	1.00	7.00
	ideas.				
10	My research choices are highly influenced by my former PhD	4	1.54	1.00	7.00
	mentor's ideas.				
Toler	ance of Low Funding				
11	Limited funding does not constrain my choice of topic.	4.41	1.66	1.00	7.00
12	I am not discouraged by the lack of funding on a certain topic.	4.11	1.71	1.00	7.00
Disco	overy				
13	I would rather conduct revolutionary research with little	5.11	1.37	2.00	7.00
	chance of success than replicate research with a high				
	probability of success.				
14	I am driven by innovative research.	5.72	1.13	3.00	7.00
Acad	emia Driven				
15	I often decide my research agenda in collaboration with my	4.17	1.38	1.00	6.00
	field community.				
16	I adjust my research agenda based on my institution's	3.5	1.25	1.00	6.00
	demands.				
17	My research agenda is aligned with my institution's research	4.78	1.06	3.00	7.00
	strategies.				
Socie	ety Driven				
18	Societal challenges drive my research choices.	5.47	1.28	3.00	7.00
19	I consider the opinions of my nonacademic peers when I	4.67	1.5	2.00	7.00
	choose my research topics.				

 Table 2

 Descriptive Statistics of Subscales of MDRAI-R (short)

Subscale	# Items	Mean	SD	Min	Max
Scientific Ambition	3	4.43	0.93	2.67	6.00
Divergence	2	4.67	1.00	2.50	6.50
Collaboration	3	5.76	1.00	2.50	6.50
Mentor Influence	2	3.74	0.86	3.33	6.67
Tolerance of Low Funding	2	4.28	1.53	1.50	7.00
Discovery	2	5.42	1.18	3.00	7.00
Academia Driven	3	4.15	0.86	2.33	5.33
Society Driven	2	4.97	1.30	2.00	6.50

Table 3Descriptive Statistics of Items of the Epistemic Values Scale

No.	Item	Mean	SD	Min	Max
Relia	bility and Truth				
1	I want my research to represent the truth as accurately as possible.	6.22	0.94	5	7
2	I want my research to serve as reliable evidence.	6.39	0.85	4	7
3	I want others to rely on my research because of its methodological rigor.	5.17	1.25	3	7
4	I want to communicate my research truthfully to others.	6.61	0.61	5	7
5	I believe it's acceptable to sometimes prioritize speed over thoroughness in research.*	4.67	1.68	1	7
Cum	ulative Collective Knowledge				
6	I want my research to contribute reliable evidence to the literature that other researchers can build upon.	6.00	0.84	5	7
7	I want my research to contribute to resolving long- standing research questions.	5.33	1.14	3	7
8	I want my research to be relevant and useful for other researchers.	6.17	0.62	5	7
9	I want my research to remain valuable to the field in the future.	6.00	0.91	4	7
10	I want my research to be updated or corrected by the scientific community.	5.67	1.08	3	7
11	I prefer developing new ideas over engaging with existing research.*	3.33	1.50	1	6
12	I believe that building on existing literature can constrain originality in research.*	4.67	1.28	3	7
13	I want my research to be distinct from the existing body of research.*	3.71	1.21	1	6
Critic	cism and Error Correction				
14	I aim to identify errors in published research through careful reanalysis.	3.00	1.27	1	5
15	I want my research to challenge and potentially falsify existing findings.	4.39	0.92	3	6
16	I aim to critically examine and expose the limitations of existing research.	4.94	1.55	2	7
17	I prioritize original contributions over correcting the published work of other researchers.*	2.22	1.17	1	5
18	I see it as my responsibility to help correct inaccuracies in the scientific record.	4.67	1.03	3	6
19	Once research has passed peer review, I generally assume it's reliable.*	4.72	1.27	3	7
20	I believe it's often unproductive to reevaluate accepted findings.*	5.83	0.99	4	7
21	No study is perfect.	6.5	1.04	3	7

Note. * Indicates a reverse-worded item.

 Table 4

 Descriptive Statistics of Subscales of the Epistemic Values Scale

Subscale	# Items	Mean	SD	Min	Max
Reliability and Truth	5	5.81	0.82	4.20	7.00
Cumulative Collective Knowledge	8	5.12	0.59	4.25	6.25
Criticism and Error Correction	8	4.55	0.66	3.12	5.86

Appendix E

Interview Questions

Opening Questions

- Can you tell me a bit about one of your current research projects and how it started?
- Can you briefly elaborate on what influenced your decision to do this study?

Motivations

- To what extent did your motivation to pursue innovative or unconventional research influence your decision to do this study?
- To what extent did your motivation to gain academic recognition influence your decision to do this study?
- To what extent did your PhD mentor's ideas influence your decision to do this study? (after participant 6 updated to: To what extent did your former PhD mentor's ideas influence your decision to do this study?)
- To what extent did your collaborators or the motivation to collaborate influence your decision to do this study?
- To what extent did your motivation to cross disciplinary boundaries influence your decision to do this research?
- To what extent did your field community influence your decision to do this study?
- To what extent did societal relevance influence your decision to do this study?
- To what extent did resource constraints influence your decision to do this study?

Cumulative Science

- To what extent did your past research influence your decision to do this study?
- In what way does this study contribute to the larger scientific literature on this topic?

Epistemic Values

- In general, what do you think are aspects of studies that make a valuable contribution to science?
- For your current study, why do you think it contributes to science?

Reflection

To conclude, I'd like to invite you to reflect on your research practice. Now that you've answered the questionnaires and had a chance to reflect on your current research practice, do you notice any areas where your actual behavior differs from what you want to do? If so, in which area do you feel a divergence or tension occurs? Feel free to take a moment to revisit your responses to the questionnaire as a reference.

Appendix F

Information Letter, Informed Consent Form, and Debriefing Letter



Information letter for participants

"The Role of Motivations and Values in Researchers' Decision-Making"

Dear Participant,

You are invited to take part in a scientific study. This study is being conducted by Julia Weschenfelder, supervised by Dr. Anna van't Veer of the Methodology and Statistics Unit at Leiden University and Dr. Daniël Lakens and Sajedeh Rasti of the Human-Technology Interaction group at Eindhoven University of Technology (TU/e), and has been approved by the Psychology Research Ethics Committee of Leiden University (reference number: 2025-05-14-A.E. van 't Veer-V2-6035).

Purpose of the study

This study investigates the factors influencing researchers' decision-making processes in academic settings. Specifically, the study examines how motivations and values impact decisions within the context of a specific research project.

Participation

Your participation in this research project does not involve any physical, legal or economic risks. You do not have to answer questions which you do not wish to answer. Your participation is voluntary. This means that you may end your participation at any moment you choose by letting the researcher know this. You do not have to explain why you decided to end your participation in the research project. None of this will have any negative consequences for you whatsoever.

Procedure

Your participation will involve completing a questionnaire followed by an interview to help us understand how you make research-related decisions. If possible, the data collection (survey and interview) will take place in a room at the Faculty of Social and Behavioral Sciences. You will be asked to reserve 60 minutes of your time.

Benefits and risks

Your participation in this research project does not involve any physical, legal or economic risks. You do not have to answer questions which you do not wish to answer. Your participation is voluntary. This means that you may end your participation at any moment you choose by letting the researcher know this. You do not have to explain why you decided to end your participation in the research project. None of this will have any negative consequences for you whatsoever.

Confidentiality, use, and privacy

How do we protect your privacy?

We will do everything we can to protect your privacy as best as possible. The research results that will be published will not in any way contain confidential information or personal data from or about you through which anyone can recognize you, unless in our consent form you have explicitly given your consent for mentioning your name, for example in a quote.

Within the framework of the research project we process the following personal data: name, e-mail, audio recording. The personal data that were gathered via audio recording and questionnaire within the framework of this research project, will be stored on a secure server, as required by Leiden University regulations on data management. The raw and processed research data will be retained for a period of 10 years. The research data will, if necessary (e.g. for a check on scientific integrity) and only in anonymous form be made available to persons outside the research group.

We wish to share the transcript of the recordings as open data for future academic purposes and scientific reviews. However, due to the nature of the questions, we cannot guarantee complete anonymity. Later in this document, we ask you to choose between these options regarding sharing the transcript of your interview: a) openly share the transcript with their identity anonymized as much as possible, b) share the transcript with limited access for research purposes only, or c) decline to share the data entirely.



Can you withdraw your consent for the use of your data?

Participation in this research project is entirely voluntary. You may end your participation in the research project at any moment or withdraw your consent to using your data for the research without specifying any reason. Ending your participation will have no disadvantageous consequences for you.

For more information on data privacy and your rights, please check the European Union's data privacy law, known as the General Data Protection Regulation ("GDPR").

Contact information

If you have any questions before or after participating in this study, you can contact the principal investigator, Dr. Anna Van't Veer, <u>a.e.van.t.veer@fsw.leidenuniv.nl</u>, or Julia Weschenfelder, <u>I.Weschenfelder@umail.leidenuniv.nl</u>.

You can also contact the (principal) investigator if you have a complaint. If you prefer not to do so, you can contact the Contact point for research participants at the Faculty of Social Sciences of Leiden University: Contactpuntparticipanten@fsw.leidenuniv.nl

If you have any questions or complaints about your privacy or the processing of your personal data, you can contact the privacy officer of Leiden University: privacy@bb.leidenuniv.nl



Date

Signature

Informed consent form for participants

I have been asked to give permission to participate in the study "The Role of Motivations and Values in Researchers' Decision-Making".

By signing this consent form I acknowledge the following:

- 1. I am sufficiently informed about the research project through a separate information letter. I have read the information letter and have had the opportunity to ask questions. These questions have been answered satisfactorily.
- 2. I take part in this research project voluntarily. There is no explicit or implicit pressure for me to take part in this research project. It is clear to me that I can end participation in this research project at any moment, without giving any reason. I do not have to answer a question if I do not wish to do so.

moment, without giving any reason. I do not have to answer a question if I do not wish to do so.
Furthermore, I consent to the following parts of the research project:
3. I consent to processing my personal data gathered during the research in the way described in the information letter.
YES □ NO□
4. I consent to using my answers for example quotes in the research publications – without my name being published in these.
YES □ NO□
5. I consent the transcript of my interview to:
\Box be openly shared with anonomising my identity and masking contextual information as much as possible.
\square only shared to people with research purpose only.
\square I wish the transcript of my interview not to be shared with anyone.
I, (NAME)consent to participate in this study.
Signed by

.....



Debriefing letter for participants

"The Role of Motivations and Values in Researchers' Decision-Making"

Thank you for participating in this study. We would now like to provide further explanation about this study.

This study aims to explore how researchers make decisions in a research project. Specifically, we focus on understanding the influence of epistemic and non-epistemic motivations and values on the research process. Our goal is to understand how these motivations and values shape concrete decisions within the research process and whether there is a gap between what researchers would like to do and what they do in practice.

By sharing your experiences and insights, you've helped us better understand the complex factors that influence decision-making in a specific research project. Your input, along with that of other participants, will be instrumental in developing a more nuanced understanding of the motivations and values that drive researchers' choices.

As the scientific community moves toward greater openness and transparency, it is crucial to better understand how motivations and values shape the research process. This study aims to offer insights into how research practices might be improved for greater alignment between individual and scientific goals. Moreover, this study aims to lay the groundwork for the development of a scale that assesses the influence of epistemic and non-epistemic motivations and values in a research project.

If you would like to withdraw your consent to use your research data based on the information above, please contact the investigator listed below within two weeks. If you choose to withdraw, this will not negatively affect you in any way.

We have asked you some personal questions. It might be that answering certain questions made you feel upset or experience negative emotions. It is okay and natural to feel this way, and these negative feelings should quickly diminish after the study's completion. If you still experience difficulties after the study or would like to talk to someone about it, there is a possibility to get help from different sources.

Please do not share the information in this debriefing letter with other potential participants, as the information could influence their behavior during the study.

Contact information

If you have any questions after participating in this study, you can contact the (principal) investigator, Anna van't Veer at a.e.van.t.veer@fsw.leidenuniv.nl, or Julia Weschenfelder at J.Weschenfelder@leidenuniv.nl.

You can contact the investigator if you have a complaint. If you prefer not to do so, you can contact the Contact point for research participants at the Faculty of Social Sciences of Leiden University:

Contactpuntparticipanten@fsw.leidenuniv.nl

If you have any questions or complaints about your privacy or the processing of your personal data, you can contact the privacy officer of Leiden University: privacy@bb.leidenuniv.nl

Appendix G

Thematic Analysis: Additional Theme not Relevant to Research Question

During the thematic analysis, one theme emerged that, while important, was not directly relevant to answering the guiding research question of this study—namely, what motivates researchers' *current project choices*. This theme is reported here to acknowledge its presence in the data and to provide context for future research.

Negative research environments shaping field choice

Three participants described how experiences of unsupportive or unsafe academic environments earlier in their careers influenced their decision to change fields.

- "[...] as a PhD [...], I didn't really have much of a field community. I also noticed reviewers of articles were just quite mean" (ID 1).
- "And I have to say the research was quite interesting. But the research environment was very bad, actually. So it was a highly, I would say, quarrelsome environment. Yeah, not fun to work there. So I specifically looked for a job in another field" (ID 3).
- "But the Institute where I ended up working was pretty horrible when I got there [...] it was a really unsafe academic environment where the professors that I worked under [...] were really controlling and restrictive. [...] And luckily, that changed over the years. So now it's much better at our Institute" (ID 4).

While these experiences clearly shaped participants' broader career trajectories, they did not emerge as direct influences on their present project choices. For this reason, they were not included in the main thematic structure of the results, but are nonetheless important in understanding the role of academic environments in shaping long-term research directions.