Generative AI in Academia:

A Survey of Students and Staff at the University of Tübingen

August 2024

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Summary: Generative AI tools, such as ChatGPT, are significantly impacting various facets of daily and academic life, including academic practices at the University of Tübingen. To empirically understand how generative AI is reshaping academic activities, we conducted a survey among students and staff at the University of Tübingen, focusing on their use of generative AI-based tools within study, research, and teaching contexts. The survey was released on March 3, 2024, and remained online for one month. It aimed to understand the frequency and depth of generative AI usage, assess user knowledge and trust in these tools, and identify the specific tools and tasks for which they are used. The primary objective was to determine usage patterns and how these vary across academic disciplines, academic positions, and educational levels. Over 500 students and staff participated in the survey. The findings reveal that nearly half of the respondents regularly use AI-based tools for their academic work. The analysis highlights that these tools are predominantly used for answering comprehension questions, explaining subject-specific concepts, translation, and programming. Some interesting findings indicate that with more prior knowledge of generative AI technology, trust in these technologies increases. Furthermore, the higher the academic status at the university, the less researchers trust in generative AI. We could also see that younger participants (18-20 years) reported a higher incidence of no prior knowledge and less frequent use of generative AI.

Zitierfähiger Link (URI):

http://hdl.handle.net/10900/158473 http://nbn-resolving.de/urn:nbn:de:bsz:21-dspace-1584735 http://dx.doi.org/10.15496/publikation-99805

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1. Project Description

This survey was conducted at the University of Tübingen between March 3, 2024 and April 4, 2024 within the framework of the project "Hybrid Epistemic Practices: Generative Artificial Intelligence and the Transformation of Academic Assemblages in the Qualitative Social Sciences and Humanities" at the Ludwig Uhland Institute of Historical and Cultural Anthropology.¹ Taking a primarily ethnographic perspective, this project looks at how generative AI (genAI) is changing the way students and staff in the social sciences and humanities at the University of Tübingen work, study, and teach against the backdrop of new advances in generative AI. In the survey, we defined generative AI as follows: "Generative AI refers to AI systems that can generate new content, such as text, images or music, based on the data with which they have been trained. Examples include text generators such as ChatGPT, image generators such as DALL-E, assistance tools such as Grammarly or translators such as DeepL." The survey serves as a quantitative foundation on which further qualitative, ethnographic research will be conducted. In this context, the survey is also used to recruit interviewees for subsequent face-to-face interviews. In the following sections, we will first discuss the participant demographics, provide some notes on methodology and limitations before we present some of the major findings of this survey.

2. Participants Demography

The survey was released on March 3, 2024, via the University of Tübingen's mass email system, targeting students, staff, and university members. After excluding incomplete or missing responses, the total number of participants was 520. The demographic breakdown shows that 62.9% of respondents identified as female, 32.7% as male, and 2.8% as non-binary, while 1.5% preferred not to specify their gender. To compare whether this gender distribution aligns with the university's official statistics, we calculated the percentage of female students in our survey, which amounts to 63.7% and compared it to the

	Frequency	Percent
Non-binary	15	2.9
No answer	8	1.5
Male	170	32.7
Female	327	62.9
Total	520	100.0

Gender

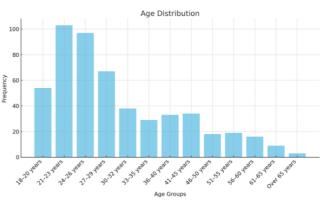


Figure 1: Age distribution across entire sample.

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The survey was mainly designed and conducted by project researcher Lukas Grießl, who is also the main author of this report. Christoph Bareither and Libuše Hannah Vepřek, who act as project PI and Co-PI, devised the original project plan and assisted in the survey design and the writing of the report. Student assistant Annabelle Schönherr assisted in editing and creating the final layout of the report.

official university statistics, which report 59% female students. This indicates that our sample reasonably reflects the university's students gender demographics. However, it is important to note that the survey was not designed to be representative; rather it aims to gain insights into the dynamics and patterns within particular subgroups.

The majority of participants were undergraduate and graduate students, predominantly aged between 21 and 26 years, aligning with the university's typical student age group. In higher age groups, such as those aged 65 years and older, the number of participants was very low, which is why generalizations are much more difficult to make for these age groups. This issue will be discussed in the respective sections throughout this report.

Disciplinary background data shows that the largest representations were from the sciences (34.4%), humanities (21%), and social sciences (14%). The general interest of this project lies in the social sciences and humanities, covering areas like philosophy, law, social sciences, economics, and theology (Protestant, Catholic, and Islamic). Consequently, the following analysis will place greater emphasis on these disciplines.

In line with the breakdown of the different age groups, we can also see that more than half of our respondents were bachelor and master students, 14.6% doctoral researchers, 10% academic staff and 10% administrative staff. The inclusion of 'administration' as a category was a response to its frequent mention in the 'others' field and will be analyzed in a separate section at the end of this report. The following report will primarily analyze the groups above the line (as

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	Frequency	Percent		
Sciences	179	34.4		
Humanities	109	21		
Social Sciences	73	14		
Other	58	11.2		
Medicine	50	9.6		
Economics	19	3.7		
Law	17	3.3		
Protestant Theology	12	2.3		
Catholic Theology	3	.6		
Total	520	100.0		

Academic Positions and Educational Levels

	Frequency	Percent
Bachelor Student	147	28,3
Master Student	123	23,7
State Exam	25	4,8
PhD Candidate	76	14,6
Postdoctoral Re- searcher	25	4,8
Lecturer/Senior Lecturer (AkadR)	15	2,9
Professor	12	2,3
Administration	52	10,0
Teaching Assistant	3	0,6
Employee	14	2,7
Medical Staff	2	0,4
Research Associate	10	1,9
Science support staff	4	0,8
Others	13	2,5
Total	520	100,0

shown in the figure on the right) separating the majority responses and minority responses regarding the respondents' position within the University of Tübingen.

3. Methodology, Scope and Limitations

3.1 Recruitment and Sample

Participants for this cross-sectional websurvey were invited through the University of Tübingen's mass email system. The invitation email was sent to all students and staff (academic and administrative), containing some background information on the project, the research team and a link to the survey. Furthermore, among all participants, 15 book vouchers worth ≤ 20 each were raffled off. In total, the email was sent to around 40.000 email addresses and was only sent out once. The invited individuals were thus the same as the target population, which is students and staff at the University of Tübingen. The invitation was sent in both German and English and the survey was also available in both languages.²

3.2 Questionnaire

Including an introductory and a final section, the survey contained seven sections. The first section gathered demographic data, such as age, gender, status at the university, discipline and how long respondents have already been working in academia/conducting their studies. The next section aimed to gather general information on participants' perception and usage regarding generative KI tools. It started with a question on how knowledgeable participants consider themselves, followed by a question on how often they use generative AI. The next section then listed a list of potential tasks for which generative AI can be used, as well as types of generative AI services. Participants were asked to select those tasks for which they have already used generative AI, as well as the types of services (e.g. text generators, image generators etc.). In the next question, the previously selected tasks were displayed again and participants had to choose the ones for which "generative AI has become an essential component" in their academic routine/studies. Participants were then asked some open-ended questions, which we will omit here, since they will be excluded from the following analysis. After this, participants were asked how much they trust the output of generative AI tools: "How much do you trust the output of generative AI tools? (Scale from 1-7). Please indicate your level of trust on a scale from 1 (very low trust) to 7 (very high trust)."³ Before the final section, participants were asked whether they would be willing to participate in an interview and if they would agree in sharing their responses for the interview. This helped us to prepare the subsequent interviews and to develop tailored questions.⁴ The survey was created on and hosted on www.soscisurvey.de.

² Please refer to the appendix to see the invitational email.

³ Please refer to the appendix to see screenshots of the whole questionnaire.

⁴ If participants chose to share their responses with us, we stored their email addresses alongside their responses. If they chose not to share their responses, we stored their email addresses separately.

3.3 Scope and Limitations

This report is part of a broader project on the use of generative AI in the social sciences and humanities and does not aim for generalizations beyond these disciplinary orientations and the University of Tübingen. Furthermore, despite certain demographic benchmarks being in accordance with the general student population at the University of Tübingen, this report does not, as mentioned, claim to be representative of the whole student/staff population at the University of Tübingen or beyond. Despite these limitations, the report provides insights into different subgroups, usage patterns, and other relevant aspects in our sample.

Throughout this report, we often differentiate between disciplinary orientations: the social sciences and humanities versus the natural sciences, mathematics, medicine and computer science. It is important to note that while these disciplines represent different research cultures and epistemologies, there might also be great differences within these disciplines. To give an example, this report puts disciplines like philosophy and sociology or physics and biology into the same groups, although there are strong differences between these fields. The rationale for this lies in the general orientation of this project and its focus on the qualitative social sciences and humanities, which also includes disciplines like law or economics.

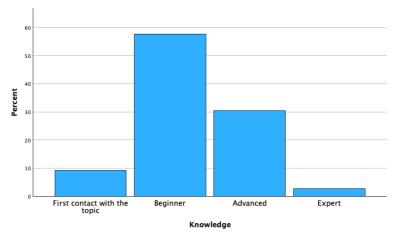
In addition, we would like to stress that the overall project has a qualitative character with a focus on ethnographic methods. This survey is considered a first step to develop a foundation and to explore topics and aspects which we will further investigate through interviews, focus groups and media diaries. This is also important when considering suggested interpretations in this survey. These interpretations will become matters of further investigation during the qualitative, ethnographic interviews. Furthermore, this report is intended to focus on the findings of our survey and does not embed its results in the context of similar surveys and the emerging literature on this topic.

4. Knowledge and Frequency of Use

4.1 Knowledge Self-Assessment

In assessing self-reported knowledge of generative AI across all groups, the majority categorize themselves as either beginners or advanced users. Notably, 9.2% of the students and staff at the University of Tübingen reported having no prior knowledge of generative AI, while a smaller segment (2.7%) iden-

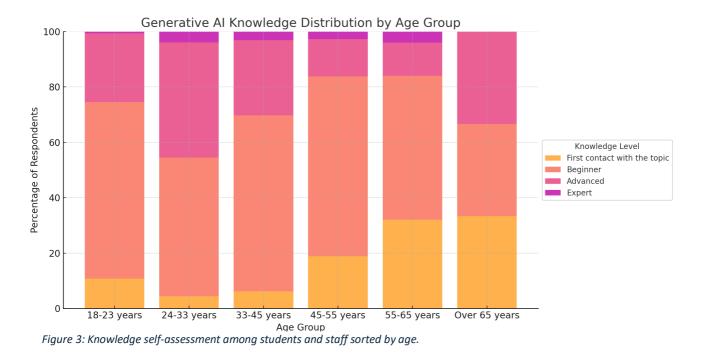
tified themselves as experts. No prior knowledge was defined as not having heard of generative AI prior to this survey. Analysis of prior knowledge across disciplinary groups revealed no significant differences, suggesting a uniform distribution of awareness and understanding of generative AI across the academic spectrum at the university.





4.2 Knowledge Self-Assessment and Age

In analyzing the interplay between prior knowledge of generative AI and age, the data indicates that the youngest demographic (18-20 years) exhibits a very high proportion of respondents without prior knowledge of generative AI in comparison to older age groups, such as their 21-23-year-old peers. This finding is particularly interesting given the presumption that the youngest age group, being more immersed in digital media, would possess greater familiarity with such technologies. This trend persists in the subsequent analysis concerning age and frequency of use, with the 18-20 years age group showing less frequent engagement compared to their slightly older counterparts. This could simply be due to our sample, but it is interesting that the youngest age-group reported not only a very low level of prior knowledge, but also, as the next section will show, very low usage frequencies. Additionally, a resurgence in the lack of prior knowledge is observed among individuals aged 46 and above. However, the limited number of responses from this older age group makes it challenging to formulate generalizable conclusions on this trend. The following chart compares age and prior knowledge. It displays both academic and non-academic participants of our survey, however, for the sake of clarity, the chart combined some of the age categories into larger groups.



4.3 Frequency of Use

4.3.1 Frequency of Use and Disciplines

In regard to usage patterns, we found that 48.6% of students and staff engage with generative AI on a regular basis, defined as at least once a week. Among these users, more than 20% utilize it several times a week, while 13.8% use it daily or even multiple times a day. In contrast, more than half of the survey participants do not use generative AI regularly, with 13.8% having only tried it once, a few times, or not at all. It should be noted that respondents who reported no prior knowledge of generative AI were not shown the question about their frequency of usage. This means that all respondents in this category, including the 5% who mentioned they have never used it, still have some awareness of the technology.

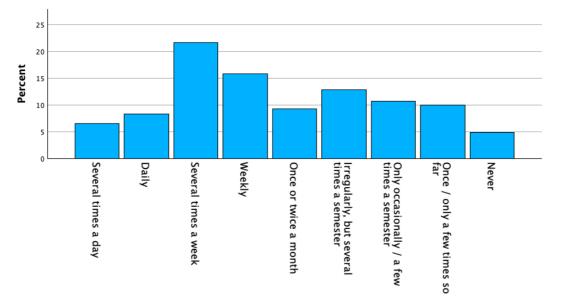


Figure 4: Frequency of use among students and researchers (excluding administration)

When examining usage frequency across different disciplinary groups, the pattern shows slight variations. In the fields of natural sciences, mathematics, medicine, and computer science, the proportion of individuals who use generative AI daily or several times a week is slightly higher compared to the overall university population. However, the percentage of those who use it weekly is somewhat lower than the general average, suggesting minimal disparities between the natural sciences, mathematics, medicine and computer science and the broader university community. In the social sciences and humanities, there is a slightly higher frequency of individuals using generative AI several times a day, along with a slightly increased percentage of those who have never used it. This indicates slight differences in engagement with generative AI across academic disciplines, without significant deviation from the overall usage patterns observed at the university.

If we look at the direct comparison between the natural sciences, mathematics, medicine and computer science versus the social sciences and humanities, it is interesting to see that on both extremes (several times a day; never), people from the social sciences and humanities show higher proportions.

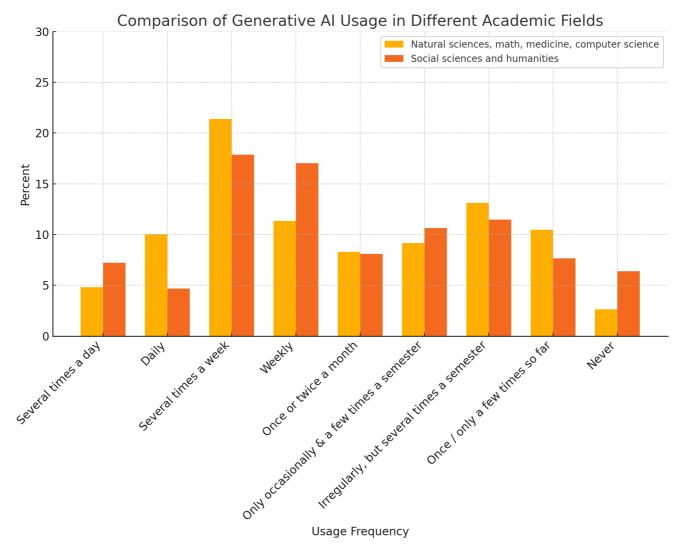


Figure 5: Comparison of generative AI usage across different academic fields.

4.3.2 Frequency of Use and Age

Analyzing the relationship between age and generative AI usage reveals that individuals aged 30-32 years engage with these technologies most regularly, followed by the 24-26 years age group. In contrast, those within the 56-60 and the 46-50 years age groups demonstrate the lowest regular usage, with the 18-20 age group also showing lesser engagement. We can also observe that usage increases from the age of 18 until 32 years, before it generally declines afterwards, with some exceptions. Those findings also resonate with the earlier finding that the 18-20 years age group has a high level of unfamiliarity with generative AI. Specifically, among those in the 18-20 years age group aware of generative AI, only 24.1% use it regularly, a rate significantly lower than the 48.5% observed in the 21-23 years age group. For the sake of clarity, the following chart combined some of the age categories to form larger groups.

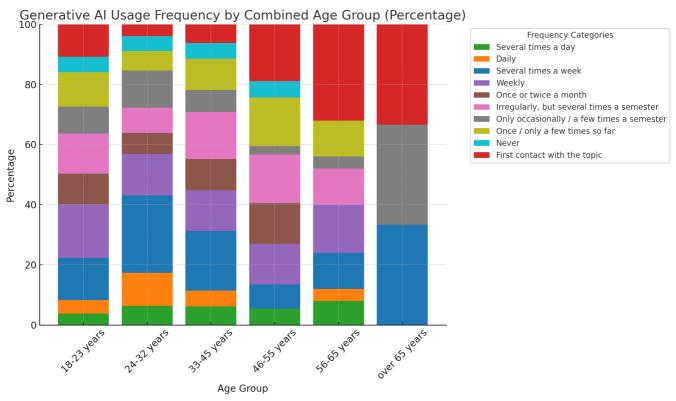


Figure 6: Frequency of generative AI usage sorted by age groups.

5. Trust

5.1 How Much Do Participants Trust the Responses of Generative AI?

In our survey, we explored participants' trust in Al-generated content by asking them to rate their trust in generative AI on a scale from 1 (very low trust) to 7 (very high trust), while also asking them to provide reasons for their rating. It should be noted that the survey did not specify a particular definition of trust. A clearer understanding of what respondents mean by trust will be the subject of further qualitative inquiry in the project. The question we asked was phrased very broadly: "How much do you trust the output of generative AI tools? (Scale from 1-7)". The findings reveal a central tendency in the responses, with the most common rating being 4 and the mean being 3.6, indicating a level of uncertainty or neutrality among respondents regarding their trust in generative AI.

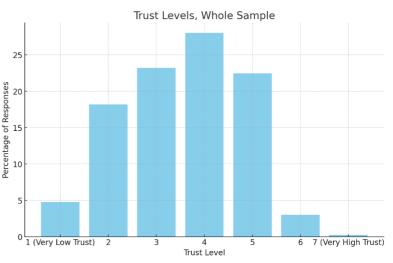
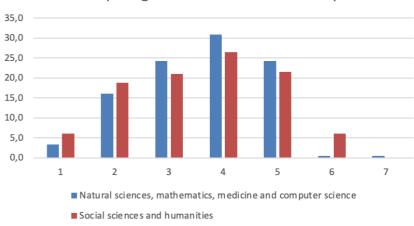


Figure 8: Trust levels regarding genAI across entire sample (1 very low - 7 very high).





When comparing trust levels in Al- Figure 7: Comparison of trust levels across different academic fields.

generated content between the natural

sciences, mathematics, medicine and computer science versus the social sciences and humanities, the results are quite consistent. The average trust level is slightly higher in the former group, but the difference is minimal, suggesting a similar degree of trust across these disciplines. What is interesting is that the proportion of respondents expressing very high trust (ratings of 6 and 7) in generative AI is lower in these fields compared to the overall student and staff group, indicating that while there might be a slightly greater inclination towards trust within the natural sciences, mathematics, medicine and computer science, extreme confidence (ratings of 6 and 7) in the technology was, however, lower.

Within the social sciences and humanities, the data indicates a somewhat higher occurrence of high trust (rated as 6) compared to the natural sciences, matheamtics, medicine and compute science,

alongside a greater proportion of respondents exhibiting very low trust. This pattern might suggest that natural scientists possess a more nuanced understanding of the technology and its limitations, leading to more moderate trust levels. However, this assumption is challenged in the subsequent section, which examines the correlation between prior knowledge and trust. Here, the trend indicates that increased familiarity with generative AI correlates with higher trust scores. Despite these findings, the overall comparison reveals minor differences between the disciplinary groups, suggesting that the level of trust in generative AI is relatively consistent across academic fields

5.2 Comparing Trust and Prior Knowledge

We hypothesized that individuals with greater knowledge of generative AI might exhibit lower trust levels, presumably due to the awareness of the technology's limitations. Conversely, one could also assume the opposite, since individuals with greater knowledge might be more aware of its capabilities.

However, the data does not support this hypothesis. In examining the relationship between prior knowledge of generative AI and trust, the trend suggests the opposite: a mild yet visible correlation exists where increased knowledge correlates with higher trust in generative AI. Although this trend is not pronounced, it indicates that familiarity with the technology tends to enhance trust.

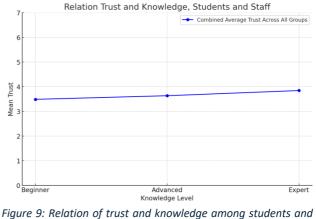


Figure 9: Relation of trust and knowledge among students and staff

When conducting the same analysis within the different disciplinary orientations, similar outcomes emerge, showing a slight increase in trust in generative AI with rising levels of (self-reported) knowledge. Interestingly, within the group of the natural sciences, mathematics, medicine and computer science, the trust scores of advanced individuals and experts are comparable. However, in the social sciences and humanities subgroup, those who classified themselves as experts exhibit significantly higher trust scores. Although the variances are modest, a discernible trend is apparent, associating increased knowledge with heightened trust. This suggests that particularly in the social sciences and humanities deeper expertise in generative AI correlates with greater trust in the technology.

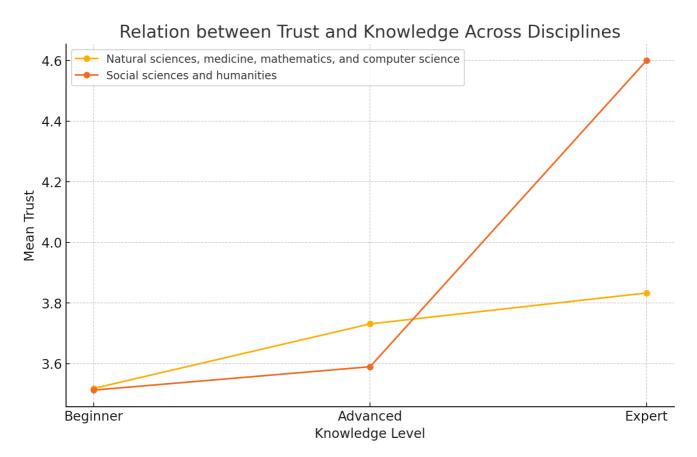
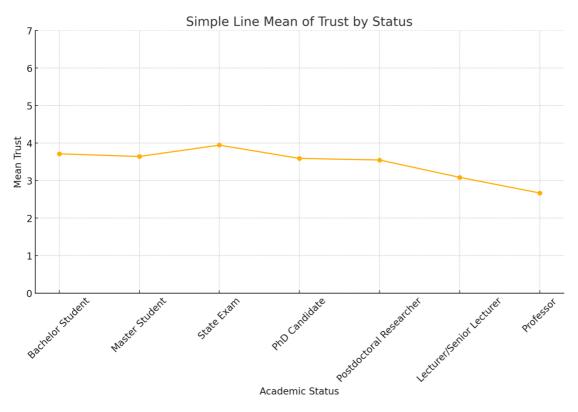


Figure 10: Relation of trust and knowledge across different academic fields.

5.3 Comparing Trust and Academic Status

Examining the influence of academic position and educational level on trust in generative AI reveals another pattern: trust decreases as one ascends the academic hierarchy. The decline in trust is gradual from bachelor students to postdoctoral researchers, but it becomes more pronounced among lecturers, senior lecturers, and professors. This trend could suggest that more established and senior researchers, having developed and relied upon their own epistemic practices, may exhibit greater scepticism towards generative AI. These individuals might have a solid foundation in their methodologies and therefore view new technologies like generative AI with caution, especially if these technologies challenge their conventional ways of working. Another interpretation could be that senior academics might perceive generative AI as a potential threat to the traditional roles and practices in academia. With more at stake in terms of career and reputation, they could view the rise of AI as a disruptive element, capable of transforming the academic research landscape.





When seperating between disciplinary cultures, we can, however, identify a difference between the social sciences and humanities, as compared to the natural sciences, mathematics, medicine and computer science.

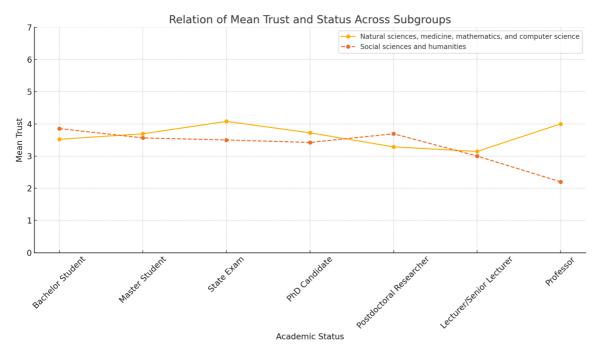


Figure 12: Relation of trust and academic status across different academic fields.

Overall, the general trust level among students and staff from the social sciences and humanitites is higher compared to the general academic population. When looking at the specifics of the respondents from the natural sciences, mathematics, medicine and computer science, the relationship between trust and academic position turns out to be quite distinct from both the overall results, as well as the from the social sciences and humanities group.

Although the diagram above appears distinct, the main difference in this subgroup is that trust increases again at the level of professors. While this seems interesting, we do not aim to overinterpret this finding, since the number of respondents at the level of professors was much lower compared to most other academic levels. Particularly, two professors of the natural sciences, mathematics, medicine and computer science reported a very high trust in generative AI which, of course, has a significant effect on the overall outcome.

5.4 Comparing Trust and Frequency of Use

The analysis of trust in correlation to the frequency of generative AI usage reveals another interesting insight: there appears to be a positive correlation between how frequently individuals use generative AI and how much they trust its outcomes. The intuitive conclusion here is that those who display higher trust in generative AI are likely to use it more frequently. However, it could also be that increased usage of generative AI leads to higher trust and not the other way around.

While our current survey data does not allow us to definitively answer this question, the qualitative responses explaining why participants assigned certain trust scores provide some potential insights. High trust scores were often rationalized by the respondents' selective use of specific generative AI tools they particularly trust for specific tasks only. For example, some respondents expressed strong trust in translation tools while remaining

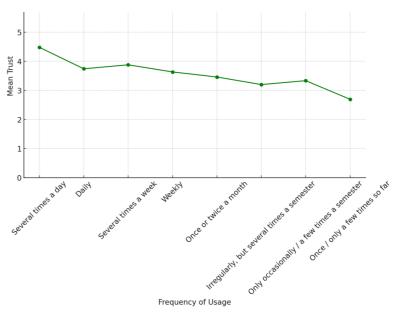
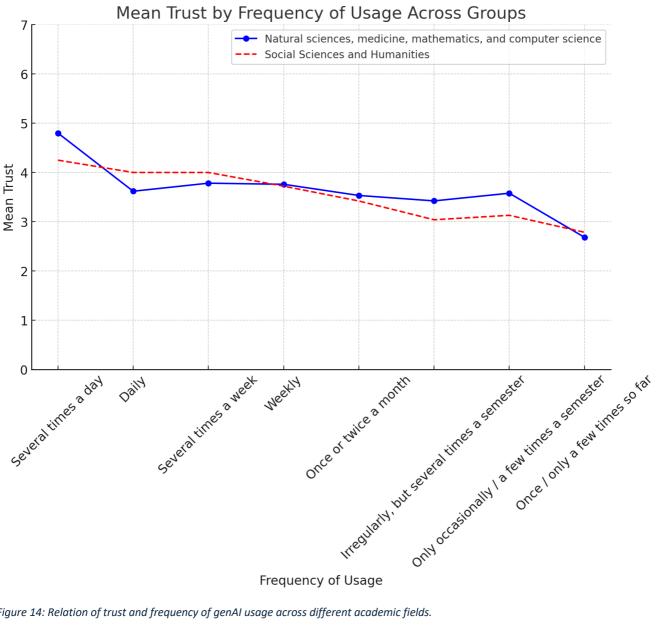


Figure 13: Relation of trust and frequency of genAl usage.

skeptical of chatbots which they use less frequently. This finding suggests that trust in generative AI is not uniform across different applications and that individual experiences and perceptions significantly shape trust levels.



Frequency of Usage

Figure 14: Relation of trust and frequency of genAl usage across different academic fields.

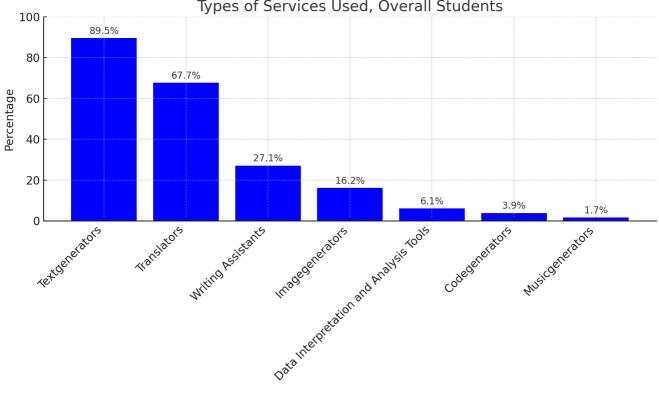
When examining the differences between the natural sciences, mathematics, medicine and computer science and the social sciences and humanities, a comparable trend can be observed. In the natural sciences, mathematics, medicine and computer science, there is a strong correlation between very high trust and very high usage, particularly among those who use generative AI several times a day. Frequent engagement with the technology seems to be closely linked to higher trust levels. Conversely, the trend in the social sciences and humanities shows a more gradual increase in trust as usage frequency rises.

6. Tasks for which Students and Staff Use Generative AI

6.1 **Kinds of Services used**

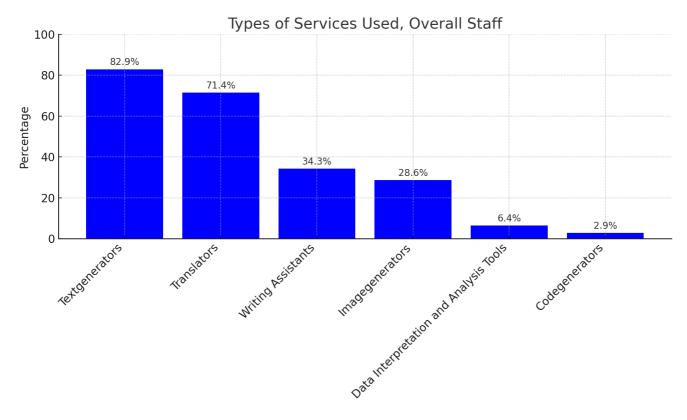
In examining generative AI systems used across various fields and considering different educational backgrounds and academic statuses, text generators and translation tools were found to be the most frequently used by both students and staff. Writing assistants and image generators were also used frequently, with staff using both more than students. Music generators were only (rarely) mentioned by students but not by staff. Furthermore, when comparing the usage of these services between students and staff within their respective disciplinary orientations, no significant differences were observed, suggesting that the preference for certain types of generative AI systems, specifically text generators and translation tools, is consistent across all educational roles and disciplines.

Among the student population, a majority of 89.5% reported using text generators (such as ChatGPT), with translation tools (such as DeepL) being used by 67.7% of the respondents, and 27.1% utilizing writing assistants (such as Grammarly). The prevalent use of text generators might be due to their flexibility, as they can carry out multiple tasks, including translation or writing assistance and have a very intuitive form of use. The subsequent analysis of activities reinforces this point, as it shows translation to be among the most commonly used application for generative AI by both students and staff.



Types of Services Used, Overall Students

Among university staff, the distribution of generative AI tool usage exhibits a pattern similar to that of students, albeit with some variations. Text generators were used by 82.2% of staff members, which is slightly less compared to the student population. The use of translation tools was with 71.4% similar to the student usage rate.



As tools like text generators can be used for a variety of tasks, it is useful to examine the specific tasks and practices for which students and staff use generative AI. This will be explored in the following sections.

6.2 Distribution of Specific Tasks

To understand the specific tasks for which students and staff utilize generative AI, this section will examine participants' responses across different educational levels and university statuses, as well as between various disciplinary backgrounds. Respondents were first asked to identify the tasks for which they use generative AI (multiple choice), followed by a question asking them to specify the tasks for which generative AI has become an essential component where the survey displayed the chosen tasks again, so that respondents could select the relevant ones.

In a first round, participants were asked the following:

 "For what tasks have you used generative AI in your studies⁵? (Please tick the tasks for which you have already used generative AI. Think of the last and current semester when answering this question)".

After participants chose the tasks they already used generative AI for, they were displayed the chosen tasks again and asked the following:

 "For which of the tasks you mentioned has generative AI become an essential component of your studies⁶?"

In the following, this report will thus present the tasks for which students and staff use generative AI for, alongside the proportions of how many people mentioned those tasks.

6.2.1 What Do Students Use Generative AI for?

In regard to the overall student population at the University of Tübingen, we can see that more than half of the respondents use generative AI to explain concepts/terms or theories, followed by a bit less than half of the respondents who use generative AI to translate their own texts. A significant number of respondents also use it to improve grammar and style, develop or structure proposals, research general information, create summaries, or for programming. Looking at the tasks on the right of the chart, we can see that activities such as managing daily university life, analyzing data (e.g. with MAXQDA), developing practice exercises for exams, transcribing data or creating images are less popular and were mentioned by less than 10% of the respondents.

⁵ Members of staff were asked: "For what tasks have you used generative AI in research and teaching".

⁶ Members of staff were asked: "For which of the tasks you mentioned has generative AI become an essential component in your academic routine"

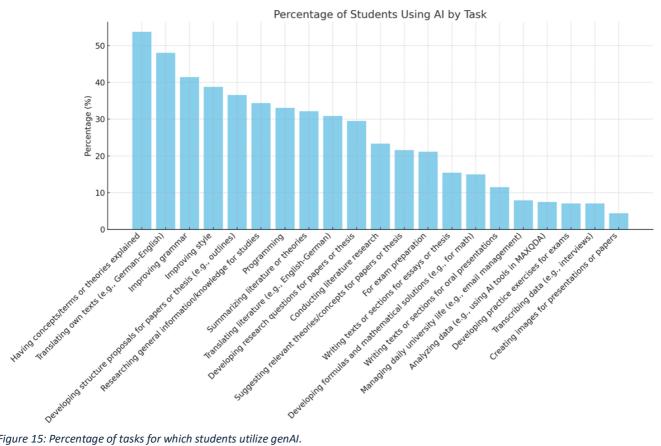


Figure 15: Percentage of tasks for which students utilize genAl.

When examining what tasks students use generative AI for, some similarities and differences emerge between the disciplines. For students in the natural sciences, mathematics, medicine and computer science, programming emerges as the primary application area of generative AI, with explaining concepts/terms, translating texts, and improving style also ranking high. Conversely, students in the social sciences and humanities rather use generative AI to get explanations for concepts or theories, with programming being ranked much lower among their tasks. Additionally, there is a slight difference in the focus on language improvement among these groups. Students in natural sciences, mathematics, medicine and computer science are more inclined to use generative AI for improving their writing style, while their counterparts in the social sciences and humanities are more likely to use these tools for improving grammar.

Another interesting difference can be found in the category "conducting literature research". With the percentage of students in the social sciences and humanities using generative AI for literature research being more than twice as high as the percentage of students in the natural sciences, mathematics, medicine and computer science, we could identify this as a task that seems to be particularly relevant for students from this group. It might also mean that students from the natural sciences, mathematics, medicine and computer science do not trust AI to perform well in this task.

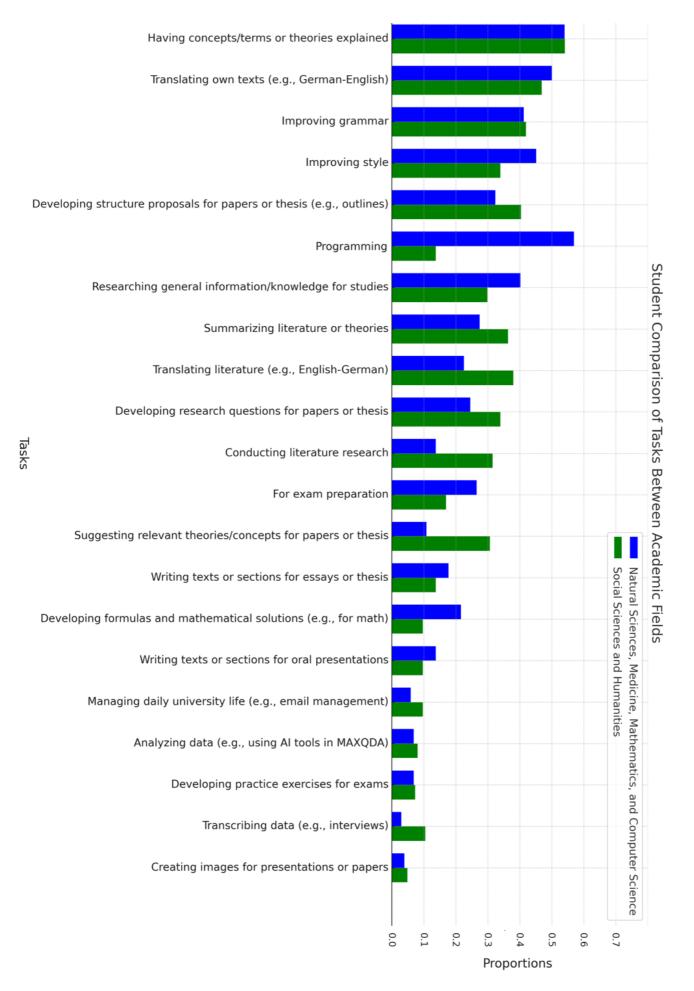


Figure 16: Percentage of tasks for which students utilize genAI across different academic fields.

If we turn to how members of staff use generative AI, we can identify some similarities and differences between their disciplinary orientations. Staff members from both disciplinary orientations use generative AI in similar ways, with the top tasks consistently being translating their own texts, improving writing style and grammar, researching general information or knowledge, and explaining concepts or terms. This does not differ from the usage patterns among students, suggesting a common set of priorities and needs among staff and students in their interaction with generative AI tools.

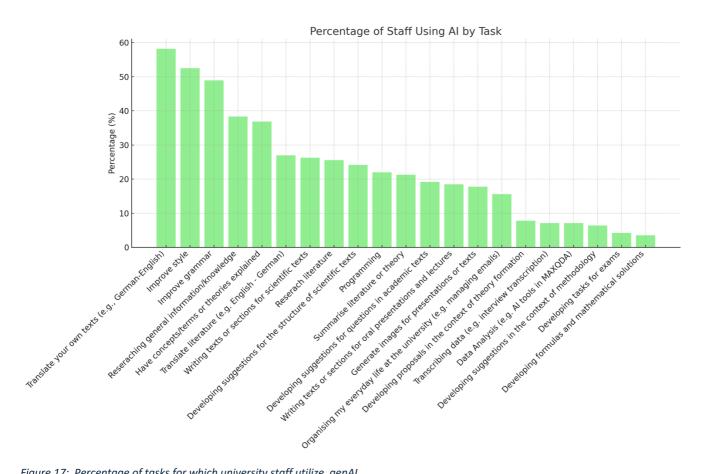


Figure 17: Percentage of tasks for which university staff utilize genAI.

Staff in the social sciences and humanities show a strong similarity to their counterparts in the natural sciences, mathematics, medicine and computer science regarding the tasks for which they use generative AI, with the first five being the same. But we can also identify some interesting differences: When comparing both disciplinary orientations, we observe a much higher proportion of members of staff from the social sciences and humanities using generative AI to translate both literature and their own texts.

Meanwhile, for staff in the natural sciences, mathematics, medicine and computer science, a key observation is their lower use of generative AI for programming compared to students from the same disciplinary background: While approximately 60% of students engage with generative AI for this purpose, only about 20% of staff members reported doing the same.

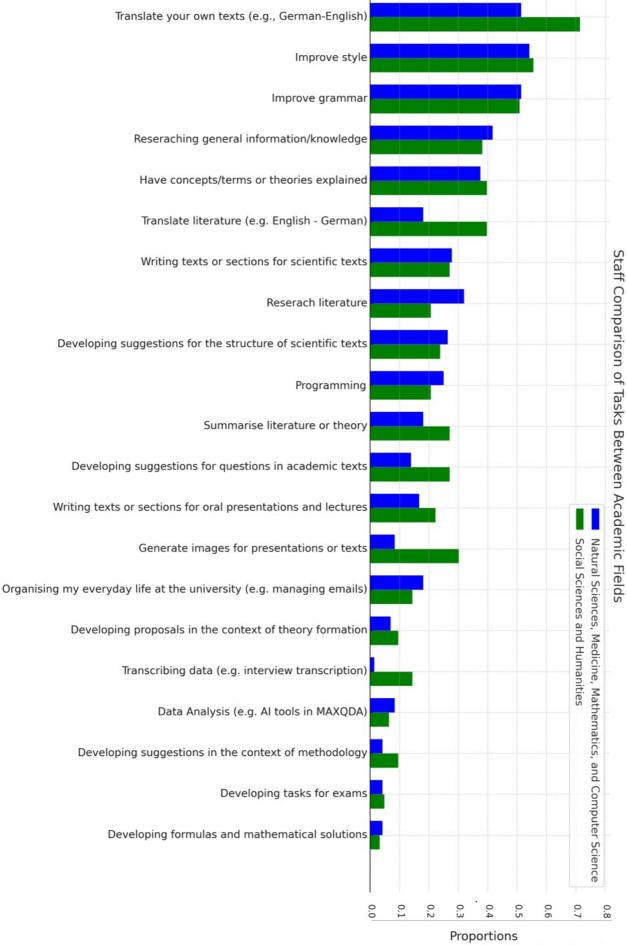


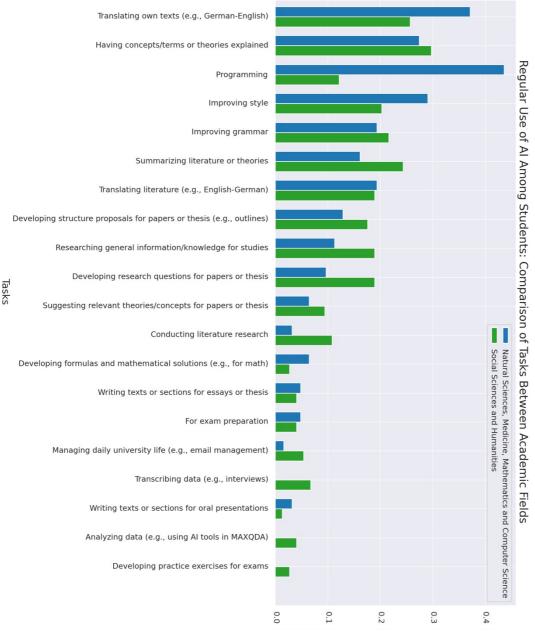
Figure 18: Percentage of tasks for which university staff utilize genAl across different academic fields.

6.3 For What Tasks Has Generative AI Become Essential?

After respondents selected the tasks for which they have used generative AI, our survey displayed their selected responses again and asked them to indicate which of these tasks generative AI have become essential in their university life, aiming to explore the specific areas where generative AI has become a routine part of the academic process for students and staff. The charts below show what proportion of respondents to the first question also chose the task for the second question.

6.3.1 Students

Taking a look at the student population, we can see that most of the top tasks chosen among students were deemed essential in their university life.



Proportions

Figure 19: Percentage of tasks for which students regularly utilize genAl across different academic fields.

While the two highest ranking tasks in the general category for students were explaining concepts/terms or theories and translating their own texts, their order appears to be reversed (this, however, without significant differences). When examining the frequency of usage, we can see that around one third of those who use generative AI for translations of their own texts reported doing so regularly. For this task, however, we can see a difference among disciplines, suggesting that students from the natural sciences, mathematics, medicine and computer science incorporate translation tasks more regularly into their practices. A similar percentage of students also stated that having concepts and theories explained to them has become an essential application of generative AI for them. In this case, however, students from the social sciences and humanities displayed slightly higher proportions. Improving style and grammar as well as summarizing and translating literature were also mentioned quite frequently as routine practices by students from both disciplinary orientations.

6.3.2 Staff

If we look at usage patterns among members of staff, we can see that they mirror the most important findings of the previous section. Thus, for members of staff, translation of their own texts, improving style and grammar were evidently also the tasks for which generative AI has become most essential. Some interesting differences, however, emerge when it comes to translating literature, where staff from the social sciences and humanities staff reported usage around twice as high as that of their colleagues from the natural sciences, mathematics, medicine and computer science. Conversely, researching literature was mentioned much more often among members of the latter disciplines. An interesting finding, however, is that programming was mentioned more frequently among the social sciences and humanities staff. This could suggest that scholars in these fields may have less programming experience and thus rely more on generative AI tools for such tasks in comparison to staff in disciplinary fields where programming is a fundamental part of academic education. It is important to note that the difference is very small, which makes such interpretations difficult.

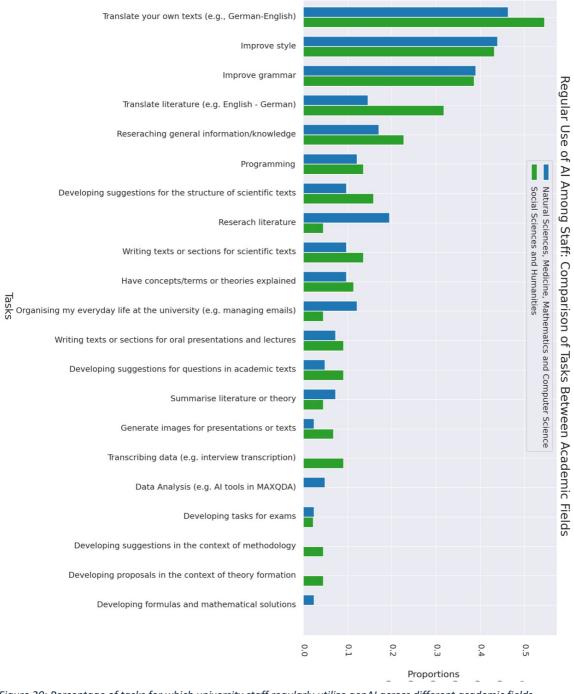


Figure 20: Percentage of tasks for which university staff regularly utilize genAl across different academic fields.

6.4 Systematizing Practices

6.4.1 Overview

In order to structure the tasks generative AI is used for most often in a systematic way, we suggest organizing them into eight bundles of epistemic practices. To do so, we combined all tasks people could choose in the survey into categories:

1. Exploring Knowledge and Working with Academic Literature

Having concepts/terms or theories explained; summarizing literature or theories; conducting literature research; research; ing general information; translating literature (in order to read it)

2. Developing Ideas and Approaches for Research and Writing

Developing research questions for papers, theses or academic texts; developing structure suggestions for papers, theses, or (scientific texts); suggesting relevant theories/concepts for papers, theses or research articles

3. Writing Text

Writing texts or sections for essays, theses, research articles; writing texts or sections for oral presentations and lectures

4. Transforming Existing Text

Translating own texts (e.g. German to English); improving grammar; improving style

5. Working with and Analyzing Qualitative Data

Transcribing data (e.g. interviews); analyzing data (e.g. using AI tools in MAXQDA)

6. Exam Preparation and Self-Management

For exam preparation; developing practice exercises for exams; managing daily university life (e.g. e-mail management)

7. Programming and Mathematical Tasks

Programming; developing formulas and mathematical solutions (e.g. for mathematics)

8. Other

Creating images for presentations or papers

In order to compare how common each of these bundles of practices is, we counted how often at least one task from within these bundles was mentioned. Displayed in a bar chart, we can see a clear typology of practices, with exploring knowledge and working with academic literature being the most frequently used ones, followed by transforming existing text and developing ideas and approaches for research and writing. The comparison of epistemic practices with trust in generative AI did not show any significant relations. Trust in generative AI therefore seems to be relatively equally distributed among the various practices.

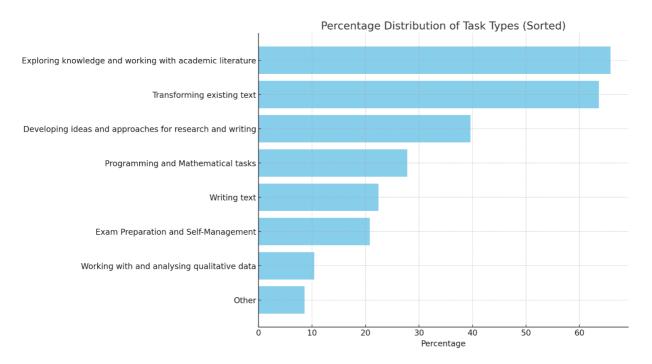


Figure 21: Distribution of task types across entire sample.

6.4.2 Natural Sciences, Mathematics, Medicine, and Computer Science

When comparing the results across disciplines, we were able to identify some differences. While transforming existing text was overall ranked second, it was the most common epistemic practice in the natural sciences, mathematics, medicine and computer science. Additionally, the practices of programming and solving mathematical problems were used slightly more in this group in comparison to the general university population which is in accordance with our previous results.

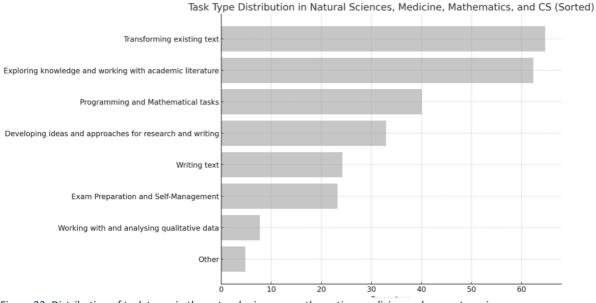


Figure 22: Distribution of task types in the natural sciences, mathematics, medicine and computer science.

6.4.3 Social Sciences and Humanities

Similarly, we can see some small variations when examining the survey results from the social sciences and humanities. Within this group, exploring knowledge and working with academic literature was the most mentioned epistemic practice, with 69.6% of respondents indicating this. One of the less common but still interesting categories was working with qualitative data analysis and transcription tools. The numbers for this practice were quite low, partly because not all respondents were qualitative social science researchers. While our survey did not distinguish between qualitative and quantitative social scientists, the data still indicates that the use of generative AI in qualitative data analysis and transcription tools.



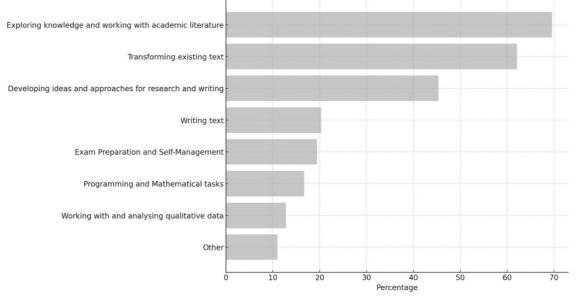


Figure 23: Distribution of task types in the social sciences and humanities.

6.5 Do Students Let Generative AI Write Their Assignments?

Surprisingly, the practices associated with the actual writing of academic texts were rarely mentioned by students and staff. This is particularly interesting because much of the current debate on how AI is changing universities has focused on the possibility of students or researchers using generative AI to write their assignments or articles. It is, of course, possible that our respondents did not feel that they could openly share their use of such practices in our survey despite the anonymous participation. However, based on our survey data only around 15-20% of the undergraduate and graduate students from the social sciences and humanities and 20-25% from the natural sciences, mathematics, medicine and computer science reported that they use generative AI for writing text. PhD candidates and postdoctoral researchers are among the ones that use it most. The task – which we in this essay coined as "writing text" – was termed "Writing texts or sections for essays or thesis / Writing texts or sections for scientific texts" in the survey and refers to the generation of new text through generative AI.

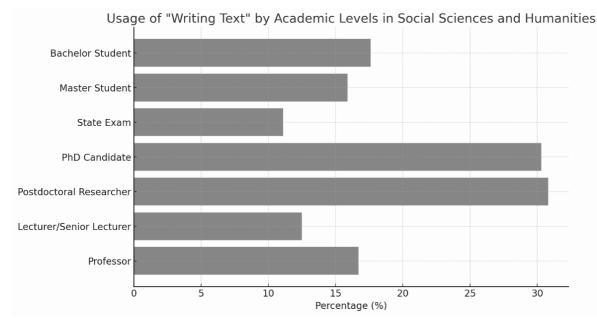


Figure 24: Distribution of the task "writing text" across different academic levels in the social sciences and humanities.

Overall, the data suggests that there is no great difference between students and staff across all disciplines, with the exception that students from the natural sciences, mathematics, medicine and computer science studying for a state exam use generative AI for writing text more often than any other group. Interestingly, said students are all studying medicine.

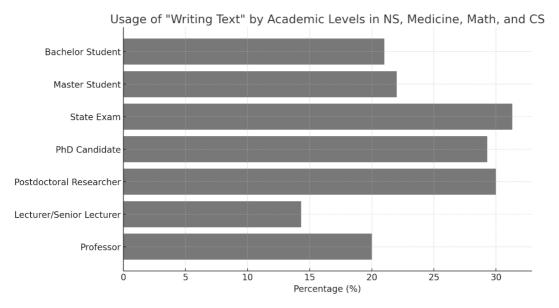


Figure 25: Distribution of the task "writing text" across different academic levels in the natural sciences, mathematics, medicine and computer science.

This becomes even more intriguing when analyzing how many students and staff mentioned that generative AI has become an essential element for writing text. The data suggests that only around 4.1% of the students who use generative AI for writing text mentioned that it has become essential to them, as compared to around 13.3% of the university's members of staff. These numbers suggest that students do not have generative AI write their essays, but rather use generative AI to transform text they have already written.

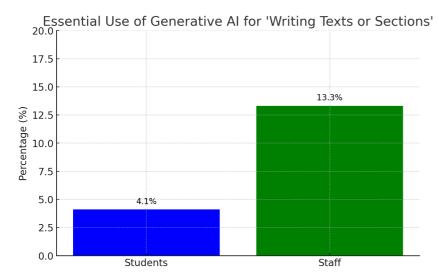


Figure 26: Percentage of students and staff for whom the usage of genAI has become essential for "writing texts or sections".

The Case of Programming 6.6

The use of generative AI for programming⁷ in research contexts shows an interesting pattern: It is extensively utilized by students in natural sciences, mathematics, medicine and computer science, yet not so much by faculty in these fields. The analysis of generative AI usage for programming across educational levels reveals a trend where usage increases from undergraduate to doctoral students, then sharply declines from the doctoral to the postdoctoral stage. Lecturers, senior lecturers, and professors report similarly low usage rates.

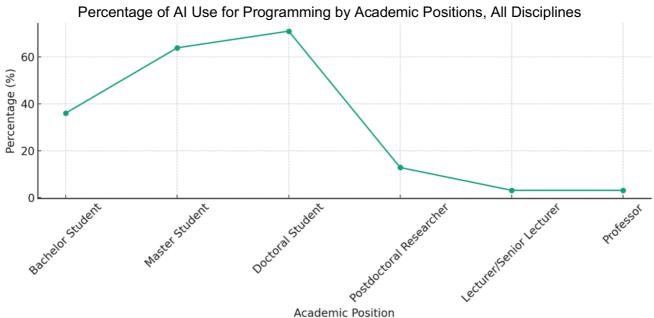


Figure 27: Percentage of AI usage for programming sorted by academic positions across all disciplines.

⁷ In our survey, we also listed "coding" as a task (meaning the act of analyzing data through the practice of assigning codes). However, we removed this practice from our analysis, as we assume that it has oftentimes been conflated with "programming" in the data. The analysis, therefore, only includes responses regarding the practice of "programming".

Breaking down the data between natural sciences, mathematics, medicine and computer science versus the social sciences and humanities, we can see a significant decrease in programming usage occurring in the transition from doctoral to postdoctoral researchers. Collectively, the usage rate ascends from around 63.9% to 71% from graduate to doctoral levels across both groups, then sharply falls to 12.9% for postdoctoral researchers. Among the natural sciences, mathematics, medicine and computer science, 65.5% of graduate students use generative AI for programming, rising to 77.8% among doctoral students.

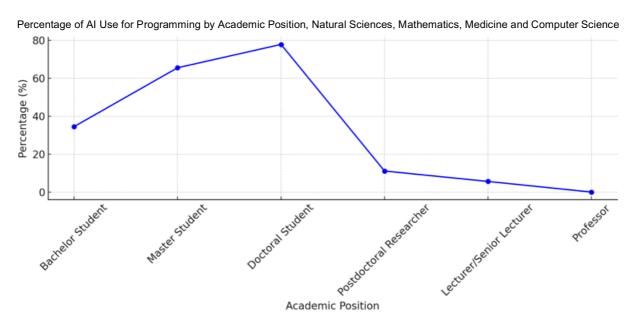


Figure 29: Percentage of AI usage for programming sorted by academic positions in the natural sciences, mathematics, medicine and computer science.

Among respondents in the social sciences and humanities, usage rises from just under 58.8% at the graduate level to 61.5% for doctoral students. Moreover, staff in the social sciences and humanities were more likely to see it as an essential practice compared to their counterparts.

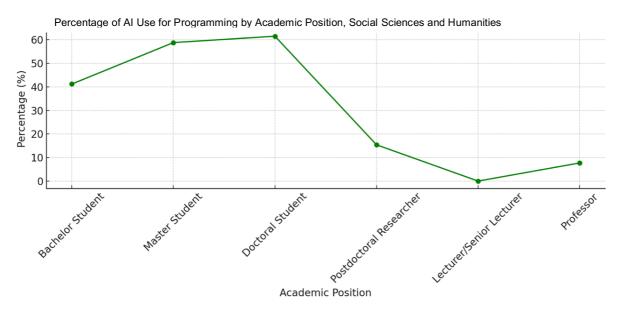


Figure 289: Percentage of AI usage for programming sorted by academic positions in the social sciences and humanities.

The sharp decrease in the usage of generative AI for programming among postdoctoral researchers, lecturers, senior lecturers, and professors which we can see among both disciplinary groups remains unexplained by the survey data, especially since we do not know the base rate of how much students and staff actually program as part of their academic practice. It is conceivable that the nature of the roles and responsibilities at more advanced career stages may contribute to this trend, i.e. individuals at higher academic levels tend to program less. Additionally, it could be that students and doctoral researchers are more likely to embrace new technologies, including generative AI for programming, compared to their more senior counterparts who might favor established methods. Additionally, the nature of the roles and responsibilities at more advanced career stages could contribute to this trend.

When comparing usage with age, rather than academic position/status, we can, however, identify a pattern quite similar to the previous one. What we can see is that usage increases for participants aged between 18 and 26 and then strongly decreases again. It is thus not clearly visible in the data whether the decline in AI usage for programming tasks depends on age,

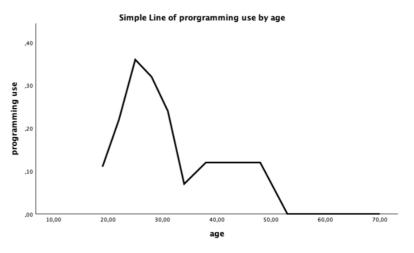


Figure 30: Usage of genAl for programming in relation to trust.

academic position or other factors. However, as mentioned, since we do not have information on the general load of programming tasks, it might also be possible that the use of generative AI for programming simply correlates with the absolute number of programming tasks among students and staff. It is, however, important to note that this differences in usage nevertheless might imply a gap in knowledge on using generative AI for programming between students and staff, opening the question as to whether staff are able to support students with generative AI tools.

7. Administration

Although it was not our main focus in this study, we had a significant number of respondents (10% of survey participants) from the university administration, which we will briefly analyze in this final section. When examining how frequently administrative staff use generative AI, we can identify patterns similar to those of students and academic staff.

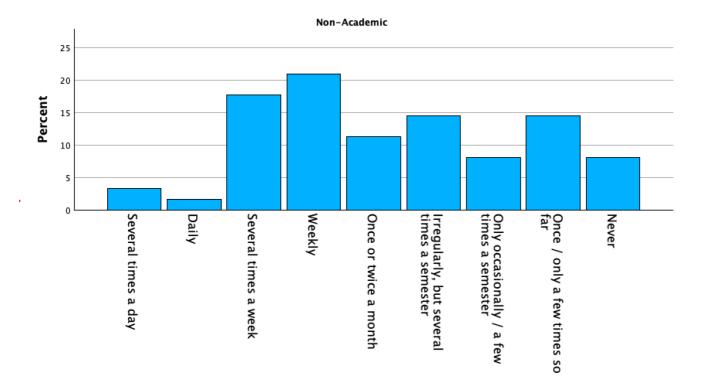


Figure 31: Frequency of genAI use within administration.

In regard to the level of trust among university administration towards generative AI, we were also able to identify patterns similar to students and academic staff. However, the mean trust score for

members of the administration lies at 3.34% and is thus slightly lower than that of students and academic staff (3.6%).

When analyzing the practices for which members of the university administration use generative AI, some distinct characteristics emerge. Nearly 90% of the respondents in administration stated that they use gen-

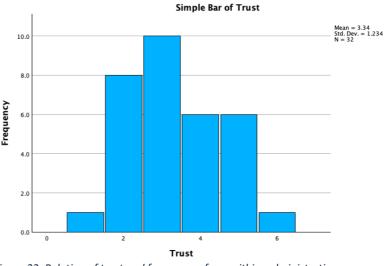


Figure 32: Relation of trust and frequency of use within administration.

erative AI for transforming existing text, indicating that this is a central practice for which generative AI is used among administration staff.

Distribution of Practices in Administrative Activities (Ordered)

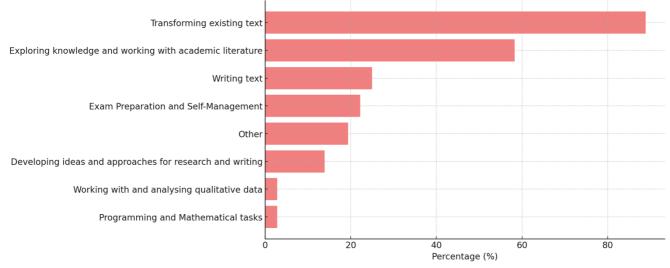


Figure 33: Distribution of practices within administration.

What particularly stood out is that the category "other" was mentioned quite frequently by this group of respondents, suggesting that they use generative AI for tasks quite different to those of students and academic staff. For example, some of the tasks mentioned in the open field were:

- Creating proposals for non-scientific texts.
- Generating initial ideas.
- Writing statements.
- Spell-checking.
- Writing letters of recommendation for students.

Especially the last task, "Writing letters of recommendation for students" can be interpreted as a task that might also be relevant epistemic practices, in that it might influence study and career paths.

8. Concluding Remarks and Future Research

The aim of this survey was to gain a general overview of how generative AI is used by students and staff at the University of Tübingen. The survey provided us with insights into usage patterns, perceptions and understandings and can therefore serve as an empirical starting point for further research. The survey was also used to recruit participants for subsequent ethnographic/qualitative interviews and focus groups, as participants could indicate whether they were willing to be interviewed about their use and perception of generative AI. As a next step, we are aiming to conduct a total number of 20 interviews with members of staff and at least 5 group interviews with students, each consisting of 3-5 students, from July to November 2024. The interviewees will represent different disciplines within the qualitative social sciences and humanities. Additionally, they will help us to further map out and explore the use of generative AI within the social sciences and humanities as well as enable us to substantiate or revise the interpretations provided in this report. Lastly, we will ask students and academic staff to conduct digital media diaries in which they will document and reflect upon their use of generative AI, providing us with a closer insight into the everyday practices and situations in which generative AI is used by students and staff at the University of Tübingen.

9. Appendix

Invitation email

* Die Universitätsleitung hat dem Versand dieser Rundmail zugestimmt. *

Sehr geehrte Studierende und Mitarbeitende der Universität Tübingen,

bestimmt haben Sie schon einmal mit generativer künstlicher Intelligenz (KI) gearbeitet oder zumindest davon gehört!

Im Zuge eines Forschungsprojekts am Ludwig-Uhland-Institut für Empirische Kulturwissenschaft möchten wir mehr darüber erfahren, ob und wie Sie als Teil unserer Universitätsgemeinschaft solche Technologien einsetzen und bewerten.

Zu diesem Zweck führen wir eine Umfrage durch und würden uns sehr über Ihre Teilnahme freuen.

Die Umfrage umfasst verschiedene Fragen zum Einsatz generativer KI in Ihrem Alltag an der Universität und nimmt etwa 10 Minuten Ihrer Zeit in Anspruch.

Als kleines Dankeschön für Ihre Teilnahme an der Umfrage haben Sie die Chance, einen von 15 Büchergutscheinen im Wert von je 20€ zu gewinnen, die Sie bei lokalen und Online-Buchhändlern einlösen können.

Interessiert? Klicken Sie einfach auf den folgenden Link, um zur Umfrage zu gelangen: <u>https://www.soscisurvey.de/generativekituebingen/</u>

Diese Umfrage richtet sich auch an Personen, die bisher noch keine oder wenig Erfahrung mit generativer KI gemacht haben. Zudem wird es auch die Möglichkeit geben, sich für ein persönliches Interview bereitzuerklären. Die Informationen dazu finden Sie ebenfalls in der Umfrage.

Ihre persönlichen Daten werden anonymisiert bzw. pseudonymisiert behandelt, ausschließlich für Forschungszwecke genutzt und nicht an Dritte weitergegeben. Ihre Teilnahme ist vollkommen freiwillig.

Sollten Sie Fragen haben oder weitere Informationen wünschen, stehen wir Ihnen gerne per E-Mail zur Verfügung.

Vielen Dank im Voraus für Ihre Unterstützung!

Mit freundlichen Grüßen

Lukas Griessl Ludwig-Uhland-Institut für Empirische Kulturwissenschaft Universität Tübingen Burgsteige 11 72070 Tübingen

lukas.griessl@uni-tuebingen.de 070712978392

Dear students and staff of the University of Tübingen,

You have certainly already worked with generative artificial intelligence (AI) or at least heard of it! As part of a research project at the Ludwig Uhland Institute of Historical and Cultural Anthropology, we would like to find out more about if and how you, as part of our university community, use and evaluate such technologies.

For this purpose, we are conducting a survey and would greatly appreciate your participation. The survey includes various questions about the use of generative AI in your everyday life at the university and will take about 10 minutes of your time.

As a token of our appreciation for your participation in the survey, you will have the chance to win one of 15 book vouchers worth €20 each, which can be redeemed at local and online bookstores.

Interested? Please click on the following link to go to the survey: https://www.soscisurvey.de/generativekituebingen/

This survey is also aimed at people who have had little or no experience with generative AI. Additionally, there will also be an opportunity to volunteer for a personal interview. You will find information about this in the survey as well.

Your personal data will be treated anonymously or pseudonymously, used exclusively for research purposes, and not shared with third parties. Your participation is completely voluntary.

Should you have any questions or require further information, please feel free to contact us by email.

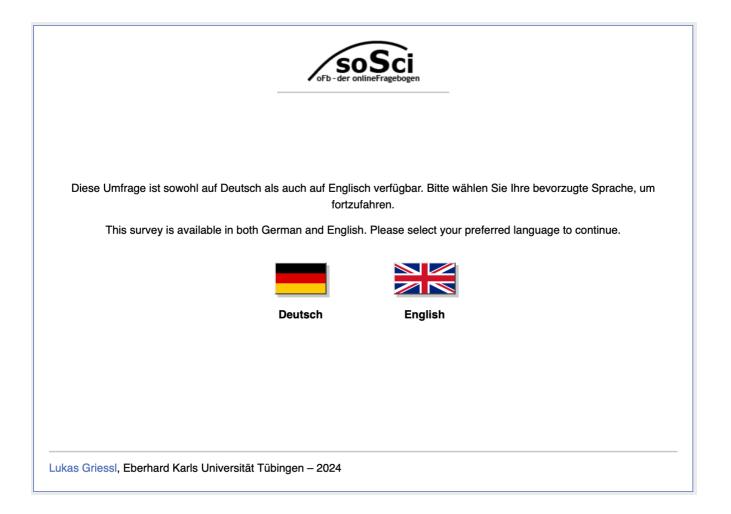
Thank you in advance for your support!

Kind regards

Lukas Griessl Ludwig-Uhland-Institute of Historical and Cultural Anthropology Universität Tübingen Burgsteige 11 72070 Tübingen

lukas.griessl@uni-tuebingen.de 070712978392

Questionnaire





Welcome to our survey on the use of generative artificial intelligence (AI) at the University of Tübingen.

Thank you very much for taking the time to complete our survey. Your contribution is very important for understanding the use of generative AI at our university.

The survey is part of the research project "Hybrid Epistemic Practices", which is being conducted at the Ludwig Uhland Institute for Historical and Cultural Anthropology (LUI).

Our aim is to gain detailed insights into the application of generative AI tools within our academic community through this survey. Completing the questionnaire is expected to take around **10 minutes** of your time.

Your data will be treated with the utmost confidentiality and used for scientific purposes only. Moreover, you have the option at any time to have your answers deleted using a code specified on the next page.

At the end of the survey, you will have the opportunity to indicate whether you would also like to participate in a **personal interview**.

As a thank you for your participation in this survey, we are offering you the chance to win one of **15 vouchers worth €20** each, redeemable at a local or online bookstore. The drawing of winners will take place at the beginning of May, and notification will be via email.

A majority of the prizes for this survey were kindly sponsored by the "Tübinger Vereinigung für Empirische Kulturwissenschaft e.V.".



Please click on "Next" to start the survey. We are grateful for every contribution and look forward to your valuable insights.

Thank you for your time, support, and commitment!



Next

Lukas Griessl, Eberhard Karls Universität Tübingen – 2024

oFb - der onlineFragebogen	
This survey is intended for students, staff and members of the University of Tübinge University of Tübingen, please select 'No'. This will close the survey.	en. If you have no connection to the
Do you belong to the University of Tübingen?	
⊖ Yes	
○ No	
Back	Next
Lukas Griessl, Eberhard Karls Universität Tübingen – 2024	6% completed



Before we start, we would like to ask you to create an individual code.

This serves two purposes:

- 1. **Data Deletion**: With your code, you can request the deletion of your survey responses. If you decide that you do not want your responses to be used, a simple email with your code to us is sufficient, and we will remove your record.
- 2. Interview Participation: If you agree to participate in an interview at the end of the survey, the code allows us to view your responses while maintaining your anonymity. Sharing your code is, of course, voluntary.

Code Creation:

- Take the third letter of your first name,
- the second letter of your birth month,
- the first digit of your house number and
- the fourth digit of your birth year.

Example:

- 1. First Name: Lukas
- 2. Birth Month: December
- 3. House Number: 35
- 4. Birth Year: 1992

Code: KE32

This process ensures that your privacy is protected, while simultaneously giving us the opportunity to use your responses for interview preparation.

Participating in an interview, as well as the willingness to share your code with us, is **completely voluntary** and has **no influence on your chances in the price draw**.

Please define your code here.	
Back	Next
Lukas Griessl, Eberhard Karls Universität Tübingen – 2024	11% completed



Firstly, we would like to ask you a few general questions about yourself and your role at the University of Tübingen.

How ol	d are y	you?

[Please choose] \$

What is your gender?	
○ female	
⊖ male	
⊖ diverse	
o prefer not to say	
What is your status at the University of Tübingen?	
O Bachelor student	
O Master student	
O PhD candidate	
O Postdoctoral researcher	
 Lecturer/Senior Lecturer (Akademische*r Rat/Rätin) 	
O Junior professor	
O Professor	
Other	
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Lukas Griessl, Eberhard Karls Universität Tübingen – 2024	20% completed

oFb - der ontineFragebogen	
In which faculty/department do you study/work?	
[Please choose]	
Please enter the department or institute where you are currently working.	
How long have you worked at or been involved with universities in total, incl This question refers to the duration of your employment at this or other universities	
O Less than 5 years	
○ 5–10 years	
○ 11–15 years	
○ 16–20 years	
21–25 years	
O 26–30 years	
O More than 30 years	
Back	Next
Lukas Griessl, Eberhard Karls Universität Tübingen – 2024	30% completed



We would now like to delve deeper into your experiences with generative AI in everyday academic life at the University of Tübingen.

Firstly, we are interested in how well you are already familiar with generative AI.

Generative AI refers to AI systems that can generate new content, such as text, images or music, based on the data with which they have been trained. Examples include text generators such as Chat-GPT, image generators such as DALL-E, assistance tools such as Grammarly or translators such as DeepL.

How well are you already fa	miliar with generative AI?		
0	0	0	0
Expert	Advanced	Beginner	Unknown – First contact with the topic
Back			Next
Lukas Griessl, Eberhard Karls Universität Tübingen – 2024			40% completed

oFb - der onlineFragebogen	
How often do you use generative AI tools? Please think of the last and current semester when answering this question.	
 Several times a day Daily Several times a week Weekly Once or twice a month Irregularly, but several times a semester Only occasionally / a few times a semester Once / only a few times so far Never 	
Back Lukas Griessl, Eberhard Karls Universität Tübingen – 2024	Next 45% completed

oFb-der onlineFragebogen			
'ha	at tasks have you used generative AI for in research and teaching?		
ea	ase tick the tasks for which you have already used generative AI.		
nir	nk of the last and current semester when answering this question.		
]	Writing texts or sections for scientific texts		
	Writing texts or sections for oral presentations and lectures		
	Developing suggestions for the structure of scientific texts		
	Developing suggestions for questions in academic texts		
	Developing proposals in the context of theory formation		
	Developing suggestions in the context of methodology		
	Improve grammar		
	Improve style		
	Translate your own texts (e.g. German-English)		
	Research literature		
	Translate literature (e.g. English-German)		
	Summarise literature or theory		
	Researching general information/knowledge		
	Have concepts/terms or theories explained		
	Generate images for presentations or texts		
	Developing tasks for exams		
	Transcribing data (e.g. interview transcription)		
	Data Analysis (e.g. AI tools in MAXQDA)		
	Programming		
	Coding		
	Developing formulas and mathematical solutions		
	Organising my everyday life at the university (e.g. managing emails)		
	Others:		
[
	Others:		
	at type of services have you already used in research and/or teaching?		
	Text generators (e.g., ChatGPT; Gemini/Bard)		
	Image generators (e.g., Dall-E)		
	Code generators (e.g., Grimoire)		
	Translators (e.g., DeepL)		
	Music generators (e.g., AIVA)		
	Data analysis and interpretation tools (e.g., AI tools in MAXQDA)		
	Typing assistant (e.g., Grammarly)		
	Other		

Back

Next

oFb - der onlineFragebogen	
For which of the tasks you mentioned has generative AI become your daily academic routine?	e an <u>essential</u> component of
Writing texts or sections for scientific texts	
Developing suggestions for the structure of scientific texts	
Improve grammar	
Summarise literature or theory	
Back	Next
Lukas Griessl, Eberhard Karls Universität Tübingen – 2024	55% completed

oFb - der onlineFragebogen	
For what reasons do you use generative AI?	
How does generative AI help you to master your daily life at universi	ty?
	1,
What advantages do you see in using generative AI in your aca How has the use of generative AI made your study, teaching or rese	
How has the use of generative AI made your study, teaching or reserved	

			oFb - der onlineFragebo	gen		
Which concern studies? Please describe			ne use of gene	rative Al in tead	ching and re	search or your
Back Lukas Griessl, El	berhard Karls	Universität Tü	bingen – 2024		70% com	Next
			oFb - der onlineFragebon	gen		
How much do y Please indicate						
(Very low trust)) 2) 3	0 4	0 5	0 6	○ (Very high trust)
What prompted	l vou to aive	this answer?				
Back						Next
Lukas Griessl, Et	perhard Karls	Universität Tül	bingen – 2024		80% com	pleted

soSci



Thank you very much for your interest in an interview.

As previously announced, you have the opportunity to provide us with your individual code before the interview, so that we can prepare specifically for the interview with you. Sharing your code with us is of course voluntary.

As a reminder, your designated code is: KE32.

To simplify the process, we are already giving you the option of sending us your code automatically.

Your willingness to send us your code together with your e-mail address will greatly assist us in selecting potential interview participants and preparing for the interviews. Please be aware that your answers will be linked to your e-mail address in this process.

If you agree to your answers and email address being linked, please select 'Yes'. However, if you wish your e-mail address to be stored independently of your answers, please select 'No'. In this case, your e-mail address and answers will be treated separately.

Would you like to provide us with your code together with you	r e-mail address?	
○ Yes		
○ No		
Back		Next
Lukas Griessl, Eberhard Karls Universität Tübingen – 2024	92% completed	

oFb-der onlineFragebogen
Thank you for participating in our survey on generative AI at the University of Tübingen!
In appreciation, we are holding a lottery to give away 15 vouchers, each valued at €20 , redeemable at local or online bookstores.
Interested? Simply confirm your participation and leave your email address. If you do not wish to participate, simply click on "Next".
Your data will be used exclusively for the lottery and to notify winners, and will be stored separately from your survey responses.
The draw will take place in early May; winners will be notified by email.
Good luck and thank you very much for your support! If you would like to participate in our lottery, please confirm your participation here and enter
your email address in the next step.
If you have already provided your email address before, please enter it again here.
I would like to participate in the lottery. I agree that my email address will be saved until the winner is drawn. My interview will continue to be anonymous and my email address will not be passed on to third parties.
Back Next
Lukas Griessl, Eberhard Karls Universität Tübingen – 2024 99% completed



Thank you very much for your valuable participation!

Your responses are extremely important to us and make a crucial contribution to a better understanding of the use of generative AI at the University of Tübingen. We are very grateful for the time and effort you have invested in this significant research.

If you have any questions or suggestions about our project or the survey, or in case you want your responses to be deleted, we would be pleased to hear from you at <u>lukas.griessl@uni-tuebingen.de</u>. Your feedback and suggestions are always welcome.

If you have agreed to be available for an interview, we will contact you in the next few weeks.

Once again, thank you for your commitment and best wishes to you!

Your responses have been saved, you can now close the browser window.

Lukas Griessl, Eberhard Karls Universität Tübingen – 2024

Participants demography, as depicted in section 2.

Age							
	Frequency	Percent					
18-20 years	54	10.4					
21-23 years	103	19.8					
24-26 years	97	18.7					
27-29 years	67	12.9					
30-32 years	38	7.3					
33-35 years	29	5.6					
36-40 years	33	6.3					
41-45 years	34	6.5					
46-50 years	18	3.5					
51-55 years	19	3.7					
56-60 years	16	3.1					
61-65 years	9	1.7					
Over 65 years	3	.6					
Total	520	100.0					

Crosstabulation of Age and Prior Knowledge, as depicted and described in section 4.2.

				Wieuge Closs			
		Knowledge					
			No prior	_ .			-
			knowledge	Beginner	Advanced	Expert	Total
Age	18-20	Count	9	37	8	0	54
		%	16.7%	68.5%	14.8%	0.0%	100.0%
	21-23	Count	8	63	31	1	103
		%	7.8%	61.2%	30.1%	1.0%	100.0%
	24-26	Count	4	48	43	2	97
		%	4.1%	49.5%	44.3%	2.1%	100.0%
	27-29	Count	4	36	22	5	67
		%	6.0%	53.7%	32.8%	7.5%	100.0%
	30-32	Count	1	17	19	1	38
		%	2.6%	44.7%	50.0%	2.6%	100.0%
	33-35	Count	1	23	4	1	29
		%	3.4%	79.3%	13.8%	3.4%	100.0%
	36-40	Count	3	18	10	2	33
		%	9.1%	54.5%	30.3%	6.1%	100.0%
	41-45	Count	2	20	12	0	34
		%	5.9%	58.8%	35.3%	0.0%	100.0%
	46-50	Count	2	13	3	0	18
		%	11.1%	72.2%	16.7%	0.0%	100.0%
	51-55	Count	5	11	2	1	19
		%	26.3%	57.9%	10.5%	5.3%	100.0%
	56-60	Count	3	10	2	1	16
		%	18.8%	62.5%	12.5%	6.3%	100.0%
	61-65	Count	5	3	1	0	9
	01 00	%	55.6%	33.3%	11.1%	0.0%	100.0%
	65+	Count	1	1	1	0.070	3
	0.51	%	33.3%	33.3%	33.3%	0.0%	100.0%
Total		Count	48	300	158	14	520
Total			9.2%				
		%	9.2%	57.7%	30.4%	2.7%	100.0%

Age * Knowledge Crosstabulation

Bundles of epistemic practices, as described in section 6.4.

	Total Per- centage	Total Fre- quency	Natural Sciences, Mathematics, Medi- cine and Computer Science		Social Sciences and Humanities	
Exploring Knowledge and Working with Academic Literature	65.8%	291	62.3%	129	69.6%	158
Developing Ideas and Approaches for Research and Writing	39.6%	175	32.9%	68	45.4%	103
Writing Text	22.4%	99	24.2%	50	20.3%	46
Transforming Existing Text	63.6%	281	64.7%	134	62.1%	141
Working with and Analysing Qualita- tive Data	10.4%	46	7.7%	16	12.8%	29
Exam Preparation and Self-Manage- ment	20.8%	92	23.2%	48	19.4%	44
Programming and Mathematical Tasks	27.8%	123	40.1%	83	16.7%	38
Other	8.6%	38	4.8%	10	11%	25