



# MASTERARBEIT | MASTER'S THESIS

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Exploring the Role of AI Literacy and User Motivations in  
Communication with Generalist AI Chatbots and Their Potential  
Impact on Human Interaction

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Für B.

Danke für deine unermüdliche Unterstützung und dafür, dass du mir immer den Rücken freigehalten hast. Auf viele weitere Türen, die wir gemeinsam eintreten werden.

## **Abstract (Deutsch)**

Diese Masterarbeit untersucht, wie Personen mit generalistischen KI-Chatbots (z.B. ChatGPT) interagieren. Im Mittelpunkt steht die Frage nach Nutzungsmotivationen, dem Einfluss von KI-Kompetenz sowie den potenziellen Auswirkungen auf zwischenmenschliche Kommunikation. Grundlage bildet eine qualitative Studie mit leitfadengestützten Interviews, die mittels strukturierender Inhaltsanalyse ausgewertet wurden. Im Fokus standen vier Dimensionen: Nutzungsweisen und Gratifikationen, die Rolle von KI-Kompetenz, Prozesse kommunikativer Anpassung sowie reflexive Erfahrungen von KI-Mensch-Interaktion. Die Ergebnisse zeigen, dass Chatbots für aufgabenorientierte Zwecke wie Textproduktion, Inhaltszusammenfassungen und Informationsrecherche eingesetzt werden, wobei Effizienzsteigerung und kognitive Entlastung zentrale Motivationen darstellen. KI-Kompetenz beeinflusste maßgeblich, wie Teilnehmende ihre Kommunikation gestalteten und anpassten. Darüber hinaus berichteten einige von Veränderungen in alltäglichen Praktiken, wie etwa einer wachsenden Abhängigkeit von KI-Chatbots oder Reflexionen über Identität und Autonomie. Die Studie verdeutlicht das Zusammenspiel von Motivationen, Kompetenzen und Anpassungsstrategien und macht zugleich sowohl das unterstützende Potenzial als auch die ambivalenten Herausforderungen von KI-Mensch-Kommunikation sichtbar.

## **Abstract (English)**

This thesis explores how individuals interact with generalist AI chatbots (e.g. ChatGPT), focusing on user motivations, AI literacy and potential effects on human communication. Based on a qualitative study using semi-structured interviews and structuring content analysis, four dimensions were examined: Uses and Gratifications, the role of AI literacy, communicative adaptation and reflexive experiences of Human-AI interaction. Findings show that users primarily engaged with chatbots for task-related purposes such as text production, summarization and information retrieval, often motivated by efficiency and cognitive relief. AI literacy shaped how participants approached and adapted their communication, while some reported shifts in everyday practices including increased reliance on chatbots and reflections on identity and autonomy. The study demonstrates how motivations, competencies and adaptation intersect, highlighting both empowering and problematic dimensions of Human-AI communication.

## **Disclaimer**

The qualitative interviews underlying this thesis were conducted in German. All quotations cited in English were translated from the original German with the assistance of ChatGPT, using a predefined translation prompt documented in the appendix. In addition, ChatGPT was occasionally used to refine the wording of individual sentences already written in English in order to align them more closely with academic research style. This refinement followed a predefined prompt, also documented in the appendix. All outputs were subsequently reviewed and, where necessary, revised to ensure semantic accuracy and to preserve the nuances of the original text. The use of ChatGPT was strictly limited to these purposes. It was never employed for generating content, conducting analysis, or any other aspect of this thesis. The substance, analysis and interpretations remain entirely the author's own work at all times.

# 1. Table of Contents

|                                                                                                    |           |
|----------------------------------------------------------------------------------------------------|-----------|
| <b>1. Table of Contents .....</b>                                                                  | <b>4</b>  |
| <b>2. Introduction.....</b>                                                                        | <b>1</b>  |
| 2.1. Background and Relevance .....                                                                | 1         |
| 2.2. Research Aim and Guiding Question .....                                                       | 4         |
| 2.3. Structure of the Thesis.....                                                                  | 5         |
| <b>3. Research Background and Literature Review .....</b>                                          | <b>5</b>  |
| <b>3.1. Definitions and Conceptual Clarifications .....</b>                                        | <b>5</b>  |
| 3.1.1. The AI Chatbot Landscape.....                                                               | 5         |
| 3.1.2. Computer-mediated Communication .....                                                       | 7         |
| 3.1.3. Human-Machine Communication (HMC) and Human-AI Communication .....                          | 7         |
| <b>3.2. Uses and Gratification Theory.....</b>                                                     | <b>8</b>  |
| 3.2.1. Theoretical Framework .....                                                                 | 8         |
| 3.2.2. State of the Art.....                                                                       | 10        |
| <b>3.3. AI Literacy .....</b>                                                                      | <b>12</b> |
| 3.3.1. Theoretical Framework - From Literacy to Digital Literacy .....                             | 12        |
| 3.3.2. State of the Art - AI Literacy.....                                                         | 13        |
| <b>3.4. Communication Accommodation Theory .....</b>                                               | <b>16</b> |
| 3.4.1. Theoretical Framework .....                                                                 | 16        |
| 3.4.2. State of the Art.....                                                                       | 18        |
| <b>3.5. Theoretical perspectives on the consequences of Human-Machine Communication (HMC).....</b> | <b>19</b> |
| 3.5.1. Mediatization Theory as societal framing .....                                              | 19        |
| 3.5.2. Humanization and Social Cues .....                                                          | 20        |
| <b>3.6. Research Gaps and Positioning of this Study .....</b>                                      | <b>20</b> |
| <b>3.7. Summary and Derivation of Research Questions .....</b>                                     | <b>22</b> |
| <b>4. Methodology.....</b>                                                                         | <b>24</b> |
| 4.1. Research Approach.....                                                                        | 24        |
| 4.2. Method-Design and Interview Guideline Development .....                                       | 25        |
| 4.3. Sampling Strategy and Participant Overview .....                                              | 31        |
| 4.3.1. Sampling Strategy .....                                                                     | 31        |

|                                                                   |           |
|-------------------------------------------------------------------|-----------|
| 4.3.2. Sample.....                                                | 32        |
| <b>4.4. Data Collection Procedure .....</b>                       | <b>34</b> |
| <b>4.5. Qualitative Content Analysis.....</b>                     | <b>37</b> |
| 4.5.1. Methodological Approach.....                               | 37        |
| 4.5.2. Development of the Category System .....                   | 38        |
| 4.5.3. Coding Procedure and Quality Assurance .....               | 41        |
| 4.5.4. Ethical considerations in Data Analysis.....               | 42        |
| <b>4.6. Reflection on Research Ethics and Positionality .....</b> | <b>42</b> |
| <b>5. Empirical Findings .....</b>                                | <b>43</b> |
| 5.1. Overview of the Data and Coding Process .....                | 43        |
| 5.2. Motivations for Using Generalist AI Chatbots (RQ1) .....     | 44        |
| 5.2.1. Uses.....                                                  | 44        |
| 5.2.2. Gratifications.....                                        | 53        |
| 5.2.3. Context of Use.....                                        | 56        |
| 5.3. Role of AI Literacy in User Communication (RQ2) .....        | 58        |
| 5.3.1. Understanding & Evaluation .....                           | 58        |
| 5.3.2. AI Ethics.....                                             | 63        |
| 5.3.3. Prompting Skills.....                                      | 66        |
| 5.3.4. Detecting AI-Generated Content .....                       | 68        |
| 5.3.5. Emotion Regulation.....                                    | 69        |
| 5.3.6. Learning & Adaptation .....                                | 70        |
| 5.3.7. AI Self-Efficacy / Problem Solving .....                   | 70        |
| 5.4. Communication Style Change and Human Interaction (RQ3).....  | 70        |
| 5.4.1. Transfer to Human Communication.....                       | 70        |
| 5.4.2. Linguistic Accommodation .....                             | 72        |
| 5.5. Users' Interpretations of Human-AI Communication (RQ4) ..... | 74        |
| 5.5.1. Reflexive Awareness .....                                  | 74        |
| 5.5.2. Role of AI .....                                           | 80        |
| <b>6. Discussion .....</b>                                        | <b>83</b> |
| 6.1. Introduction to the Discussion .....                         | 83        |
| 6.2. Research Question 1 - Uses and Gratifications.....           | 83        |
| 6.3. Research Question 2 – AI literacy .....                      | 87        |

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| 6.4. Research Question 3 – Communication Accommodation Theory (CAT)..... | 89 |
| 6.5. Research Question 4 – Reflexive Awareness.....                      | 90 |
| 6.6. Cross-cutting Interpretation.....                                   | 92 |
| 6.7. Limitations .....                                                   | 93 |
| 6.8. Implications .....                                                  | 94 |
| 7. <i>Conclusion</i> .....                                               | 95 |
| 8. REFERENCES                                                            |    |

## 2. List of Tables

|                                                                                 |    |
|---------------------------------------------------------------------------------|----|
| <i>Table 1 - Sociodemographic Information Of Participants</i> .....             | 34 |
| <i>Table 2 - Distribution Of Codes Across Levels Of The Coding System</i> ..... | 44 |

## APPENDICES

Appendix A: Interview Guideline

Appendix B: Codebook

Appendix C: ChatGPT - Instruction for Translating

## 2. Introduction

### 2.1. Background and Relevance

“Think about it: The pace of change has never been this fast, yet it will never be this slow again.” (Trudeau, 2018). This quote by the Canadian Prime Minister Justin Trudeau precisely reflects the current tempo of technological transformation the world is presented with, particularly in the light of the rapid emergence of Artificial Intelligence. The launch of ChatGPT in 2022 (*Introducing ChatGPT*, 2022) marked the beginning of what has often been referred to as an “AI-boom”. Within months this phenomenon triggered a rapid surge in public interest and adoption, causing AI to spread into both personal and professional environments, almost seamlessly becoming a part of how information is gathered, problems are solved, content is created and how communication takes place. Now, almost three years later, AI has become everyday normality for most digitally connected parts of the world.

According to OpenAI, ChatGPT is set to reach 700 million weekly users in calendar week 32 of 2025 (Sigalos, 2025). This enormous and rapid growth of generalist AI chatbot-users indicates that ChatGPT represents a fundamentally new kind of phenomenon, which is not only relevant in terms of technological innovation but also highly significant for communication sciences due to its conversational training from Reinforcement Learning from Human Feedback, which allows it to respond in a conversational way (*Introducing ChatGPT*, 2022). The result is an interface designed to appear as human-like as possible, simulating social cues, empathy and the dialogue structure of human communication (Lodoen & Orchard, 2025).

To illustrate just how rapidly technological advancement is currently progressing, it is worth highlighting three major developments that emerged just during the time span in which this research was conducted. One such example is the rise of autonomous AI Agents capable of performing complex multi-step tasks independently, with OpenAI stating on their website: “...today’s launch is just the beginning. We’ll continue to iteratively add significant improvements regularly, making it more capable and useful to more people over time.” (*Introducing ChatGPT Agent*, 2025).



A second example is Google's recent integration of AI-generated summaries, powered by Gemini, into its search engine<sup>1</sup>. The so-called "AI Overviews" pops up right above the Google Search results and gives a quick summarized version of these search results. Google describes it as follows: "Sometimes you want a quick answer, but you don't have time to piece together all the information you need. Search will do the work for you with AI Overviews." (*Generative AI in Search*, 2024). This new feature is already transforming how users access and process information and is expected to do so even more over time.

The last example is a particularly noteworthy one: the emergence of AI companions such as Grok's AI girlfriend Ani or the red panda Bad Rudi (*Musk Leans into Raunchy Grok "companions," Teasing New "50 Shades" Inspired Bot*, 2025). This development goes one step further than the typical AI applications in everyday life. It indicates a shift in perception, where AI is no longer only understood as Artificial Intelligence performing functional tasks but increasingly seen as a social entity with social, emotional and even sexual characteristics. This raises the concern that users may overlook the fact that these companions are still non-human, machine-based systems. In addition to these bigger societal concerns, the fact that these systems may also be accessible to minors highlights the urgent need for regulations and protective measures.

These developments illustrate the importance of illustrating how users interact with the yet most widely used form of such systems: with generalist AI chatbots like ChatGPT, which are explicitly trained to simulate human-like dialogue. It becomes essential to ask how users experience and interpret these interactions with generative AI chatbots that sound and act like humans but are no humans. From a communicative perspective several questions arise: What are people's motives to engage with AI chatbots? What kind of gratifications do they draw from these interactions? To what extent is a form of AI literacy needed to get the expected outcome from the generalist AI chatbot and how does the level of the users' AI literacy influence their communication strategies and their trust in the interaction?

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<sup>1</sup>Its official release took place last year, but it was only rolled out in Europe at the end of March 2025 (*We're Bringing the Helpfulness of AI Overviews to More Countries in Europe.*, 2025)

The question of what motivates people to engage with a new form of communication medium is a recurring one in media and communication research. Historically, such questions tended to arise with the emergence of a new medium or communication system, such as the internet for example. In these contexts, the Uses and Gratifications framework (Katz, Blumler, et al., 1973) remains one of the most used theories to examine user's needs, desires and expectations of these new communication systems. Also in the case of AI-based communication, the approach proves to be suitable to gain insights into why individuals choose to interact with a chatbot in the first place.

At the same time, it is equally important to understand what new competencies users need to "...communicate and collaborate effectively with AI; and use AI as a tool online, at home and in the workplace." (Long & Magerko, 2020). As AI systems are evolving rapidly, the ability to adapt to the technological changes, to critically assess AI outputs, to understand their limitations and to integrate them into everyday tasks becomes a key component to users' success in AI use (Long & Magerko, 2020).

Furthermore, as increasingly more users engage in conversations with generalist AI chatbots on a daily basis, it becomes relevant to review whether and in what ways they adapt their communicative behavior towards these chatbots and also subsequently in interactions with other humans. The fact that these systems are trained to simulate human dialogue may lead users to subconsciously apply the same conversational patterns and social norms to their interaction with Artificial Intelligence as they would to human-human interaction. These human-to-human conversational dynamics were first researched by Howard Giles (1973) and then developed into the Communication Accommodation Theory. His framework focuses on how individuals adjust their communication style to align, or deliberately not align - to evoke convergence or divergence - with their interlocutor. In this research CAT was applied to Human-AI communication to examine if users converge linguistically to perceived AI-conversation norms and if these patterns also might affect the communication style in inter-human communication.

These theoretical considerations regarding the context of AI in generalist chatbot use, user motivations and communicative adaptation lead to the following research objectives and questions of this thesis.

## 2.2. Research Aim and Guiding Question

The aim of this study is to explore how individuals engage with generalist AI chatbots with a particular focus on their underlying motivations, the role of AI literacy and the adaptive communicative behavior towards AI systems, potentially leading to effects on human-to-human interaction. In this study, the term “Generalist AI chatbots” refer to conversational agents based on large language models (LLMs) that are designed to interact in a human-like manner across a wide range of topics without being restricted to a specific task. Examples of these systems are ChatGPT, Gemini, Claude, Perplexity and many more.

Building on Uses and Gratification theory (Katz, Blumler, et al., 1973) this study first addresses the question of which initial motivations drive individuals to interact with generalist AI chatbots. Earlier research has demonstrated an extensive corpus on motivations and gratifications for traditional and digital media, and more recently also for AI applications, but the rapid transformative character of these systems makes it necessary to investigate motivations continuously.

Furthermore, the constant evolution of AI systems reshapes the knowledge and skills required to engage with them effectively. Research highlights the importance of competencies and critical awareness, however, it remains unclear how varying levels of literacy influence user interaction and adoption.

At the same time, theories of communication accommodation (Giles et al., 1991a) suggest that users adapt their communicative style when interacting with AI systems. It remains unclear, however, whether these adaptations go beyond human-AI interactions and spill over into human-to-human exchanges.

Beyond these individual adjustments, the broader shift to Human-AI communication raises questions about how such interactions are interpreted in everyday life. While users are aware that AI is not human, they often respond with politeness and anthropomorphization. From a mediatization perspective, these practices mirror broader social norms.

On the basis of this background, the following guiding question for this study emerges:  
*In what ways do users’ motivations, competencies and interactions with generalist AI chatbots shape their communication styles and everyday social experiences?*

## **2.3. Structure of the Thesis**

This thesis is structured into six main chapters. Chapter one introduces the research topic, outlines its relevance, and presents the research objectives and research questions. Chapter two presents the current state of research on human-AI communication and the use of generalist AI chatbots and provides an in-depth literature review on the following theoretical frameworks: Uses and Gratification Theory, AI Literacy and Communication Accommodation Theory. The next chapter outlines the methodological design of this study, including the qualitative research approach by Udo Kuckartz, data collection and analysis procedures. Chapter four presents the empirical findings, structured alongside the research questions. The next chapter discusses the results in the light of the theoretical framework and interprets their implications for human-AI communication. And finally, chapter six offers a conclusion and summarizes the key insights of the study, reflecting on limitations and proposing future research ideas.

## **3. Research Background and Literature Review**

### **3.1. Definitions and Conceptual Clarifications**

#### *3.1.1. The AI Chatbot Landscape*

Since the release of ChatGPT in late 2022, the everyday use of conversational AI has grown rapidly, with ChatGPT alone reaching 700 million weekly active users (Sigalos, 2025). Within an extremely short period of time, such systems have moved beyond being niche applications to being daily practice for diverse user groups. Recent studies show that users quickly integrate conversational AI chatbots into their lives if they find them “useful and pleasurable” (Følstad & Brandtzaeg, 2020). As Goli et al. describe in their recent study, “Perceived ease of use is a persons’ effort towards the usage of a specific technology” (2023, p. 4), which applies to conversational AI chatbots as well. The entry barrier for most conversational AI systems is exceptionally low, as users typically only require an internet connection to start using it – often not even an account for the platform or any form of subscription is needed, which facilitates simple and fast initial adoption.

The current chatbot landscape has been expanding rapidly, facilitated by breakthroughs in large language models (LLMs), low entry barriers for users and the growing diversity of everyday applications (Casheekar et al., 2024). Recent research by Kumar notes: “LLMs are capable of generating human-like language and performing a range of language processing tasks due to their training on extensive textual datasets, which include publicly available data and data licensed from third parties.” (2024, p. 2). Because of their generative character, LLMs are commonly classified as a core form of generative AI.

Generative AI-driven systems in particular have seen a significant growth in both number and visibility in many domains, such as higher education, making it increasingly important to distinguish between different types of chatbots and the general roles they play (Polyportis, 2024).

A recent comprehensive review differentiates between task-oriented, social, knowledge-based and hybrid chatbots, with conversational AI chatbots and virtual assistants falling into the latter category (Casheekar et al., 2024). This classification is taken as the basis for the present study, focusing on the hybrid category, as contemporary chatbots such as ChatGPT and Perplexity are situated here. Within this group a further subdivision can be made into open-domain chatbots (Iyer et al., 2020), domain-specific chatbots (Janssen et al., 2020; Yager, 2023) and hybrid forms of AI chatbots.

Open-domain chatbots are designed to engage in dialogue on any topic, without being restricted to a single domain and are therefore often referred to as “generalist” models (Iyer et al., 2020). Domain-specific AI chatbots, however, remain optimized for specific contexts, such as Woebot, a mental health chatbot, or mostly any other e-commerce or customer service AI-supported chatbot by now, such as the H&M chatbot (Janssen et al., 2020; Yager, 2023). Finally, a new set of chatbots is emerging, that combines open-domain frameworks such as LLMs with additional domain-specific characteristics, which represent the third, hybrid category. These hybrid chatbots can develop in two ways: some, like Replica, started as a domain-specific social bot, which later integrated generative AI (*How Does Replika Work? – Replika*, 2025), while others, like Grok AI, for example, began as open-domain chatbots and added companion-like layers this year (xAI, 2025). These systems blend the generalist

capacities of large language models with personalization, memory and relational features, creating social companions with extensive knowledge. Differentiating AI chatbot categories is especially important, as it demonstrates how the blurred lines between merely pragmatic informational sources and social companions influence people's behavior and motivations.

This study focuses on generalist AI chatbots, since they are by far the most common type of conversational AI chatbots today, with ChatGPT, Gemini, Copilot and many others widely used around the world (*Over Half of American Adults Have Used an AI Chatbot, Survey Finds*, 2025).

### *3.1.2. Computer-mediated Communication*

Herring defined Computer-mediated communication (CMC) as "...communication that takes place between human beings via the instrumentality of computers." (1996, p. 1). It includes both synchronous and asynchronous modes of interaction, such as email, instant messaging, video conferencing and social media/networking platforms. The defining feature of CMC is that interaction is technologically mediated, which alters the availability and interpretation of social cues compared to face-to-face communication (Thurlow, 2004; Walther, 2010).

### *3.1.3. Human-Machine Communication (HMC) and Human-AI Communication*

Andrea L. Guzman described human-machine communication (HMC) as "...the creation of meaning among humans and machines" (2019, p. 344). Building on this, HMC refers to communication processes in which people treat machines not merely as tools but as communicative partners. It shows how technologies such as chatbots or voice assistants can be perceived and engaged with as interlocutors, which are capable of producing and interpreting content (Guzman, 2019; Guzman & Lewis, 2020). In the context of recent developments in AI, some scholars have raised the question of whether Human-AI communication (HAIC) should be conceptualized as its own subcategory of HMC, focusing on interactions with AI-driven systems such as chatbots and other generative models (Guzman & Lewis, 2020). However this term is not yet widely established in the literature. Therefore, in this thesis the terms are used

interchangeably, with HAIC being used deliberately to emphasize that the focus of this research lies on human interactions with AI-driven systems.

## **3.2. Uses and Gratification Theory**

### *3.2.1. Theoretical Framework*

Before the emergence of the Uses and Gratification (U&G) approach, mass media were largely understood as influencing instruments capable of directly shaping public opinion (Lasswell, Harold D., 1938). In the early communication research, audiences were typically regarded as passive recipients who perceive media stimuli for the most part uniformly and passively. This perception was exaggeratedly later called the “magic bullet” or “hypodermic needle” model of media effects (Lowery & DeFleur, 1983; McQuail, 1987). According to this mass media perspective, a persuasive message, such as propaganda, if crafted effectively, could influence “(...) the individual's emotions and sentiments strongly.” (Lowery & DeFleur, 1983, p. 23). The conceptions of an undifferentiated mass audience were closely linked to the interwar period, when concerns about propaganda and manipulation through media were particularly prominent (Burkart, 2002; Lasswell, Harold D., 1938; McQuail, 1987).

This image of the passive audience was first challenged in the 1940s. A pioneering study was conducted by Herta Herzog in 1942, who investigated the motivations of women listening to radio soap operas (Herzog, H., 1944). In her research she asked the question *why* audiences actively engaged with this content instead of focusing *on what* the programs did to the listeners. Drawing on interviews, she identified three types of listening gratifications: (1) emotional release, (2) wishful thinking and (3) source of advice (Herzog, H., 1944). By linking media use to individual needs and everyday concerns, Herzog indicated that audiences are not passive consumers but active participants, thereby laying the very early groundwork for future U&G research. In the decades that followed, in the 1960s and 1970s to be more precise, the Uses and Gratification approach slowly emerged and developed. Katz and Foulkes describe it in their research the following: “This is the approach that asks the question, not ‘What do the media do to people?’ but rather, ‘What do people do with the media?’” (1962, p. 378). Building on this user-centered perspective, Katz Blumer and Gurevitch underlined the active role of audiences in choosing media to meet their needs and

framed the approach as an alternative to earlier media effects research (Blumler & Katz, E., 1974; Katz, Blumler, et al., 1973).

Several core assumptions have emerged from this perspective. First, media use is viewed as an active and goal-oriented endeavor (Katz, Blumler, et al., 1973; McQuail et al., 2009). Second, audience members take the initiative in linking their need gratification to media choices, meaning that neither media nor content choice can be seen as a linear effect on people's attitude or behavior (Katz, Blumler, et al., 1973). Third, "The media compete with other sources of need satisfaction." (Katz, Blumler, et al., 1973, p. 511), such as interpersonal communication or other leisure activities, thereby situating media in a broader social context. Fourth, it is assumed that people are self-aware enough to report and recognize their own motives for media use (Katz, Blumler, et al., 1973). And finally, researchers should avoid making value judgments about media and instead focus on how audiences actually use and interpret it (Katz, Blumler, et al., 1973).

Based on these premises, Katz et al. (1973) developed a classification of needs consisting of five categories: (1) cognitive needs – the pursuit of information, knowledge and understanding of things (2) affective needs – the search for emotional, pleasurable or aesthetic experiences (3) personal integrative needs – the desire to enhance trustworthiness, self-confidence and social status (4) social integrative needs – the pursuit to strengthen or weaken the contact with family, friends and society at large (5) tension release needs – the use of mass media as a means of escape and relaxation from one's own role.

During the 1980s and 1990s, U&G research was further expanded and empirically diversified. Rubin refined the concept of "active audience" by distinguishing between *instrumental* orientations, which are goal-oriented and information-driven, and *ritualized* orientations, which involve habitual media use to pass time or for entertainment (Rubin, 1984, 2009). This distinction demonstrates that audience is not uniform but varies from a passive, more habitual use to highly purposeful, information-driven engagement with media.

Rayburn and Palmgreen (1985) linked gratification to an expectancy model and demonstrated how gratifications sought (GS) and gratifications obtained (GO) can be



explained through audience expectations and evaluations of media content and thus providing a more measurable framework.

Palmgreen (1984) showed that U&G was developing into a complex theoretical framework, calling for flexible and adaptable approaches (Ruggiero, 2000). By the end of the 20<sup>th</sup> century, the U&G had established itself as one of the central paradigms in audience research. As Ruggiero (2000) notes, the typology of needs introduced by Katz et al. (1973) became a central framework within U&G research and has been widely adopted, discussed and refined in numerous subsequent studies and applied across many media environments. At the same time, Ruggiero (2000) also highlighted the adaptability of the U&G approach as a major reason for its continuing relevance during the rise of new communication technologies.

### *3.2.2. State of the Art*

Early research in digital media applications of U&G focused on the rise of the internet during the late 1990s and early 2000s. Reflecting on this perspective, Newhagen & Rafaeli noted that: "(...) because of the Internet's chameleon-like character, I do agree that uses-and-gratifications offers a vehicle to lay out a taxonomy of just what goes on in cyberspace." (1996, p. 11).

Papacharissi and Rubin (2000) identified motivations such as information seeking, interpersonal utility, passing time, entertainment and convenience, showing that classical needs could be transferred to online environments. Around the same time, Ruggiero (2000) emphasized interactivity, demassification and asynchronicity as distinctive features of the internet, highlighting how digital technologies enable new forms of individualized and interactive communication. Building on this research, Stafford, Stafford and Schkade (2004) proposed a more systematic distinction. They divided Internet gratifications into the three dimensions of process (e.g. interactivity and enjoyment of browsing), content (e.g. access to a variety of information sources) and social (e.g. communication and relationship building) gratifications (cf also M. R. Stafford & Stafford, 1996). Taken together, these studies demonstrate that the Internet did not only extend traditional media gratifications but rather introduced new gratifications that could be explored through the user-centered U&G approach.

As the Internet shifted to Web 2.0, a culture of active user participation was born and U&G Theory focused more on social networking platforms and mobile media. Smock et al. (2000) demonstrated that certain Facebook affordances are linked with distinct gratifications, such as social exchange, entertainment, passing time and expressive information sharing. This feature-based approach highlighted that also different social media platforms are shaped by diverse motivations tied to platform-specific affordances. Sundar und Limperos proposed that: “(...) U&G researchers adopt an affordance-based framework for identifying gratifications sought and obtained from media.” (2013, p. 521), emphasizing that technological affordances such as modality, interactivity, navigability and personalization should be seen as new sources of gratifications.

In recent years, U&G has been applied to the research of Artificial Intelligence (AI)-mediated communication, mostly in the form of conversational agents and chatbots. Unlike earlier digital platforms, which mostly facilitated human-to-human interaction, AI systems introduced a new dimension: bidirectional human-to-machine communication. Araujo (2018) suggests that users more easily attribute human-like features to conversational agents than to websites or computer systems, perceiving them as a distinct kind of interaction partner. Brandtzaeg & Følstad (2017) were among the first to apply a U&G perspective to chatbot use, demonstrating that motivations extend beyond classic gratifications, and they found relational and novelty benefits as well. Since Brandtzaeg & Følstad’ pre-generative chatbot study, which established a baseline around information, entertainment, social exchange and curiosity, the interest in the field has shifted toward the newly arisen general-purpose, LLM-based chatbots (Brandtzaeg & Følstad, 2017). These chatbots suggested a broader spectrum of possible usage motivations and gratifications through their general-purpose character and their human-like conversation style. Skjuve et al. found in their research about why people use ChatGPT that the following recurring gratifications emerged: “(...) efficiency at work, enhancing learning and creativity, supporting communication between friends, offering social support to alleviate the burden of decision-making, and helping with routine tasks.” (2024, p. 15).

Subsequent studies show that these U&G-driven motives do not just predict use, but also influence how these outcome are evaluated, for example in terms of trust and perceived “creepiness”, with findings indicating that chatbots performing too well or

displaying human-like social cues can evoke unease or the feeling of creepiness (Hyun Baek & Kim, 2023).

Thus the relevance of U&G perspectives also extends beyond the user side: while they help to explain motivations, evaluations and experiences, they also provide valuable insights for developers and designers in creating user-centered AI chatbots that address different gratifications while reducing potential discomfort (Dekkal et al., 2024; Xie et al., 2024).

In sum, U&G has successfully transitioned from its origins in traditional mass media to applications across digital platforms and most recently, to Human-AI interactions. As AI technologies and their communicative possibilities evolve rapidly it is essential to continuously re-examine U&G in this context to capture emerging gratifications and their implications for human communication (Sundar, 2020; Sundar & Limperos, 2013).

### **3.3. AI Literacy**

#### *3.3.1. Theoretical Framework - From Literacy to Digital Literacy*

The concept of literacy has undergone a significant transformation over the past decades. Traditionally, literacy was narrowly defined as the ability to read and write, a skillset primarily associated with formal education and often measured through functional competencies (Livingstone, 2004). One of UNESCO's earliest definitions from 1958 illustrates this binary character: "A person is literate who can, with understanding, both read and write a short simple statement on his or her everyday life." (UNESCO, 1958). People were either literate or illiterate, with little attention to the broader social, cultural and technological contexts in which these skills were embedded. Today the UNESCO definition of literacy is far more comprehensive: "Literacy is a continuum of learning and proficiency in reading, writing and using numbers throughout life and is part of a larger set of skills, which include digital skills, media literacy, education for sustainable development and global citizenship as well as job-specific skills." (UNESCO, 2025). To understand why media literacy is now a part of the comprehensive literacy definition, it is necessary to understand its historical emergence. Over the past decades the concept of literacy has diversified into multiple

context or domain-specific forms. The earliest debates can be traced back to the 1920s and 1930s, but it was in the 1960s that media literacy gained prominence through efforts to critically engage with film and television (Arke, 2013). Aufderheide's report (1993) of a conference regarding media literacy consolidated diverse definitions and defined media literacy as the ability to access, analyze, evaluate and create messages across diverse forms (Christ & Potter, 1998; Livingstone, 2004). In the 1970s, Zurkowski (1974) introduced the concept of information literacy to describe the ability to identify, locate and use information. With the spread of personal computers and the internet Gilster's work on digital literacy (1997) highlighted that literacy involved not only technical skills but also critical and reflective engagement with digital information flows. Eshet-Alkalai describes that digital literacy "(...) involves a large variety on of complex cognitive, motor, sociological, and emotional skills (...). (2004, p. 93), illustrating that the facets of literacy are becoming more diverse while mirroring the complex environment of media.

### *3.3.2. State of the Art - AI Literacy*

Digital literacy forms the foundation of AI literacy, as basic knowledge of computers and digital technologies is a prerequisite for engaging with artificial intelligence (Long & Magerko, 2020). With AI moving from a specialized technology to an everyday application, the debate on literacy expanded once more and scholars have begun to conceptualize the skills needed for engaging with AI systems (Long & Magerko, 2020; Ng et al., 2021).

One of the earliest definitions is provided by Long and Magerko: "We define AI literacy as a set of competencies that enables individuals to critically evaluate AI technologies; communicate and collaborate effectively with AI; and use AI as a tool online, at home, and in the workplace." (2020, p. 2). Their framework consists of five dimensions: (1) What is AI? (2) What can AI do? (3) How does AI work? (4) How should AI be used? (5) How do people perceive AI? – under which they formulated a set of competencies that specify the knowledge, skills and reflections required for AI literacy (Long & Magerko, 2020).

Building on this foundation Ng et al. (2021) conducted an exploratory review of the relatively new field of AI literacy. They identified three main dimensions: “Know and understand AI”, “Use and apply AI” and “Evaluate and create AI”. They also discuss ethical dimensions such as inclusiveness, fairness and transparency as core pillars for AI literacy (Ng et al., 2021).

A further step in consolidating the concept has been the development of empirically validated measurement instruments. The Meta AI Literacy Scale (MAILS) operationalizes AI literacy through dimensions such as *Know & Understand*, *Use & Apply*, *Detect AI*, *AI Ethics* and psychological competencies like *self-efficacy* and *self-management* (Carolus et al., 2023). Originally, *Create AI* was included in the AI literacy definition by Ng et al. (2021). However, Carolus et al. suggest, in line with other conceptualisations, that it should be seen as a skill but not as an inherent component of AI literacy (Carolus et al., 2023; Long & Magerko, 2020). Similarly, the Artificial Intelligence Literacy Questionnaire (AILQ) defines four dimensions – affective, behavioural, cognitive and ethical – and confirms that AI literacy does not only encompass mostly technical skills (Ng et al., 2024).

At the same time, recent discussions point out that AI literacy should not be understood as one fixed, uniform construct, since technological advancement constantly redefines the competencies required for meaningful engagement (Bozkurt, 2024; Liu et al., 2025). Strikingly, the term “*literacy*” in the context of AI no longer focuses on only functional abilities but also integrates psychological and ethical considerations that were absent from earlier literacy definitions. This transformation reflects the interactive nature of AI systems and the societal challenges AI poses which require new skills to properly and confidently navigate these systems (Long & Magerko, 2020; Ng et al., 2024; UNESCO, 2025).

Some researchers have already begun to differentiate between *general AI literacy* and *Generative AI literacy* (GenAI literacy), acknowledging that the rapid emergence of generative AI models such as ChatGPT requires a more specialized set of competencies (Bozkurt, 2024; Jin et al., 2024; Liu et al., 2025).

Unlike earlier systems, which were primarily limited to prediction and classification, generative models introduce “(...) autonomous content creation and comprehension through deep learning and natural language processing (...)” (Liu et al., 2025, p. 1).

Bozkurt defines AI literacy with focus on GenAI technologies as follows: “AI literacy is the comprehensive set of competencies, skills, and fluency required to understand, apply, and critically evaluate AI technologies, involving a flexible approach that includes foundational knowledge (Know What), practical skills for effective realworld applications (Know How), and a deep understanding of the ethical and societal implications (Know Why), enabling individuals to engage with AI technologies in a responsible, informed, ethical, and impactful manner.” (2024, p. 286).

The rapid spread of generative AI systems such as ChatGPT has opened up new opportunities while also simultaneously introducing a whole set of new risks, affecting not only users but also non-users, as AI-generated content circulates widely in society. Several studies even stress that these systems cannot and should not operate without human intelligence as guidance, critical evaluation and ethical oversight (Bagenal et al., 2024; Liu et al., 2025). Zhang & Magerko argue that generative AI systems “introduce a high degree of non-determinism and variability in their outputs.” (2025, p. 2), which is not properly addressed in existing AI literacy definitions. This problem underlies many of the core risks of generative AI, including hallucinations, biased outputs, copyright infringements and the erosion of trust in information and professional environments (Bagenal et al., 2024; Kasneci et al., 2023). It becomes increasingly imperative to establish a generative AI literacy, ensuring that users are equipped with competencies required to critically and responsibly engage with these systems (Kasneci et al., 2023; Muller et al., 2024; UNESCO, 2025; C. Zhang & Magerko, 2025).

Several frameworks have begun to conceptualize these competences. Zhang and Magerko established twelve guidelines grouped into four key dimensions: “(1) Guidelines for Generative AI Tool Selection and Prompting, (2) Guidelines for Understanding Interaction with Generative AI, (3) Guidelines for Understanding Interaction with Generative AI, and (4) Guidelines for High-Level Understanding of Generative AI.”(2025, p. 1). Similarly. Annapureddy et al. (2025) identified twelve competencies ranging from foundational knowledge about AI systems and prompt engineering to even ethical and legal aspects, with a high emphasis on the ability to evolve and adapt to the rapidly changing AI landscape.

Four core competencies for generative AI use, which have been observed to some extent in the existing research, can be distilled: First, prompting skills are necessary to steer system outputs and avoid irrelevant results (C. Zhang & Magerko, 2025). Second, *critical evaluation skills* enable users to detect hallucinations and bias in generated content (Kasneci et al., 2023). Third, ethical and legal awareness addresses issues regarding fairness, inclusiveness, accountability and intellectual property (Muller et al., 2024; UNESCO, 2025). Finally, the skill to *creatively engage* with generative AI systems and reduce the danger of uncritical adoption (Annapureddy et al., 2025; Muller et al., 2024).

In sum, generative AI extends traditional AI literacy by adding the aspects of creative use and of lifelong learning. . Empirical findings indicate that individuals with higher GenAI literacy levels not only engage in more “complex cognitive processing activities” but also suggest that they interact with chatbots more efficiently and strategically than their lower literacy counterparts (Jin et al., 2024). This has important implications for the present study, as literacy levels appear to shape not only how people communicate with AI systems but also the new specific forms of use they develop and the gratifications they obtain from such interactions (Yan et al., 2024).

### **3.4. Communication Accommodation Theory**

#### *3.4.1. Theoretical Framework*

Communication Accommodation Theory (CAT) was first introduced by Giles in the 1970s and explains how speakers modify their communicative style, meaning linguistic and non-verbal features, to achieve social outcomes, such as gaining approval, managing identity or assuring difference between them and the interlocutor (Giles, 1973; Giles et al., 1991a). The theory distinguishes in interpersonal communication between convergence, divergence and maintenance, with all three mechanisms representing forms of accommodation to the interlocutor (Giles, 1973; Giles & Ogay, 2007).

Convergence is a strategy aimed at adapting to one’s interlocutor in order to be more similar. This not only increases the likelihood of being liked and respected but also enhances the effectiveness of the communication (Giles & Ogay, 2007). Divergence,

by contrast, is used to deliberately create distance from one's interlocutor in order to actively differentiate oneself and avoid being perceived as similar, often in response to dislike or intergroup dynamics (Giles & Ogay, 2007). And maintenance is seen as the act of deliberately not changing one's behavior with regard to the interlocutor (Giles et al., 1973). Accommodation is employed either to seek approval, respect or social rewards through alignment with the other person or to assert distinctiveness and distance by resisting adoption or even intentionally displaying contrasting behavior (Coupland, 2022; Giles, 1973; Giles & Ogay, 2007).

With the advancement of media technologies, CAT also evolved from interpersonal face-to-face communication to a wide range of areas of application such as intergroup encounters, institutional communication and power-asymmetrical settings (Gallois et al., 2005). This theoretical flexibility did not only open up new areas of application but also new modes of communication, including mediated and digital ones.

Buzzanell et al. (1996) found that people adapt formality and message length when leaving telephone answering machine messages, showing that accommodation occurs even without direct and face-to-face interlocutors. With the rise of digital media, CAT got more involved in computer-mediated communication (CMC). Studies show that accommodative behavior also occurs in digital written communication. Both Thomson et al. (2001) and Bunz and Campbell (2004) examined accommodation in e-mail and found that users accommodate through politeness strategies and gender identity expectations to match their interlocutors, despite the absence of immediate feedback.

A few years later, Kroll et al. (2018) found in their study regarding instant messaging in hierarchically imbalanced situations that users converged their emoji use to match the communicative style of interlocutors in higher hierarchical positions. This indicated that accommodation is also a relevant phenomenon in digital synchronous mediated communication.



### 3.4.2. *State of the Art*

More recently, the scope of accommodation research has expanded to human-machine communication (HMC), which examines how people adjust their communicative behavior while communicating with technology (Giles et al., 2023).

Human-Machine Communication (HMC) reframes technology from a neutral medium to an interlocutor that actively participates in conversations (Giles et al., 2023). This perspective challenges conventional understandings of authorship and agency by showing that communicative roles and responsibilities are shared between humans and machines (Guzman, 2018; Guzman & Lewis, 2020). More recent work emphasizes that such forms of machine agency affect how individuals interpret everyday interactions and gradually reshape social reality (Sundar, 2020).

Research by Cohn & Zellou (2021) indicates that even in spoken interaction with AI voice assistants such as Alexa, users accommodate their speech style to the voice assistant.

The Computers as Social Actors (CASA) framework demonstrated that people apply social heuristics to computers, treating them as conversational partners (Nass et al., 1994; Reeves & Nass, 1996). It shows that users automatically apply unconscious social heuristics to technological systems, such as politeness, reciprocity and trust. Even in the conscious absence of intentionality, people interact with AI as if it were a social actor. Subsequent studies underline that anthropomorphic design and social cues deliberately elicit human-like responses and shape trust in AI interlocutors (Araujo, 2018).

While CASA was not formulated as a part of CAT, both frameworks intersect: CASA explains why users accommodate to computers, responding socially to anthropomorphic cues, while CAT explains how these accommodations manifest. Branigan et al. (2010) illustrated in their research that users even align lexical and syntactic choices with computer output just as convergence processes in human interaction.

Today, these CAT dynamics extend into Human-AI communication as well. Through their display of social cues and anthropomorphic features, AI chatbots tend to be treated as social actors by humans (Araujo, 2018; Rafikova & Voronin, 2025). When

chatbots employ social and human-like cues, such as empathy, personalization and conversational warmth, they are perceived as more human, strengthen emotional connection and encourage greater user engagement (Rafikova & Voronin, 2025). Another study found that adaptation is a reciprocal process, which also affects how users perceive their communicative partners. Biancardi, Dermouche & Pelachaud (2021) show that when virtual agents adjust their communication style to human interlocutors, they are perceived as more competent and engaging, and with that enhancing user involvement.

CAT's theoretical flexibility makes it well suited to trace accommodation from interpersonal exchanges through mediated and computer-mediated contexts to today's AI interaction.

### **3.5. Theoretical perspectives on the consequences of Human-Machine Communication (HMC)**

#### ***3.5.1. Mediatization Theory as societal framing***

Mediatization describes a metaprocess in which media increasingly penetrates and reshapes societal practices and institutions but at the same time being an independent institution one has to accommodate to (Hepp et al., 2015; Hjarvard, 2008; Krotz, 2007).

Human-AI communication represents a new stage in the process of mediatization, where algorithmic and data-driven logics become embedded in everyday interaction. Generative models such as ChatGPT not only determine what information is accessible but also how it is linguistically and rhetorically composed while recommender systems filter and prioritize content according to algorithmic criteria (Beer, 2017). From the perspective of deep mediatization, such basic tasks such as asking the chatbot to summarize a text or engaging it in a conversation regarding a research topic are part of a broader societal transformation since they normalize the conversation with AI systems as conversational partners and with that embed it even deeper in our social life and culture (Hepp et al., 2018; Hjarvard, 2008).

### *3.5.2. Humanization and Social Cues*

A further dimension of Human-AI communication (HAIC) concerns the humanization of artificial agents through social cues. Research in human-computer interaction has consistently shown that when technologies display human-like features, such as natural language, turn-taking or emotional expressions, users respond as if they were engaging with social actors (Araujo, 2018; Nass et al., 1994; Reeves & Nass, 1996)

In the case of AI chatbots, these dynamics are amplified since Large Language Models (LLMs) are designed to produce coherent, context-sensitive and often emotionally attuned responses (Araujo, 2018; Guzman & Lewis, 2020). By using conversational markers or empathetic phrasing, they invite users to perceive them as social partners rather than a technical tool (Følstad & Skjuve, 2019).

Research shows the consequences: Hohenstein et al. (2023) demonstrate that AI-generated smart replies influence human language production and in turn, affect interpersonal evaluations in everyday messaging, subtly shifting how humans perceive each other. Fang et al. describe that voice-based chatbot interactions can enhance engagement and temporarily reduce loneliness, but extended use may also lead to reduced social interaction and potential dependency. Similarly, Zang et al. (2025) find that exposure to unfair AI interactions diminishes subsequent prosocial behavior toward humans, suggesting that negative encounters with machines can spill over into human-human contexts. Misnawati et al. (2025) further report in their findings that efficiency-oriented AI communication may undermine authenticity and empathy, contributing to gradual shifts in communicative norms.

These dynamics of humanization have significant implications for communication since they blur the line between instrumental and social interaction. Moreover, it fosters communication habits and may influence how people evaluate authenticity, underscoring the need to critically examine how AI systems reshape the norms and boundaries of everyday interaction.

## **3.6. Research Gaps and Positioning of this Study**

Conversational AI chatbots are an evolving ecosystem rather than a static technology and several studies indicate that user motivations for interacting with chatbots evolve

alongside technological developments (Sundar & Limperos, 2013). Brandtzaeg & Følstad (2018) argue that recent improvements in AI and in the increasing use of messaging platforms have led to new user needs and motivations. Also in educational contexts, a recent study highlights that motivation is a long-term, dynamic factor that shifts as students continue to use conversational agents for longer periods of time (Huang et al., 2025). These findings suggest that user motivations and gratifications evolve with the technological landscape. As new features or forms of conversational AI come up and people gain familiarity in using them, the reasons why they turn to these systems shift and with them the gratifications they derive. Large Language Models such as ChatGPT represent a significant shift compared to earlier AI, raising the question of whether established gratifications still apply or new ones emerge (Brandtzaeg & Følstad, 2018) and given the evolving character of AI systems, the need to examine user motivations continuously remains.

Similarly, AI literacy is often reduced to technical knowledge, while its communicative and reflexive dimensions remain underexplored (Gu & Ericson, 2025). How users with varying familiarity of AI chatbots adapt their interaction styles, set boundaries, and make sense of chatbot use needs further attention.

Research on computer-mediated communication (CMC) and human-machine communication (HMC) shows how technologies shape conversational norms, yet the algorithmic nature of generative AI creates new dynamics that need closer exploration (Giles et al., 2023). In this context, communication accommodation theory (CAT) offers a useful lens, yet the adaptive practices of interlocutors in AI contexts remain insufficiently studied yet. Moreover, the possible spillover effects of Human-AI interaction into human-to-human interactions represent a relatively new field that requires further exploration (Hohenstein et al., 2023).

This study addresses the gaps by integrating established frameworks, such as U&G, AI literacy, CMC, and CAT, with the emerging field of Human-AI Communication (HAIC). Through a qualitative design, the study centers the lived experiences and reflexive interpretations, thereby hopefully contributing deeper insights into the role of AI in everyday communication.

### 3.7. Summary and Derivation of Research Questions

The theoretical discussion shows that through Human-AI communication (HAIC) a fundamental shift in how people interact with technologies is carried out. Existing research provides valuable insights from different theoretical perspectives but yet important gaps remain to be closed.

To approach these gaps, four central research questions have been posed, which are grounded in the theoretical frameworks outlined above. In the following, the research questions are derived and explained in relation to the respective theoretical framework and the study's overall objective.

From a communication studies perspective, the emergence and the rapid global spread of AI chatbots, such as ChatGPT, open up to new avenues of research. Generalist AI systems are explicitly trained to sound, write and have a conversation in the most-human manner and they have become an integral part of many individuals' everyday lives. These developments hold the potential to uncover new communicative phenomena, to reassess and to possibly expand current theoretical frameworks through the lens of Human-AI communication.

One of the first questions that typically arises when a new communication technology emerges is why people choose to interact with it. In the case of AI and generalist chatbots this is particularly worth exploring due to the rapid and widespread adoption. The fact that millions of users (Sigalos, 2025) began integrating tools like ChatGPT into their daily lives within a short amount of time suggests that these systems might not only fulfill existing needs but also reveal unconscious ones or even create new ones. To explore the users' motivations, the Uses and Gratification Theory (Katz, Blumler, et al., 1973) offers a useful framework. It focuses on the active role of people in selecting media to satisfy various kinds of needs and it has been applied to a wide range of technologies to explore how and why people engage with them (Katz, Blumler, et al., 1973).

Based on this, the first research question is as follows:

*RQ1: Which uses and gratifications motivate individuals to interact with generalist AI chatbots?*

Just as important as the understanding of user motivations is the concept of literacy in the context of AI. The technological development progresses with enormous speed, and so must individuals' competencies to keep up to make use of these new features or even tools. AI literacy refers to the ability to operate, understand and critically evaluate AI systems. This includes not just the technological know-how but also ethical awareness and the competency to interpret AI outputs correctly (Carolus et al., 2023; Long & Magerko, 2020).

In the context of generalist AI chatbots, the question of AI literacy becomes particularly important, as these systems are designed through Reinforcement Learning from Human Feedback to sound trustworthy, human-like and competent regardless of the actual quality or accuracy of their outputs (Lodoen & Orchard, 2025; Ouyang et al., 2022). This leads to the second research question of this research:

*RQ2: How does AI literacy influence the way users communicate with and adapt to generalist AI chatbots?*

From a communication studies perspective it is not only important to explore users' motivations or their skills in engaging with AI chatbots but also whether frequent interactions with these chatbots might affect users' communication style in general - and if this possible style change also extends into human-to-human interaction. The Communication Accommodation Theory, originally developed by Howard Giles (1973), investigates how individuals adapt their language and interaction style in response to different conversational partners to manage social distance (Giles et al., 1991a). While CAT was originally applied to spoken human-to-human communication, a later development of the theory also encompasses written, computer-mediated communication such as e-mail (Giles & Ogay, 2007). This theoretical extension suggests that CAT can also offer valuable insights into human-AI communication, especially when users engage with the chatbots through written dialogue. Subsequently, this leads to the third research question of this thesis:

*RQ3: Does interaction with generalist AI chatbots lead to observable changes in user's communication styles and if so, how do these changes manifest in human-to-human interactions?*

The final research question operates on a meta-level, investigating how individuals assign social meaning to Human-AI communication, beyond functional use and personal adaptation. This perspective draws from Mediatization Theory (Couldry & Hepp, 2017; Hepp, 2013), which focuses on the deep integration of media into everyday practices. This approach enables an exploration of how interacting with generative AI chatbots might gradually influence users' social norms, expectations and patterns of daily communication with AI and other individuals. This leads to research question four:

RQ4: How do users experience and interpret the effects of Human-AI Communication on their everyday interaction with others?

## **4. Methodology**

### **4.1. Research Approach**

For this study a qualitative research approach was selected for several reasons. Although it may feel as though AI has been around for a long time given the extent of usage by now, but this is not the case. Generalist AI chatbots such as ChatGPT were only made publicly accessible in late 2022 (*Introducing ChatGPT*, 2022). As a result, the field is yet relatively underexplored especially regarding users' subjective experiences, motivations and reflections. These aspects are particularly important for RQ1, concerning subjective motivations; RQ2, dealing with individual adaptation and AI literacy and RQ3 and RQ4 researching reflective shifts in communication styles.

Since AI is relatively young, it is also both timely and necessary to bridge established theoretical frameworks such as Uses and Gratification (Katz, Haas, et al., 1973) and Communication Accommodation Theory (Giles et al., 1991b) with the emerging phenomenon of Human-AI communication. But it is not only important to bridge but also to redefine or further develop frameworks such as media literacy with the new aspect of AI with regard to establishing an increasingly important AI literacy.

Methodologically the study was developed within the framework of Qualitative Content Analysis by Udo Kuckartz (2016). This particular framework and not the widely more popular framework by Mayring was chosen despite the fact that the frameworks are

essentially similar but with the distinction of the framework of Kuckartz leaving more space for inductive findings. This method is perfectly suited for analyzing interviews in a structured but yet flexible way to be able to capture more subjective details that might emerge from personal opinions and reflections. Qualitative content Analysis by Kuckartz allows for systematic interpretation of interview data combining deductive coding based on theoretical frameworks such as Uses and Gratification Theory (Katz, Haas, et al., 1973) or Communication Accommodation Theory (Giles et al., 1991b) with inductive category development to capture unexpected themes emerging from the interview data. These insights can contribute to the advancement of current research and lay the groundwork for a more quantitative approach in consecutive studies.

In sum, this chosen approach deliberately moves beyond the quantitatively oriented perspective in order to be able to explore how individuals experience, interpret and integrate AI-use into their everyday communication practices. This study seeks to generate through this qualitative approach in-depth empirical insights into how human communication is evolving through and in relation to interaction with generative AI chatbots.

#### **4.2. Method-Design and Interview Guideline Development**

To explore participants' motivations, AI literacy and perceived changes in communication behavior regarding the use of AI, a semi-structured interview design was employed. This format is well suited for the present study, as it provides a predefined interview guideline while still leaving room for flexibility in the order of questions depending on the situational dynamics and the flow of the conversation. Moreover, the semi-structured format allows the interviewer to ask follow-up questions or include additional prompts where appropriate, enabling a deeper exploration of participants' responses. This flexibility makes it possible to engage more closely with aspects and nuances that emerge as particularly relevant for the research focus and to devote greater attention to themes that might not have been fully anticipated in advance. The semi-structured character of the interview guide offers a strong basis for comparability, given that all participants respond to the same questions.



The interview guide was created in close alignment with the four research questions and the underlying theoretical frameworks such as Uses and Gratification Theory (Katz, Haas, et al., 1973), the Meta Artificial Intelligence Literacy Scale (Carolus et al., 2023) and Communication Accommodation Theory (Giles et al., 1973). Accordingly, it was both logical and methodologically appropriate to structure the questions into thematic blocks to ensure that each dimension was properly addressed.

The main part of the interview guide consisted of 17 open-ended questions and a range of follow-up prompts with each thematic block consisting of three to five questions. The questions were carefully phrased to be open and natural to give participants the freedom to formulate their answers without implying or steering them toward a particular direction. The follow-up prompts were only designed to either encourage further elaboration or to gently guide the interviewee back to the main question in cases where they had digressed or overlooked certain aspects.

The full interview guideline, including all questions and prompts, is provided in the appendix. In the following sections, the thematic structure is outlined with selected sample questions for each block.

The final semi-structured interview guide consisted of these following segments:

#### 1.) Opening Section: Initial Briefing and Ethical Introduction

At the very beginning of each interview, participants were introduced to the topic of this research, but the context was kept deliberately non-specific in order to avoid social desirability bias (Fisher, 1993), whereby participants provide answers they believe to be socially acceptable rather than their genuine views.

Participants were then informed about their rights as research participants. They were explicitly told that their participation is voluntary and that they can withdraw from the interview at any given moment without providing a reason. It was also explained to them that the interview will be pseudonymized, meaning all personally identifiable information will be removed or pseudonymized to ensure full personal privacy.

Participants were made aware that the interviews will be audio-recorded and partially transcribed with an AI-based transcription tool. But they were also assured that the tool will only be running locally on the researcher's computer and not on a data cloud

service – therefore providing full GDPR regulations compliance. In addition, participants were again assured that only the researcher and the supervising university professor will be able to access the data.

Before beginning with the actual interview questions there was a short disclaimer about the terminology being used during the interview. It was explained that the used term “AI chatbot” always refers specifically to general-purpose, generative AI systems, such as ChatGPT and not to limited-purpose customer service bots such as IKEA chatbot for example. This disclaimer was important to ensure participants had a clear understanding of what kind of chatbot was in the research’s scope in order to provide targeted answers. And finally participants were encouraged to answer in full sentences and were reassured that there are no right or wrong answers with the aim to mitigate, at least to some extent, the effects of social desirability bias (Fisher, 1993).

## 2.) Sociodemographic Context and Interview Entry

Following the initial briefing the interview guide started with a collection of sociodemographic information, including age, gender, occupation, highest level of education and nationality. This data was collected to enable more informed interpretations after analysis and to identify potential patterns or correlations across different participants’ backgrounds. To smoothen the transition to the actual interview questions the following easy icebreaker question was used: “Do you remember the first time you interacted with an AI chatbot?”

## 3.) Block 1: Uses and Motivations (RQ1)

The first thematic block consisted of five main and one follow-up prompt, focusing on participants’ uses and gratifications in their engagement with AI chatbots. The questions in this section were designed to explore the situational contexts, personal intentions and needs that lead participants to get in touch with AI chatbots. Special attention was paid to the domains in which chatbots are used, such as everyday, work or academic life. Subsequently it was especially important to not only understand the context of the use but also to understand what kind of gratifications individuals draw

from the interactions and why they choose to interact with a generalist AI chatbot instead of using other tools or turning to another human to get their needs met.

Example questions: “In which areas of your life do you use AI chatbots?” or “what benefits or needs does an AI chatbot fulfill for you?”

#### 4.) Block 2: AI Literacy and Understanding (RQ2)

Block number two consisted of three main and one follow-up question. In this section the focus was on exploring the AI literacy level and getting an understanding of how much knowledge participants have regarding how AI chatbots work, how they come to answers and how participants deal with their responses.

The development of the blocks' questions was guided by the Meta Artificial Intelligence Literacy Scale (Carolus et al., 2023) which was originally designed as a quantitative questionnaire. Since the MAIL Scale (2023) used closed-ended survey items in Likert format, it could not directly be applied in this quantitative interview guideline. Therefore, the key components, particularly the part concerning users' understanding of AI, trust in AI, ethical reasoning and data literacy, were taken as a conceptual basis and then reformulated into open-ended narrative-oriented questions. This adaptation kept the conceptual foundation of MAELS (Carolus et al., 2023) and still allowed it to be integrated and used as a base for this qualitative study.

The first question let participants describe freely how they believe a generalist AI chatbot works and how it creates their answers. The aim of this question was to explore whether participants have an explicit awareness of how a chatbot functions, specifically whether they understand that chatbots do not possess knowledge per se but produce answers through very sophisticated algorithmic processing and predictive language modelling.

After that, the second question was designed to explore whether and in which situations participants engage with AI-generated content critically and when they tend to accept it without further reflection. The follow-up question encouraged them to think about the conditions that influence their reflexivity.

The last question of the block explored if AI chatbots changed participants' research behavior or routine and the way of thinking. They were asked if their willingness to search for information or how they approach information in general had shifted.

Example questions "How well do you think you understand how an AI-powered chatbot like ChatGPT generates its responses?" or "Do you critically engage with the responses or do you tend to adopt them more directly? In which situations do you question the responses and when do you not?"

### 5.) Block 3: Communication and Adaptation (RQ3)

The third thematic block was constructed out of four main questions with two follow up prompts. The questions focused on participants communicative behavior in relation to their use of AI chatbots. This section drew on principles from the Communication Accommodation Theory (CAT) (Giles et al., 1991b), which explains how people adjust their language and style in response to their communication partners, in this case an AI chatbot.

The aim was to explore how individuals phrase their input for the AI chatbot. It was important to be able to understand if participants would use the same language they normally use, or if they would talk more formally or maybe just type keywords. To properly investigate this topic, participants were asked to phrase a prompt for a simple everyday problem. The task involved an everyday situation in which they had to prepare a cake but realized they were missing eggs from the recipe. This scenario was chosen because it was assumed to be relatable for a diverse participant group with no special expertise needed.

Another focus of this block was to explore how aware participants are of the growing presence of AI in communicative contexts. They were asked whether they sometimes consider the possibility that a neutral and highly structured text may be written by AI. This question was designed to understand how participants perceive AI-generated content and how much they are aware of the stylistic characteristics they associate with it and whether they attribute any particular features or patterns to AI content.

The last question of this thematic block was designed to investigate possible changes in participants' own communication style especially in written communication since they interact regularly with AI chatbots. Participants were asked to reflect about their own communication regarding changes, new vocabulary, phrases and sentence structure. The goal was to research if linguistic adaption might go beyond human-machine interaction and begin to influence human-to-human communication as well.

Example Question: "How do you prompt? Are there specific things you pay attention to when formulating your prompts for generalist AI-chatbots – for example in terms of language, style, spelling or sentence structure?"

#### 6.) Block 4: Reflexivity and Everyday Interactions (RQ4)

The last thematic block consisted of five main and two follow-up questions and addressed how participants reflect on the broader impact of AI in their lives and how they perceive the role that AI plays in their everyday routines. Participants were asked to evaluate the difference they experience between interacting with an AI chatbot and communicating with another human being in terms of emotional or relational contexts. They were also asked to reflect on the questions if they can imagine a situation where they would specifically do not want to talk to an AI and would rather have a human-to-human conversation.

In addition to reflecting on their own personal use of AI, participants were asked to discuss the broader societal impact of the widespread AI use, especially with regard to potential effects on the environment and society. They were encouraged to draw from their own knowledge, observations or experiences and to really explore these topics in depth.

The aim of this block was to connect participants' individual views on AI use in their own lives with their reflective perspectives on the societal impact of widespread AI adoption globally. This connection is highly important to understand how participants make sense of AI use beyond individual use and how they position themselves within larger, global and societal discourses.

Example Questions: “Are there situations in which you deliberately choose not to talk to AI and instead prefer to ask a human?” or “When you look back: Has your world changed through AI-powered chatbots like ChatGPT, in your professional life, private life, everyday situations or in your way of thinking? And if so, how?”

## 7.) Closing Section

In the closing section of the interview participants were asked whether they had any final questions or remarks regarding the interview or the research project in general. After that, they were once more assured that all data would be pseudonymized and processed according to GDPR regulations.

## 4.3. Sampling Strategy and Participant Overview

### 4.3.1. Sampling Strategy

A purposeful sampling was deployed to recruit participants who could offer the most diverse, relevant and rich insights into the research questions. This sampling method was chosen because as the name already states purposive sampling enables the deliberate selection of participants in a way that, while not statistically representative, still allows for a balanced gender distribution and the inclusion of individuals with varying levels of expertise. With this approach it was possible to capture a broad range of experiences, perspectives, motivations and reflections from participants with a spectrum of expert levels within a qualitative research design.

People were recruited by the researcher through direct outreach and personal or professional networks. Given the qualitative, non-representative character of this study, the researcher’s own judgment played an important role in selecting suitable participants. In some cases, as described below, prior knowledge about participant’s experience with AI helped to identify individuals who could contribute relevant perspectives.

Participants were selected based on three criteria: the first inclusion criterion was age. Only individuals aged 18 or older were included in the sample to ensure legal capacity for providing informed consent without the need of parental approval. The second

inclusion criterion was that possible participants must have used generalist AI chatbots at least once in their life to be part of the study. This ensured that all participants had a minimum level of familiarity with AI chatbot use to be able to understand and to engage with the topic of the questions in a meaningful way. The last criterion was the participants' level of AI literacy. Since AI literacy levels were not beforehand quantitatively measured by a standardized scale such as MAILS (Carolus et al., 2023), they had to be assessed based on participants' self-reported expertise and the researchers' prior knowledge of the participants' AI literacy instead. Individuals with a high level of AI expertise were not just regular users but worked professionally in AI-related fields such as development, research or education. Their professional involvement and ongoing training ensured up-to-date knowledge and therefore a high expertise in the topic. The aim was to include individuals across the AI-knowledge spectrum, from casual users to experts, in order to capture a diverse picture of chatbot interactions.

Efforts were made to not only include a broad range of different AI expert levels but also to provide a well-mixed and diverse sample in terms of gender, age and educational background even though the sample is not intended to be statistically representative of the population in general. This approach tried to gain insightful and in-depth information by selecting information-rich cases and therefore chose variability of perspectives over generalizability. Nevertheless, as previously mentioned, care was taken to ensure as much diversity as possible across multiple dimensions in order to approximate representativeness and to allow for potential type-building in the analysis. However, it should be noted that geographical background was limited to three countries since this research was conducted in Austria with approximately half of the interviews taking place in person. As discussed, the researcher applied a purposive sampling strategy and participants were selected from her personal and professional network which is largely an academic environment. Therefore, the sample includes a disproportionately high number of individuals with academic levels of education.

#### *4.3.2. Sample*

The final sample consisted of 18 participants in total, including nine female, eight male and one non-binary individual. Participants ranged from age 22 to 58 years and came

mainly from Austria and Germany with only one individual of Polish nationality with residence in Austria. The educational background varied from one individual with compulsory schooling, to five participants with “Abitur/Matura”, which resembles the German/Austrian general university entrance qualification to twelve people with university degree. Four of them have a bachelor’s degree and five with a master’s degree; the remaining three participants simply stated that their highest form of education was an academic degree without specifying what type.

In terms of occupational backgrounds, people held diverse positions, from university students to start-up founders over marketing and management positions in large companies as well as IT specialists and AI workshop facilitators. The sample was also deliberately composed with a variation of AI literacy levels and categorized by participants’ self-assessment and the researchers’ prior knowledge of participants’ experience. These categories consisted of *high*, *medium* and *low* AI literacy levels and considered occupational involvement with AI, frequency and type of interaction with AI chatbots and described knowledge of AI mechanisms as classification criteria for the respective category. Considering these three AI literacy levels, the sample consisted of four participants with high, eleven with medium and three with low experience



**Table 1 - Sociodemographic Information Of Participants**

| <b>ID</b> | <b>Sex</b> | <b>Age</b> | <b>Education</b>                                      | <b>Occupation</b>                                                  | <b>Nationality</b> | <b>AI-Level</b> |
|-----------|------------|------------|-------------------------------------------------------|--------------------------------------------------------------------|--------------------|-----------------|
| P01       | Female     | 29         | Bachelor's Degree                                     | Sales Enablement Manager in Marketing                              | Austria            | Medium          |
| P02       | Non-binary | 30         | German General University<br>Entrance Qualification   | University student and part-time employee<br>in quality management | Germany            | Low             |
| P03       | Male       | 33         | Compulsory Schooling                                  | Founder of IT Start-up and Advertising                             | Austria            | Medium          |
| P04       | Male       | 28         | Austrian General University<br>Entrance Qualification | Founder of IT Start-up and Faciliator of AI-<br>workshops          | Poland             | High            |
| P05       | Female     | 28         | Bachelor of Science                                   | Projekt Manager in the analytic sector                             | Germany            | Medium          |
| P06       | Male       | 58         | Diploma of Business<br>Administration                 | Commercial Employee of a large company                             | Germany            | Low             |
| P07       | Male       | 24         | German general University<br>Entrance Qualification   | Journalism Student                                                 | Germany            | Medium          |
| P08       | Male       | 26         | Bachelor of Arts                                      | Digital Marketing Manager                                          | Germany            | Medium          |
| P09       | Male       | 31         | Master of Science                                     | IT Security specialist                                             | Austria            | High            |
| P10       | Male       | 39         | Academic Degree                                       | IT Security specialist                                             | Austria            | High            |
| P11       | Female     | 27         | Master of science                                     | Employee in Human Resouces department                              | Austria            | Medium          |
| P12       | Female     | 30         | University Degree                                     | Course planning                                                    | Austria            | Medium          |
| P13       | Female     | 30         | University Degree                                     | Employee in banking sector                                         | Austria            | Medium          |
| P14       | Female     | 29         | Austrian General University<br>Entrance Qualification | Specialist Advisor                                                 | Austria            | Medium          |
| P15       | Female     | 42         | University Degree                                     | Employee                                                           | Austria            | Medium          |
| P16       | Female     | 28         | Master's Degree                                       | Campaign Manager                                                   | Austria            | Medium          |
| P17       | Female     | 28         | Bachelor's Degree                                     | Employee in cultural sector                                        | Austria            | Low             |
| P18       | Male       | 22         | Advanced Technical College<br>Entry Qualification     | Dual study program student                                         | Germany            | High            |

This sample composition allowed for a wide variety of AI usage in different occupational contexts and across different AI literacy levels, providing a well-balanced ground to explore the user's uses and gratifications as well as their communicative adaptation when interacting with AI systems. It also ensured that all four research questions and the underlying theoretical concepts could be addressed and explored thoroughly.

#### **4.4. Data Collection Procedure**

The interviews were conducted over a two-week period, from July 16 to July 29 in 2025. A total of 18 interviews were conducted; nine of them were conducted online via Microsoft Teams and eight were conducted; in person. The platform Microsoft Teams was chosen because it offered a secure, widely accessible and user-friendly interface. Participants were asked to open the provided link in an incognito browser window to prevent a Teams account of that person, if one existed, from being linked to the

interview session. Through this approach the need for a log-in through that account was eliminated and therefore the risk of personal data being displayed or stored by the platform was minimized.

The location for the in-person interviews was thoughtfully chosen in terms of accessibility and privacy to minimize participation barriers and to support comfortable surroundings. Interviews took place in a closed room that was specifically rented for this purpose. It was centrally located, easily accessible and provided a quiet, disruption-free atmosphere.

All interviews were conducted in German, since it was the native language of all participants and the research was based in Austria. The interviews lasted between 35 to 60 minutes, depending on how detailed the participant's response was and how well the interview flow went.

Both in-person and online interviews were audio-recorded to ensure seamless transcription later. The audio recording was performed by an iPad with the Voice Memos app, which had proven to deliver the best audio quality and to be the most reliable among other recording devices that were tested beforehand.

Before the recording was started, participants were informed that the interview would be voice-recorded and later on transcribed with an AI-based voice-to-text transcription tool called Whisper. They were also assured that the interviews would be pseudonymized and that the tool only operates locally on the researcher's computer. This ensures that no data would be stored in the cloud or would be used for AI-training purposes and therefore being fully compliant with GDPR regulations. Lastly, participants were informed that only the researcher herself and her supervising professor will have access to their data.

At the beginning of each interview, participants were welcomed and shortly introduced to the research purpose. Then they were reminded of their right to withdraw from the interview at all times without explanation. Furthermore, they were informed about data protection measures, the voice recording and the transcription process with the AI-tool. Participants were also referred to the university's ethic committee if any concerns regarding this research would arise. Consent to the interviews was obtained either orally, for online interviews, or in written form, for in-person interviews. For in-person

interviews the audio recording began after consent was given, once the interview started. In the nine online interviews, participants were explicitly asked whether they agreed to begin the voice recording before their official verbal consent was given in order to be able to document that consent to the interview and its procedures.

The interviews were conducted in a semi-structured format, with the researcher always aiming to create a relaxed, conversation-like atmosphere to promote openness and honest responses by participants. Each session began with an icebreaker question and ended with a brief oral feedback round. Participants were generally highly cooperative and eager to answer the questions thoughtfully. Many expressed interest in the topic and noted that the interview inspired them to reflect more deeply on their own AI use.

Three interviews were affected by technical issues that caused interruptions in the video call, which unfortunately impacted the conversation flow from time to time. These interviews also posed as a problem for the AI transcription tool. Therefore, a manual correction loop of these transcripts had to be performed. Furthermore, one participant repeatedly switched into spoken dialect, which also posed a challenge for the AI. This case as well had to be manually retranscribed to ensure accuracy.

After these four cases had shown clear problems with the transcription accuracy, all other interviews were once again reviewed in terms of accuracy and completeness. During this process, it became obvious that the tool Whisper is helpful for basic transcription especially when it came to capturing the general meaning of a sentence. However, for this study, a word-for-word transcription was necessary to reflect all nuances of the participants' statements. In some cases, the tool Whisper even changed the core meaning of a sentence due to its AI-driven text completion that shifted sentence endings in a direction the interviewee never articulated. This discovery made the careful manual review and correction of all transcripts necessary to ensure the content was captured correctly.

## **4.5. Qualitative Content Analysis**

### *4.5.1. Methodological Approach*

For this research the structuring qualitative content analysis by Udo Kuckartz (2016; Rädiker & Kuckartz, 2019) was chosen. This approach was selected because it allows systematic categorization alongside existing theoretical frameworks while still remaining open to new inductive insights. The method is well suited for this research project since the aim was to explore predefined conceptual dimensions that are well researched and established in other communicational contexts such as, for example, the Uses and Gratification Theory (e.g. Katz, Blumler, et al., 1973; McQuail & Deuze, 2020; Sundar & Limperos, 2013), while applying them to the relatively new phenomenon of AI chatbot use. At the same time the method allows for the exploration of new individual perspectives and usage nuances throughout the research process by capturing these aspects that may not have been fully reflected in the existing theoretical models. The possibility with this method to keep the category creation open for new emerging aspects during the coding process may help to shed new light on existing concepts or confirm that these established theoretical frameworks also apply to the new phenomenon of AI.

As Kuckartz describes, during the process of qualitative content analysis categories are often redefined and if necessary, new categories are added as a result of the intensive engagement with the material (2016, p. 47). In line with this, the coding system was developed using deductive categories derived from the research questions and their underlying theoretical framework, especially drawing from the Uses and Gratifications Theory (Katz, Blumler, et al., 1973; Sundar & Limperos, 2013; McQuail & Deuze, 2020), Communication Accommodation Theory (Giles et al., 1991b) and the Meta AI Literacy Scale (MAILS) (Carolus et al., 2023) and inductive categories that have emerged during the coding process. These inductive categories primarily served as additions or extensions to the deductive categories or subcategorized them more granularly.

All transcribed interview data was uploaded to the tool MAXQDA24. The tool was used to systematically organize the uploaded data, to develop the coding system and to code the interviews based on this established coding framework.

#### 4.5.2. Development of the Category System

The initial codebook was developed based on the underlying theoretical concepts of this research. During the first round of coding, the structure turned out to be too complex due to constant refinement of the categories. The new emerging categories were not clearly alignable with the original theoretical frameworks. This led to the creation of additional main categories and lastly resulted in an overload of categories and a very long and complex code system, which complicated the coding process enormously. As a result, the decision was made to reorganize the codebook alongside the four research questions to allow more flexibility in category development within these four broader main categories to ensure a leaner and more structured coding process.

As described above, the code system was developed with a theoretical foundation and empirical insights from the interview data. The four main categories were initially derived from the four research questions and their theoretical frameworks. These four categories were “RQ1 – Motivations For Using AI Chatbots”, “RQ2 – AI Literacy”, “RQ3 – Change in Communication Style” and “RQ4 – User Interpretation of Human-AI Communication”.

For the first main category “RQ1 – Motivations For Using AI Chatbots” the Uses and Gratifications Theory by Katz, Blumler and Gurevitch (1973) originally established the foundation for this codebook section. It was divided into three subcategories: Uses, Gratifications and Context of Use.

The “*Uses*” category included all codes that described how participants engage with AI chatbots and what they use them for. Level three categories were developed inductively and included aspects such as “*task-related use*”, “*informational use*” or “*exploration/play*”.

The “*Gratification*” category on the other hand was derived deductively. McQuail (1987) builds conceptually on the early framework by Katz et al. and systemizes user motivations for media use into five areas: information, personal identity, social interaction, entertainment and escapism. Sundar and Limperos (2013) introduced another aspect: affordance-based gratifications, which take into account how digital and interactive media themselves shape user expectations. For this research all stated

gratifications were grouped and formed the following level three categories: *“cognitive”, “affordance-based”, “social” and “emotional gratifications”*.

The third subcategory *“Context of Use”* was added inductively to be able to better capture the situational or environmental background of AI chatbot use. Third level categories were: *“usage situation” (private, professional or educational context)* and *“affective motivational state during use” (e.g. laziness, discomfort, overwhelm)*.

The second main category *“RQ2 – AI Literacy”* was developed on the basis of the Meta Artificial Intelligence Literacy Scale (Carolus et al., 2023). The scale originally consisted of eight thematic blocks but only seven were used as subcategories for the code system. The category *“Create AI”* was excluded since such deeply technical knowledge was not expected from average generalist AI chatbot users. The final coding structure consisted of the following subcategories: *“Application/Prompting Skills”, “Understanding and Evaluation”, “Detecting AI-generated Content”, “AI Ethics”, “AI-Self-Efficacy/Problem Solving”, “Learning” and “Emotion Regulation”*. Five of the seven subcategories have third-level categories. While some of these dimensions were taken from MAILS (Carolus et al., 2023), the majority of them emerged inductively during the coding process. Examples for level three categories within *“Application/Prompting Skills”* were: *“Single-Prompting Strategy”, “Multi-Prompting Strategy” and “Output Style Specifications”*. The category *“Understanding and Evaluation”* is further divided into *“General Understanding of How AI works”, “Awareness of Limitations” and “Critical Reflections on AI Output”*. *“Detecting AI-generated Content”* was coded when participants reflected on their ability to detect content that was created by AI. *“AI Ethics”* consisted of four subcategories: *“Environmental Concerns”, “Societal Consequences”, “Privacy and Data Concerns” and “Moral Boundaries”*. Under *“AI Self-Efficacy/Problem Solving”* two further categories were established based on the data: *“Confidence in AI-related Skills” and “Handling Problems independently”*. The subcategory *“Learning”* referred to participants’ own learning curve with new AI systems and was divided into *“Staying up to Date” and “Adapting to New Tools and Changes”* as level three categories. Lastly, the subcategory *“Emotion regulation”* was applied when the participant described how they managed their emotions, such as anger or frustration, during AI use.

The third main category “RQ3 – Change in Communication Style” consisted of two subcategories which were as follows: “*Linguistic Accommodation*” and “*Transfer To Human Communication*”. The third level categories of “*Linguistic accommodation*” were broken down into four more categories: “*Convergence*”, “*Divergence*”, “*Overaccommodation*” and “*Maintenance*”. These categories were originally derived from the Communication Accommodation Theory by Giles et al. (1991a). While CAT was initially developed in the context of spoken face-to-face communication, it has since been extended by Giles & Ogay (2007) to computer-mediated and written communication as well, making it applicable for AI chatbot use. These categories describe different ways in which participants adjust, or consciously do not adjust, their communication behavior to a conversation partner (Giles et al., 1991b).

The second subcategory was added to the code system to explore potential spillover effects from human-machine to human-human communication with the following third level codes, which were derived inductively: “*Using AI-generated Expressions with Humans*”, “*Adopting Prompt-like Structure or Formality in Human Communication*” and “*No Changes Observed*”.

“*RQ4 – User Interpretation of Human-AI Communication*”, the last main category of the code system was created completely inductively and divided into two subcategories “*Reflexive Awareness*” and “*Role of AI*”. This section was designed to capture participants’ reflections on their own use of AI chatbots and to map those reflections to categories. Within “*Reflexive Awareness*” several third-level codes emerged, including “*Reflexive Awareness without Impact*”, “*Perceived Self-Change*”, “*Media Routine Change*”, “*Communication Styles Awareness*”, “*Boundary Setting*”, “*Humanization & Social Cues*”, “*Perceived Social Effects*” and “*Normative Reflection*”.

The second subcategory, “*Role of AI*”, focused on how individuals perceive the role of AI in their lives or how they actively reject certain roles. This included the following subcodes “*Assigned Roles*”, “*Rejected Roles*” and “*Human vs. AI – Communication Role Difference*”.

The entire code system was developed in the English language in the hindsight that also the research report would be written in English as well. This was done to ensure terminological consistency and to avoid nuanced translation issues later in the process.

#### *4.5.3. Coding Procedure and Quality Assurance*

The coding process started immediately after the transcripts had been reworked and finalized. MAXQDA24 was used as the software tool for the analysis of the data to ensure the adequate documentation of the analytical process and to promote reconstructability.

To ensure the quality of the data analysis, a pilot coding with two interviews was conducted to test the initial codebook, which had been structured on the basis of the theoretical frameworks. However, this codebook structure proved to be too complex and inflexible since it left only little room for emerging subcategories or modifications. As a result, the code system was reorganized alongside the four research questions which not only left more space for inductive categories but was also aligned with the structure of the questions of the interview guide. This change significantly improved the coding workflow.

The coding process consisted of two rounds. In the first round, material was coded deductively using the established main categories while emerging subcategories were subsequently added when necessary. In the second round of coding, the entire data was recoded with the codes established in the first round. All categories were reviewed, refined or merged based on their relevance or frequency of occurrence.

Ambiguous segments were assigned to multiple relevant codes if necessary and a memo note was added with the context of the coded segment to ensure that overlapping, ambiguous statements were captured properly without changing their meaning.

Both coding rounds were conducted by the researcher herself. To support consistency and transparency throughout the coding process, code memos with anchor examples and distinctions to other codes were established and documented in the codebook. These anchor examples were either taken directly from the data or in some cases, generic examples were created to represent the code in a more neutral and understandable way.

The coding was performed based on meaning units rather than sentences or interview paragraphs (questions), in order to be able to reflect all contextual nuances within the data properly.



#### *4.5.4. Ethical considerations in Data Analysis*

Throughout the analysis process, careful attention was paid to ethical standards concerning data protection and the privacy of participants. This began already during the data collection phase, where care was taken to ensure a private and undisturbed setting for all interviews to minimize interruptions or unintended information disclosure. During data analysis, all interview data were pseudonymized and all identifiable personal data were altered or removed. In the results section, participants are labeled with an ID (*P01-P18*). Each label also includes the participant's AI literacy level (low/medium/high), which was assigned by the researcher, as described above. For example, *P18\_high* refers to Participant 18, who was assessed with a high level of AI literacy.

Access to the research data was strictly limited to the researcher and the supervising professor for evaluation. The AI-based transcription tool Whisper was used only locally on the computer of the researcher to prevent cloud processing or AI training with the data.

#### **4.6. Reflection on Research Ethics and Positionality**

This research was conducted by a master's student in communication sciences working in a professional environment where AI technologies have become incredibly prominent and relevant. This study was inspired by the observation that the increased use of hyphens in written human communication occurred. The em-dash, frequently used by various AI chatbots, has become more socially acceptable in human communication as well. While most users do not differentiate between em-dash and en-dashes, they often simply use a hyphen due to its accessibility on standard keyboards. Nevertheless, the frequency and the communicative function of this phenomenon have changed noticeably potentially reflecting influences of AI use.

Due to the purposive sampling strategy, several participants were recruited from environments close to the researcher. This could be seen as less conventional from a scientific standpoint or as a disadvantage leading to subjective outcomes but it likely enhanced trust and openness, resulting in rich and reflective data while still

maintaining professional distance through the process of audio recording and the semi-structured interview guide.

The coding process was carried out by one researcher. To reduce subjectivity, a codebook with clearly defined categories and anchor examples was developed and maintained. Coding decisions were carefully documented with memos in MAXQDA24 and small breaks were taken between coding phases to support reflexivity of the researcher to ensure a more objective and consistent coding process.

There were no ethically questionable statements during the interview, but many participants expressed concern, reflection and even unease about their own use of AI technologies at the end of the interviews.

## **5. Empirical Findings**

### **5.1. Overview of the Data and Coding Process**

The empirical findings presented in this chapter are based on 18 semi-structured interviews. All interviews were fully transcribed and subsequently coded in MAXQDA with the outcome of 1720 coded segments. This material forms the basis for the structuring of qualitative content analysis, in which the codes were clustered under the four research questions.

The coding system consisted of both deductively derived theoretical expectations and inductively developed categories emerging from the material. In addition, two meta-codes were included as contextual markers: (1) the usage situation in which participants engaged with AI (work, private or university) and (2) the affective-motivational state that led to the chatbot use. Although these two codes were treated as meta-codes, they were categorized under RQ1 since their overarching function was to situate user statements regarding why individuals turn to AI chatbot use, which is the main focus of RQ1.

Table 2 provides an overview of the structure of the final coding system. It comprises four main categories aligned with the research questions, 14 subcategories, 48 second-level subcategories and 24 third-level subcategories.

*Table 2 - Distribution Of Codes Across Levels Of The Coding System*

| Research Questions                              | 1st - Level Subcategory | 2nd - Level Subcategory | 3rd - Level Subcategory |
|-------------------------------------------------|-------------------------|-------------------------|-------------------------|
| RQ1 - Motivations for using AI chatbots         | 3                       | 12                      | 24                      |
| RQ2 – AI Literacy                               | 7                       | 18                      | -                       |
| RQ3 – Communication Style Change                | 2                       | 7                       | -                       |
| RQ4 - Interpretations of Human-AI Communication | 2                       | 11                      | -                       |
| <b>Sum</b>                                      | <b>14</b>               | <b>48</b>               | <b>24</b>               |

In reporting the number of coded segments, all occurrences were included, regardless of whether they expressed positive or negative evaluations. For one code, however, the frequency of the negative expressions was particularly high, which led to the split into a positive and a negative subcode in order to capture the participant's differentiated view on this matter. Therefore, the reported frequencies should not be interpreted in a statistical sense but rather as a descriptive orientation, highlighting codes and themes that occurred more frequently than others and showed recurring patterns and contrasts.

The following sections hence represent the results structured in line with the research questions. Within each section, results will be structured by descending order of empirical importance.

## **5.2. Motivations for Using Generalist AI Chatbots (RQ1)**

### **5.2.1. Uses**

The analysis reveals that participants engage with generalist AI chatbots in a wide range of different ways. These diverse uses can be grouped into three overarching usage themes: *functional*, *relational* and *exploratory*.

*Functional uses* capture activities such as summarizing, writing assistance or information retrieval; *relational uses* group instances where participants used the chatbot as an emotional or social source for support and under *exploratory use* all codes that describe any form of creative, playful or curiosity-driven use of an AI chatbot

are summarized. These three different categories show how diversely participants use AI chatbots and help to systemize the bandwidth of usage applications observed in the data.

Beyond the categorization, the interviews reveal noteworthy differences in how participants recall and reflect on their chatbot use. Some are able to easily give a few usage examples, while others struggle to remember concrete examples. In several cases, participants start to recall further chatbot-use instances as the interview unfolds, suggesting that the AI use is already so deeply integrated into their daily routines that they no longer consciously register their use anymore. Furthermore, some even state that it's hard for them to recall what life resembles without the incorporation of AI chatbots into their tasks and activities. This points to a strong degree of habituation, in which AI technology is no longer perceived as new but rather seen as a normal part of daily life.

For some, the interview even serves as a moment of discovery, in which they realize additional ways the chatbot might be useful to them.

The findings highlight both the diversity and the routinization of chatbot use. The subsequent sections present the findings according to the research questions to show how these practices relate to the study's analytical focus.

#### 5.2.1.1. Task-related Uses

Task-related use refers to situations in which participants draw on generalist AI chatbots to accomplish concrete tasks or to pursue productivity-related goals. In this sense, the chatbot functions primarily as a pragmatic tool that supports task completion and problem-solving in everyday activities. This category includes a wide range of practical applications, including drafting texts, coding, scheduling, summarizing information, or checking language and grammar. Across all interviews, task-related use emerges as the most frequently occurring form of use. It is most frequently reported in professional contexts, reflecting the everyday demands of work-related tasks. Private applications and other contexts such as university-related ones are also common and will be discussed in detail in the section of the regarding chapter. This category focuses on functionality and productivity, which distinguishes it from

other use categories, as the primary motivation is not creative exploration or relational engagement but rather the successful and efficient completion of tasks and assignments. Within the material, three subcategories are especially prominent: *text production and writing assistance*, *summarizing*, and *feedback or translation*. These subcategories form the main reasons why participants turn to AI chatbots in the first place and are therefore examined in more detail in descending order of their empirical prominence in the following sections.

### 1. *Text Production & Writing Assistance*

The category *Text Production & Writing Assistance* emerges as the most frequently reported subcategory of *task-related use*. It summons all situations where participants stated that they use the AI chatbot either to produce new written text or to support in drafting, rephrasing or rewriting existing content, in this way functioning not only as a generative tool for composing complete texts but also as a correction and review tool that helps improve existing content by rephrasing, changing the structure and clarifying meaning.

Within this subcategory, participants most frequently mention the AI chatbots' role in supporting with everyday writing tasks. A central theme is the drafting and rephrasing of e-mail correspondence, often with the goal of sounding more professionally: "Above all, when it comes to wording, for example something like having an e-mail text rewritten or drafted..." (P16\_medium). Beyond achieving a professional tone, participants also report using the chatbot for spelling and grammar checks and to generate alternate phrasing or to provide inspiration when they feel stuck in the writing process, as well as to ensure that their texts are coherent and understandable. One participant mentions they use the chatbot: "...to go through the grammar again, read the text again, check whether it all makes sense, check the spelling. Because in my head it all makes sense, I've said everything important, only whether the message is actually conveyed, that's the laborious part." (TN07\_medium).

Beyond e-mail communication, participants also describe using the chatbot for social media copywriting, particularly related to their professional life. For example, a digital manager creating copies for corporate social media channels: "So even when it comes back to my work area, a social media text -I also like to specify a range, how many words it should have, whether it should use emojis, or whether bullet points should be

used or not, what the CTA should look like...” (P8\_medium). Others mention composing personal posts for professional networks, such as writing a career-related update on LinkedIn, with the AI chatbot in order to achieve a more professional tone.

In addition, some participants mention job application drafting as an AI chatbot usage situation: “Otherwise I use it for job applications, for letters of motivation, so I just always put in the job posting and my letter of motivation, the general one, and then I use ChatGPT. And then I ask it to write me a letter of motivation tailored to the posting from those two documents.” (P12\_medium).

In summary, participants describe both a sense of pressure to facilitate AI chatbots and a feeling of relief, as these tools enable the completion of tasks faster and easier. Several interviewees express the perception that not using an AI chatbot would put them at a disadvantage particularly regarding the quality and timeliness of their work. The results also reveal differences of chatbot use in regard to the AI literacy levels of participants: Interviewees with higher AI literacy levels tend to treat the text production and writing assistance as one facet of the chatbot’s capabilities. For them, this function represents the baseline for their more advanced purposes, such as creating specialized bots for certain actions. By contrast, participants with lower AI literacy levels often perceive text production and writing assistance itself as a breakthrough in their daily work life.

## 2. Summarizing

The subcategory “*Summarizing*” is the second most frequent code under “*task-related uses*”. Participants report using AI chatbots to condense longer texts and to distill the key messages into shorter text versions. In this way, the chatbot is seen, on one hand, as a tool to gain an overview over a rather complex or extensive topic without necessarily focusing on detailed understanding and on the other hand, as a tool for handling large amounts of information more efficiently.

Participants describe two main approaches within this category. On the one hand, they use the chatbot to get an overview of a topic. In these situations the chatbot is facilitated to grasp an entry point into the topic by providing the basic information needed to either guide further research or to support decision-making on the basis of the provided facts. One participant describes it as follows: “...to get a selection of

information that you then want to look into more closely yourself. I think that's the exciting part about it." (P04\_high). Several interviewees also emphasize that they turn to the chatbot in order to get a general sense or feeling about a particular topic or situation before investing more time and effort into it. One Interviewee mentions that they use the AI chatbot "...to get a general feeling or to find out some basic things, like for example: 'give me a short overview of the company XY.'" (P15\_medium). In these cases, the aim is less to obtain an overview of the factual situation and more to develop a first orientation of how a topic or situation might be understood or interpreted. In this sense the chatbot is more used as a help to categorize topics and situations, as a sense-making tool.

On the other hand, participants engage with the chatbot to condense complex or extensive material, which would be highly time-consuming to view, into shorter more accessible versions. One participant explains that they use an AI chatbot to summarize e-mail conversations: "I use AI, for example, really gladly like this: 'summarize for me the e-mails from the last two years from this-and-that sender.' Bam, it's there and of course with the links to the respective e-mails." (P13\_medium). Another big use case for interviewees is the summarization of demanding content, such as long-ongoing global political issues or complex academic literature. One interviewee mentions: "...also for university, for example to summarize university texts that I have to read, or to pull out the most important points, that just saves you hours and hours of work." (TN1\_medium). In these cases, the focus lies on the AI chatbot being used as a strategy to handle large amounts of information more efficiently.

In summary, participants often use AI chatbots as a step before turning to search engines, either to gain an initial picture of a topic or to summarize large amounts of information. The difference between AI literacy levels lies in what participants do with the output. Interviewees with higher literacy levels tend to use the output as an entry point for further research while participants with lower literacy levels are more likely to take the output as a given fact. This distinction will be discussed in greater detail in a later section.

### 3. Feedback & Translation

*"Feedback and Translation"* is a smaller but not less important task-related AI chatbot use. Participants engage with the chatbot to get feedback on digital and also non-

digital material, through uploading photos or artworks, for example, as well as texts, presentations, codes, ideas or any other type of material they choose to submit for constructive improvement or valuation. One participant states: “I find it very practical for work, because it makes some things easier for me. For example, I can have a text reviewed again to see if it’s better to rephrase it.” (P15\_medium). Several participants also state that they see the feedback as a way of seeking reassurance and collecting an additional perspective on their work.

The other frequent application within this subcategory is “*translation*”. Participants describe using the chatbot as a conversational dictionary, which has the advantage of being able to process contextual meaning and sentences instead of just translating individual words. Some people describe that they have a learning effect through the translation process since they pick up specific words and phrases from the chatbot’s output, as one participant states: “But when I write texts in English and I’m not sure whether I wrote it properly or if it sounds a bit odd, since it’s not my native language, I sometimes ask ChatGPT to comment on whether you would write it like that. And yes, I try to polish up my English skills through that.” (P18\_high).

In sum, this category shows that participants not only use the AI chatbot to generate material but also to review, refine and for translation purposes. Some interviewees see these functions, especially translation, as ambivalent. On one hand, participants say, the chatbot use reduces their own efforts in actively phrasing sentences in a foreign language while on the other hand, others emphasize a learning effect through the well-written output.

A difference in usage between the AI literacy levels of participants lies in the way participants formulate their prompts when requesting feedback. Those with higher levels are more precise with their prompt-phrasing, providing contextual details and specifying the feedback they seek, rather than requesting without instructions. This distinction will also be described in greater detail in a later section.

#### 5.2.1.2. Informational Uses

“*Informational use*” emerges as one of the most frequent practices across participants. Many describe the chatbot as a supplement or sometimes even as a replacement of



conventional search engines. While Google remains a constant for many, especially now with the new AI search function, the chatbot is often considered as more convenient and practical. Two main practice strands occur in the data: “*information seeking*” and “*learning/knowledge gain*” and “*self-education*”.

Participants turn to the chatbot with questions that would have been directed to search engines in pre-AI times. This includes trivial questions such as asking for recipes, song lyrics, washing instructions for clothing or even IT troubleshooting. One participant describes: “I sometimes don’t use Google anymore; instead, I put it into Perplexity, which then draws on Google or rather the pages on Google and gives me the answer.” (P09\_high). The fact that participants do not have to filter through search engine links to find answers but rather immediately receive information tailored to their specific request turns out to be the deciding factor for the chatbot. As another interviewee mentions: “No, I’d say the biggest advantage is that you always get an answer precisely to what you ask.” (P07\_medium). Participants also highlight that some topics cannot be found out through conventional search engine queries, especially highly specialized requests such as mathematical problems or context-specific questions. The possibility to ask the chatbot for different perspectives on one topic also emerges as an advantage among interviewees, but especially among participants with higher AI literacy levels.

Beyond these everyday uses, participants report engaging with the chatbot for knowledge gain and self-education. One participant explains: “(...) you can have entire topics explained to you and then follow up with questions. In the past, you might have taken an online course or watched YouTube videos. (...) but if you didn’t grasp something right away back then, now you can just ask directly about that specific point.” (P18\_high). In that sense, the chatbot is seen not only as a source of one-directional information but more as a tutor, which can explain and break down complex topics. Participants view this feature as an empowerment since they can teach themselves highly complex and extensive new material for free and in a short amount of time.

Looking at the different AI levels of participants, one common denominator is the fact that informational use appears on all levels but varies in scope and depth. Interviewees with lower literacy levels use the chatbot mainly for trivial everyday questions and

appreciate the fast and easy handling while also mostly taking the output for given fact. Participants with higher AI literacy describe using the chatbot in a more profound way. They challenge the output, request different viewpoints or comparisons and report seeing the chatbot more as a companion or tutor rather than merely as a search engine.

#### 5.2.1.3. Exploration/Play

Another recurring pattern is the use of the AI chatbot in an “*exploratory*” or in a “*playful*” manner. Those interactions are mostly not goal-oriented but instead motivated by curiosity or the search for entertainment. Participants want to test the limits and see what the chatbot can or cannot do. Interviewees report that engaging with the chatbot in a playful manner and trying out the system themselves helps them overcome hesitation and uncertainty.

Several participants explain that they initially engaged with the chatbot to simply test its capacities. As one notes: “Well, first, just general things to see if this chatbot is really as cool as everyone says. Whether it really understands what you type in.” (P18\_high). Another participant describes their curiosity towards the chatbots skills to hold a conversation on topics and how natural it feels: “So, I just wanted to test how far conversations are actually possible.” (P13\_medium).

Image and humorous content generation emerged as one of the most prominent use cases regarding entertainment purposes. One participant mentions: “Well, in general, I find the image generation quite nice. (...) and then we generated images and had memes created in a certain style.” (P10\_high).

Those hands-on applications illustrate how interviewees facilitate the chatbot not only as an informational source but also as a medium for creative exploration. This process mostly represents an initial step of familiarization with the tool for many participants.

Curious and playful behavior is apparent across all literacy levels but participants with lower literacy levels often experience initial hesitation and need a third person to introduce them to the tool or the new features while higher literacy levels tend to explore it confidently on their own.

#### 5.2.1.4. Creative Uses

In contrast to exploratory or playful chatbot use, *creative uses* are characterized by a purposeful engagement with a clear outcome aim. This subcategory summarizes all creative chatbot uses that produce new ideas, designs or artistic content of any kind. Participants demonstrate that they know how to purposefully request certain creative outputs and formulate their prompts accordingly.

A recurring theme across all interviews is the role of the chatbot as a sparring partner for creativity, both in private and professional contexts. In a professional environment, participants use the AI chatbot to support idea development, visualizations and content production. As one interviewee explains: “So, for example, I have a video idea and I don’t feel like making a whole storyboard myself. Then I tell it to make a storyboard for me or say: ‘tell me how it could look like, so I can picture it better myself.’” (P07\_medium). The chatbot is further used for brainstorming or ideation, for instance when participants simply seek inspiration or suggestions for new projects: “Or when I just need new ideas.” (P07\_medium).

In private contexts, the chatbot use manifests in applications such as imagining home improvements or generating artworks, as one participant describes: “(...) so you take a photo and say: ‘please, what could I do with that room?’ And then it comes up with something random.” (P14\_medium). Furthermore, participants mention creating artworks for their home with the assistance of AI chatbots or requesting decorative tips.

Participants with higher AI literacy levels tend to recognize a broader range of creative application use cases than those with lower literacy levels.

#### 5.2.1.5. Social & Emotional Support

Some participants turn to the chatbot for social or emotional purposes. These uses involve helping with conversation, seeking guidance or mediation in interpersonal situations and neutral reflection.

One participant emphasizes the chatbot’s role in regulating emotions in conflict situations: “I use AI to formulate a better response (...) you can sometimes communicate much more calmly, more politely and in a more focused way.”

(P10\_high). At the same time, the chatbot is valued as a sparring partner for striking the right tone in social interactions, as one interviewee explains: “How do I reach the right level of communication? I often find AI a good sparring partner for hitting exactly the right wording.” (P14\_medium).

Another advantage many participants note is the availability and the perceived neutrality of the chatbot. Unlike human interlocutors, it is always accessible and does not bring in their own opinions.

In this study, only participants with medium or high AI literacy levels report the use of the chatbot in bespoke ways, while those with lower literacy levels do not turn to the chatbot for social or emotional support.

### 5.2.2. Gratifications

In addition to the previously discussed uses, participants describe the gratifications they gain from interacting with AI chatbots in this category. Reported gratifications range from cognitive stimulation and learning to pragmatic advantages such as saving time or reducing complexity and finally to emotional or social reassurance. These gratifications summarize the perceived benefits and satisfactions participants draw from the chatbot use and are the reason why they engage in the first place or continue engaging with it while integrating it into their lives.

#### 5.2.2.1. Pragmatic Gratifications

*Pragmatic* gratifications capture the practical benefits participants associate with the chatbot, particularly when it helps them to accomplish tasks more efficiently, save time or simplify problem-solving in everyday situations.

By far the most frequently mentioned within pragmatic gratification is “*Fast Information*”. Participants emphasize that the chatbot delivers answers almost immediately and without having to go through results of search engines or comparing multiple sources. As one Interviewee explains: “Well, when it has to be quick, because the response is immediate. You type something in and you instantly have an answer. You don’t have to spend a long time searching.” (P16\_medium). In a fast-paced world,

participants find this immediate delivery of information especially attractive when speed matters more than detailed information. This gratification is reported consistently across all literacy levels.

The second most frequently highlighted subcategory is “*time-saving*”. Participants emphasize that the chatbot helps them complete tasks significantly faster and frees up time for other activities. As one participant describes it: “You simply have more time because of it. Or you can save time and gain time through it.” (P01\_medium). The perceived time-saving makes the chatbot attractive as a handy everyday tool for all AI literacy levels in the same way. It reduces effort and speeds up tasks that would otherwise take much longer, both in private and professional contexts.

*Reducing complexity* is also one of the most frequently mentioned characteristics within the category of pragmatic gratifications. Users appreciate that the AI chatbot can break down complex topics or processes into more comprehensible explanations and precise steps as well as short summaries. It gives them a starting point for understanding and contextualizing complicated information. As one participant explains: “That I can, for example, have a complicated topic explained to me as if I were a five-year-old, (...) and then, so to speak, use that as a basis for making my strategic business decisions.” (P04\_high). This gratification appears more prominent among higher AI literacy participants, as they seem to know what instructions can be given to receive fewer complex explanations.

Participants also highlight the advantages of the chatbot’s constant *availability and interactivity*. They describe situations in which simply no human interlocutor is available to answer their questions, leading them to turn to the chatbot for conversational-like exchanges that also allow follow-up questions. As one interviewee describes: “No, I’d say the biggest advantage is that you always get an answer exactly to what you ask. So it’s very specific and you can also ask follow-up questions.” (P07\_medium). Another one adds: “Sometimes I just can’t ask anyone and then I can ask the chatbot.” (P12\_medium). These examples show that interactivity and availability are perceived as highly valuable gratifications. No notable differences between AI literacy levels are found.

Another pragmatic gratification participant highlight is the sense of “*independence and autonomy*” gained through the AI chatbot. Tasks can be completed without depending

on others or checking their availability which results in greater flexibility in time management and autonomy. One participant describes it as follows: “I can handle a lot of tasks on my own with it [the chatbot]. I don’t need to take up another person’s time; I don’t have to ask anyone else. (...) And whether it takes 10 or 40 minutes, it doesn’t matter. I don’t need anybody else for it (...).” (P03\_medium). This gratification is mentioned across all AI literacy levels without notable differences.

A rather small number of participants also value the chatbot’s *documentation* and the perceived *objectiveness*. They describe that conversations can be saved and revisited and the chatbot remembers past conversations and picks up on the conversation where it was left off, as one explains: “Everything is saved and I can also always export my histories.” (P03\_medium). Others highlight the relatively neutral responses from the chatbot: “Text input doesn’t completely take emotion out but it does remove the subtext, the nuances of tone.” (P10\_high).

#### 5.2.2.2. Cognitive Gratifications

Several participants emphasize the cognitive stimulation they receive when interacting with the chatbot. Beyond the already described practical benefits, the tool is valued as a source of learning and mental stimulation. Participants describe that they gain new knowledge, satisfy their curiosity and even new interests emerge through new perspectives from the chatbot.

One interviewee highlights the learning aspect that happens from repeatedly asking the chatbot to improve the formulation of their work e-mails: “But I can also learn something from it. When the same phrases keep being used, you pick up on them – you remember certain ones and might be able to use them yourself.” (P01\_medium). Others describe the satisfaction of curiosity while some report the fulfillment of their thirst for knowledge as gratifications: “A chatbot helps me satisfy my curiosity, or my hunger for knowledge.” (P18\_high). These statements highlight that participants do not just derive gratification from simply receiving answers but also from being intellectually engaged during the interaction with the chatbot.

Cognitive gratifications appear across all participants' AI literacy levels, though those with higher levels tend to derive more gratifications since their knowledge gain is more purposeful and not “accidental” as by those with lower AI literacy levels.

#### 5.2.2.3. Emotional & Social Gratifications

A few interviewees also report emotional and social gratifications from AI chatbot interactions, which manifest in improved mood, feelings of reassurance and validation and a sense of being accompanied and socially connected even.

One participant describes that the chatbot always provides a sense of validation and being seen. They mention: “There is someone who is interested in giving you the best possible answer. Attention also plays a role here, because not everyone gets the attention they might need or want in their everyday life. And I think that’s another form of reassurance: you matter, your concerns count, I see you.” (P05\_medium). Others highlight small gestures of responsiveness that can influence mood, such as greetings. These gestures result in emotional gratification participants need and value, as one mentions: “I know that when I say hello, the AI greets me warmly in return. And especially on days when you might be feeling a bit down, that can be really heartwarming.” (P13\_medium).

These gratifications are reported more frequently by participants with lower literacy levels than by those with higher AI literacy levels.

#### 5.2.3. *Context of Use*

The category “*Context of Use*” captures situational and emotional circumstances in which participants engage with the chatbot. It functions as a meta-layer that provides complementary information regarding when and under which condition chatbot interaction takes place. This helps to situate participants’ chatbot use more profoundly.

#### 5.2.3.1. Usage Situation

Participants most frequently engage with the chatbot in work contexts. Many describe the chatbot use as now being a highly integrated part of their everyday work life, helping them with recurring and new tasks and challenges. One interviewee explains: “I work at a communications IT company, where this whole topic is present and you can’t just completely step aside and say you’ll never deal with it. There’s an expectation that you know how to handle it and how to put it to use.” (P01\_medium). Work-related environments do not only provide the most frequent use cases but also in some cases create expectations that employees develop skills regarding AI use.

AI chatbot use in private contexts is mentioned less frequently but still plays a significant role, especially for participants with higher literacy. In this context, the chatbot is seen as a practical helper for a range of everyday activities, such as organizing and planning vacations or leisure time. One participant notes: “Also in personal areas, yes, for example, analyzing things like looking at what the best vacation route would be based on recommendations.” (P04\_high).

University-related uses are reported least frequently, partly because only a few participants in the sample are still enrolled in a university program. In these cases, the chatbot use is usually introduced through peers or even coursework requirements. One interviewee describes: “At university, because everyone was using it and I had some assignments. And I thought, ‘ah, I could give it a try.’ That’s how it started.” (P14\_medium).

Looking at the different AI literacy levels, participants with higher literacy tend to incorporate the chatbot more quickly and to a greater extent into their work life than participants with lower literacy levels. Those with higher literacy also report using the chatbot for a broad range of private matters, seeing the chatbot as a personal assistant. Participants with lower AI literacy levels report more frequently that their first encounters with chatbots happen in professional or university contexts where peers or colleagues introduce them to the tool.



#### 5.2.3.2. Affective-Motivational States

The second meta-category describes emotional and motivational states of participants that either trigger the engagement with the AI chatbot in the first place or in some cases even persist throughout the interaction.

The most frequently mentioned affective-emotional state is *laziness*. Participants state an unwillingness to invest effort or time in tasks: “Mostly out of laziness. I want to provide my content, but I don’t want to be the one to make it look nice.” (P07\_medium). “*Uncertainty*” is also described as a common emotional state that leads to chatbot use, for example when participants do not fully trust their own knowledge or judgment and therefore use the chatbot as a source of reassurance or validation: “When it’s something I’m unsure about or feel like the people around me can’t really be asked at the moment, or simply can’t help me (...).” (P01\_medium). Closely related to “*uncertainty*” is “*discomfort*”, seen in the sense of revealing knowledge gaps or making mistakes in front of others. Participants report turning to the chatbot with their uncomfortable questions to avoid the risk of embarrassment in front of others, noting that the chatbot provides neutral answers without judgment.

Another motivational state reported is social or peer pressure, as one participant describes: “I tried to resist, but since so many people around me are using it now, I feel they all have an advantage over me and save time – and of course I don’t want to fall behind.” (P03\_medium).

Less frequently, participants mention *boredom* or *positive surprise*, in the meaning of joy or amusement at how well the chatbot works, as emotional states that led to AI chatbot use. In this study, no notable differences between AI literacy levels emerge from these affective states.

### 5.3. Role of AI Literacy in User Communication (RQ2)

#### 5.3.1. Understanding & Evaluation

As a core dimension of the research question of *AI literacy*, this category addresses the cognitive and evaluative aspects shown by participants when interacting with AI chatbots. It describes how users critically assess the chatbot’s outputs, the extent of

their general knowledge about how AI systems function and how aware they are of the chatbots' limitations.

#### 5.3.1.1. Critical Reflections on AI Output

Participants frequently describe that their critical perspective toward AI chatbot outputs depends strongly on the context of use. For trivial questions or simple translation tasks, many interviewees report little to no output review. In these cases, output is often taken at face value and the answer is taken over verbatim without further questioning. Participants often justify and compare this behavior to earlier searches for information with search engines. Just as simple factual Google search queries were typically not being double-checked, chatbot answers are likewise rarely questioned. Some participants even go one step further and suggest that the chatbot might be more reliable than their own research behavior on trivial matters since it summarizes facts from a range of different sources instead of only one Google link, just as they would do. One interviewee describes it as follows: "(...) it pulls from so many different sources and then picks what seems to make the most sense. And if I'm just on a single website, it somehow feels more likely that there will be nonsense there." (P07\_medium). In low-stakes situations, the awareness that the AI draws on a wide range of sources fosters trust in its output.

But in contrast, when participants' queries concern sensitive or high-stake matters, such as business-critical information, academic work, political content or materials to be published under one's own name, they seem to handle the output significantly more critically. In these cases, credibility and the need for verification through valid links in the output become of high importance, as one participant describes: "I still always go back and do some research myself, by checking what it spits out. I look at the sources, and I check whether it really matches what I meant. Because sometimes it messes things up and includes material where it basically pretends it's an academic source, but in reality, it's just a newspaper article." (P01\_medium). This example illustrates the heightened mistrust when it comes to potential misinformation in a high-stakes situation. The need for cross-checking or fact-checking the output is often described as necessary and highly time-consuming by participants. Some mention that this additional effort calls into question the usability of the chatbot in general since it

diminishes the efficiency factor. One participant states: “That’s also one of the reasons why I might not use it so often, because I think, well, I’ll probably have to Google it afterwards anyway.” (P05\_medium). For many interviewees the time-saving factor is crucial. If the necessary double-checking of critical output cancels the bespoke time-saving advantage, some tend to use the chatbot less for high-stake matters.

While the process of external output verification often undermines the time-saving advantage of chatbot use, participants with higher AI literacy levels describe that critical reflection can also happen with the chatbot interaction itself. Instead of accepting the first output as final, they test the chatbot by rephrasing the prompt, questioning its reasoning and checking consistency of the output, as one participant explains: “I usually don’t go with the first answer. Instead, I try to ask the chatbot in more detail what it means, what it’s referring to or whether it changes its answer. And I don’t accept every answer as given. It’s not 100% truth. If it’s important information that I need to use somewhere, I make sure to double-check it.” (P09\_high). These conversational strategies represent a more active form of evaluation that goes beyond the traditional fact-checking processes. However, interviewees with lower literacy are not familiar with these advanced strategies which results in lower quality outcomes and fewer time-saving advantages since they tend to fall back to more familiar approaches such as Google searches.

These literacy-related differences become even more evident when examining output evaluation and cross-checking strategies even further. Participants with higher AI literacy levels describe even more systematic ways of validating output, such as employing different AI chatbots to verify each other’s outputs: “When it comes to coding, where in many areas my own understanding isn’t very advanced, I’ll take the code as it is but then I’ll have it double-checked, for instance by another AI.” (P04\_high). They are also highly aware of the AI’s flaws such as hallucinations or outdated references when the chatbot only employs an internal search without accessing the internet: “And yes, I am always aware that there are lots of side effects, like hallucinations, incorrect sources, data issues and so on. I know all that, which is why for me it’s input but not the end-all-be-all.” (P10\_high). This shows that participants with higher AI literacy show a broader knowledge of strategies to evaluate outputs, yet they are highly critical and still double-check information when the query involves important matters. By contrast, participants with lower literacy levels mostly

lack these more sophisticated strategies and remain dependent on external verification processes.

At the same time, participants across all AI literacy levels highlight that even imperfect or partly incorrect outputs can still be useful. Rather than taking the outputs verbatim, they are often treated as initial points of orientation to provide a starting point for further research. As one interviewee puts it: “Even if you can’t or shouldn’t take it one-to-one, it still gives you a point of reference.” (P14\_medium).

Overall, all participants highlight that critical reflection is an important part of interacting with AI chatbots, but the form and intensity in which it is employed, vary strongly with the context and the AI literacy level.

#### 5.3.1.2. General Understanding of How AI Works

A recurring theme in the interviews and within the research question of AI literacy is the question of how well participants understand how the AI chatbot works. Many interviewees admit that they never think about the function mechanism; they simply use it. The interaction takes place on a superficial level: a prompt is being typed in, an answer is created, and no consideration takes place on how the answer is generated. For many the system appears as a kind of mysterious black box, which simply works and is most of the time relatively reliable.

Participants with lower AI literacy levels show both little to no knowledge and also no interest in how such systems function. Hence, interviewees consider AI equivalent to some form of search engine or unknown data source that draws its information from the internet. One participant describes it bluntly as: “I’ve never really thought about it consciously. When it gives me some results, I don’t think, ‘how did you come up with that?’ (...) It’s just, I don’t know, it comes from the internet.” (P01\_medium). This statement illustrates both the absence of deeper reflection and the misconception that AI responses are always generated through real-time internet search queries.

Participants with medium AI literacy levels display superficial knowledge regarding the function of AI chatbots, mixing accurate ideas with vague or partially incorrect assumptions. One notes: “People often say that data is fed in to generate the knowledge. Which data are actually used, I don’t know.” (P05\_medium). Another

participant elaborated further, being aware that AI chatbots are functioning on probabilities, but still holding misconceptions regarding internet access: “In my head, at some point it was fed with loads of information. And ideally it could also access things online, go through everything, look at what’s interesting somehow, and then generate word after word based on probabilities. So in a way I know, but not really either.” (P07\_medium). These statements illustrate the limited conceptual and functional knowledge. Participants show somewhat vague awareness, yet primarily rely on superficial or inaccurate knowledge from which they construct their own understanding of how AI chatbots work.

In contrast, high AI literacy participants showed a profound, extremely detailed and most importantly accurate knowledge of AI systems. They described technical processes such as tokenization, probability distributions and the ideas of large language models functioning as highly advanced autocomplete systems. One participant summarized: “I understand the basics of how training works, how tokenization works. And roughly speaking, it’s a super smart autocomplete that tries to give you some gratification (...). And the whole thing is based on probabilities.” (P10\_high). Another added that training involves parameter adjustments to shape output pathways: “All I know is that you can adjust parameters during training so that it becomes more likely to construct a certain path of an answer. (...) If I type in, say, word XY, it’s basically like autocompletion, only kind of enhanced.” (P18\_high).

Taken together, interviewees illustrate a spectrum of understanding of how AI chatbots work, ranging from speculative superficial knowledge, where AI is a black box tool, to highly technical awareness, with detailed knowledge on tokenization and probability-based training. These AI literacy levels highlight not only differences in knowledge but also in the interaction approach. Participants with lower AI literacy mostly engage without questioning; those with medium AI literacy speculate with partial knowledge while high AI literacy participants deliberately use their understanding to optimize their prompts and to evaluate the outputs more critically.

### 5.3.1.3. Awareness of Limitations

All participants demonstrate some sense of general awareness that AI systems have limitations and that they carry inherent restrictions. This awareness is not about the

evaluation of outputs but more about the broader understanding of weaknesses of AI systems in general. A recurring theme is the awareness that conversational chatbots are trained to provide answers even when they are lacking information. One participant describes the so-called “hallucinations” as follows: “(...) experience has shown that the system unfortunately, still makes things up quite often when it doesn’t know an answer.” (P15\_medium). Here, the focus lies on errors as functional characteristics of this technology rather than specific interactions.

Several participants describe further limitations regarding data access. They pointed out that important sources might be inaccessible for the AI, for example when the content is hidden behind a paywall. One interviewee explains: “There are lot of sites with genuinely important information that the AI can’t access (...) This limitation alone creates problems and gaps in information retrieval (...)” (P13\_medium). This highlights the awareness of limits tied to the information retrieval process of AI systems.

Finally, a few users also note that infrastructural dependencies since many services rely on OpenAI. The dominance of only a few or even just one provider is seen as a potential bottleneck with the risk of dependencies and holding control. One participant describes: “(...) if Ai isn’t working (...) about half of the AI tools on the market just stop functioning.” (P04\_high).

Interviewees with higher levels of AI literacy show deeper knowledge about limitations such as errors, data restrictions and infrastructural dependencies than those with less AI literacy.

### *5.3.2. AI Ethics*

Participant’s reflections regarding ethical matters such as questions of right or wrong or weighing potential threats or benefits of AI use are described in the following. Such reflections go beyond individual interactions and are seen in a broader, societal, environmental and moral light.

#### 5.3.2.1. Societal Consequences

Participants widely agree that the spread of AI will have far-reaching consequences for the society. A key concern is the workplace and how future work will manifest. Some fear that those unwilling or unable to keep up with technological progress will fall behind and eventually lose their jobs. As one participant describes: “a lot of people will be left behind if they don’t engage with it. Because as an employee you’ll simply be too slow, while someone else will basically be doing the work for two.” (P04\_high).

Education was another recurring topic of anticipated change. Interviewees emphasized the need for new examination formats and pedagogical approaches to ensure students continue to develop independent creativity and learning skills. One participant notes: “(...) you don’t want people to lose the ability to learn, to be creative on their own (...). At the same time, you also can’t just say you’ll completely exclude this new aspect [AI] from schools (...)” (P17\_low). Beyond exams, some participants worry that AI enables the quick production of seemingly flawless results in all sorts of domains, which lets people cover up their weaknesses and present themselves as perfect. Participants question how quality and distinctiveness can still be measured in the future.

In addition, several participants warn about cognitive laziness caused by relying too much on AI and potential consequences if the technology should ever become unavailable. Others, however, stress the positive potential to accelerate research, particularly in medicine: “There will also be many new applications for AI, including in medicine, where it will drive scientific progress from that will come social progress as well and a transformation, so to speak.” (P02\_low).

Overall, all participants, regardless of their literacy level, are concerned about the societal consequences of AI use.

#### 5.3.2.2. Privacy and Data Concerns

All participants raise concerns about privacy and data security, but the extent and depth of these concerns vary by literacy level. Participants with lower AI literacy levels describe uploading personal material under the assumption that it could “just be deleted again”. One mentions: “And then I actually did – technically against the rules,

but just between us – I once scanned an invoice (...) and just uploaded it there.” (P06\_low). This example shows the lack of knowledge about how and where data is stored. The uncertainty about data handling is widespread, not only with low AI literacy levels but also with medium AI literacy levels as one participant describes: “That’s one aspect that makes AI feel a bit hard to grasp for me, also in terms of functionality, more specifically, how the data is actually protected.”(P15\_medium).

By contrast, participants with higher AI literacy show great caution, articulate concerns more explicitly and adopt more careful strategies. One describes anonymizing information and explicitly avoid uploading sensitive content: “(...) when I have it write something work-related, like for social media, I’ll use ‘Company XXX’ or ‘Company1 and Company 2’, so I’m not putting too much personal data into it (...). (P08\_medium). Others emphasize their hesitancy to share personal details at all: “(...) when it comes to personal information and such, I’m very hesitant (...) and I think that will probably hold me back somewhat from using a chatbot in that area.” (P01\_medium).

### 5.3.2.3. Environmental Concerns

The data shows that participants recognize the high consumption of electricity and water as problematic for the environment. For some this awareness creates ambivalence between the convenient use and the guilty conscience. One participant confesses: “so it’s always a struggle between my guilty conscience and my laziness when I use AI for things.” (P01\_medium) and describes further: “(...) we have a global warming and there are already countries suffering from water shortages, and then we use it to cool data instead of letting people drink it. And that’s actually pretty awful because I’m simply too lazy to start my semester paper three days earlier.” (P04\_medium).

Several participants also criticize the retreat of large tech companies from previously declared sustainability goals. As one participant notes: “It’s actually quite absurd, many of the big tech had committed themselves to ambiguous environmental targets, energy-saving goals, Green IT and so on. With the dawn of AI all of that was largely thrown aboard.” (P10\_high). At the same time one participant expresses hope that AI could find ecological solutions: “AI consumes a huge amount of resources right now



but over time, I'm quite sure AI will also develop techniques and methods to compensate for that." (P04\_high).

Overall, participants for all AI literacy levels describe a mix of guilt and critique but still continue using it for practical reasons.

#### 5.3.2.4. Moral Boundaries

Participants describe ethical limits that should guide the use of AI, highlighting that not everything technically possible is morally acceptable. One participant describes it as follows: "(...) Just like in medicine, for example, these days you can research so much, test so much, try out so many things. And it's good when research is being done, but the question is: do we really need to do everything that is possible?" (P11\_medium).

Concerns also focus on political manipulation, where AI is seen as amplifying risk: "It's already been shown that simply through algorithms, through targeted content, opinions can really be manipulated, to the point that you end up with people like Trump. (...) But I think these are all just tools that make it possible to do it on a much larger scale and with far stronger effects." (P11\_medium).

Finally, participants point out the hidden human costs of AI training, particularly the exposure of low-paid workers to harmful content: "(...) that there are people who have to look through all this content and then decide: good, not good, whatever." (P01\_medium).

These moral concerns appear consistently across all AI literacy levels, with no major difference in how participants articulated these concerning matters.

#### 5.3.3. *Prompting Skills*

The data shows that prompting strategies are strongly shaped by participants' AI literacy level. While all participants emphasized how important the instruction formulation is so that the chatbot would be able to make sense of it, the specific practices differ across low, medium and high AI literacy groups.

Low AI literacy participants tend to emphasize that spelling and grammar are less important than they had initially thought. Several explain that they become more relaxed over time, since the chatbot understands their input, even it contains spelling mistakes, unusual sentence structure or lacked proper grammar, as one participant explains: “The few times I’ve used it, I found I can write things wrong and it still understands me. I also get lax about sentence structure. (...) What matters is that you know what you want and using the right words for that.” (P06\_low).

Participants with low AI literacy often invest significant effort into constructing a single, detailed prompt. They consider whether everything they want to ask is included before sending it off, so no second prompt is necessary: “And then I made sure to keep it as short as possible but as detailed as necessary. Before sending each prompt, I thought hard every time about whether everything I really wanted was in there (...)” (P17\_low).

This highlights that participants with lower AI literacy tend to rely on single-prompting strategies, aiming for high accuracy with their initial request.

Medium AI literacy interviewees display a different approach. While they also care about the clarity of the given prompt, they often describe iterative prompting, beginning with more general instructions and then refining it once they have an answer. One participant explains it as follows: “If I don’t like the answer yet, I’ll say, try it in a different way. Do it again differently. I don’t have to come up with it all myself, I can just say, ‘give me five suggestions’ and then I’ll piece something together from it.” (P15\_medium). As seen here, the refinements lack direction and purpose.

At the same time, medium AI literacy participants use specific style requirements, particularly in professional contexts, as one participant working with social media texts describes: “I like to specify a range for the word count, whether it should use emojis, whether bullet points should or shouldn’t be used and what the CTA should look like.” (P08\_medium). These examples summarize that participants with medium AI literacy show a more vague iterative prompting style with more output style specifications.

Participants with high AI literacy describe prompting as a sophisticated skill set. They too, do not think that spelling and grammar matter when entering prompts; they emphasize the benefits of punctuation, structured formatting and precise specifications of the desired output. Some also practiced source control, for instance

instructing the chatbot to rely only on information from an uploaded document. Others deploy role framing, asking the chatbot ‘to act as an expert’ in order to shape the tone and knowledge of the response. In addition to that, some high AI literacy level participants report using prompting frameworks such as CRAFT (Context, Role, Audience, Format, Task) to be able to formulate effective prompts.

Finally, high AI literacy levels also describe prompting more like a dynamic, conversational process instead of one-sided prompting inputs: “So, engage in a conversation and treat it more like a team member, rather than seeing it as an expert or whatever role, and then, in that kind of iterative loop, I manage to achieve at much better, higher-quality outputs. Because you also get more out-of-the-box-thinking when you’re not just saying ‘I’m the expert, I’ll dictate exactly what output I want’, that already narrows things down a lot.” (P10\_high).

Taken together, prompting emerges not only as a technical skill but also as an indicator of literacy or literacy development, reflecting users’ strategic communication with the AI.

#### *5.3.4. Detecting AI-Generated Content*

Participants describe mixed experiences in recognizing whether a text or a content piece is generated by an AI. Some report that they have developed specific heuristics to identify if it was created by humans or an artificial intelligence. Participants with a high AI literacy level describe stylistic features they attribute to AI writing. One explains it as follows: “And the Em dash isn’t even on the keyboard, yet AI uses it fairly often. It’s not conclusive, but it’s a likely tell. Sometimes the sentence structure is, too; ‘This, but also That’ (...).” (P10\_high).

Similarly, others mention typical stylistic features of AI writing changing over time, such as the early use of emojis or later on the overuse of dashes: “Maybe it’s just me, but at the beginning there was this extreme emoji overload, and now it’s somewhat evolved so that every text has dashes, even where they don’t really belong. I actually find them quite sexy at times.” (P08\_medium).

Beyond recurring stylistic features, some participants highlight contextual cues. They perceive AI-generated text sometimes as “inflated” with filler words, producing long responses that sound sophisticated but lack conciseness. Rather than taking a clear position on a topic, the system gives often balanced but yet “neither this, nor that” answers: “And then you get a three-page analysis explaining why the answer is probably a ‘yes-and-no’.” (P10\_high).

Not all participants are concerned with detecting AI authorship. Some express indifference, describing that the usefulness of the content matters more than origin: “I don’t really think about it that much anymore, because so much is written by AI now, and I honestly don’t care much whether it’s by an AI or a person. The main thing is that it delivers the information I need.” (P18\_high).

Overall, interviewees with higher AI literacy levels tend to articulate clearer strategies or heuristics for identifying AI texts, while those with lower AI literacy levels are more uncertain or unconcerned by the source.

### *5.3.5. Emotion Regulation*

Participants mention various ways of handling their emotional reaction, often frustration or irritation, during interactions with the chatbot. As one interviewee describes: “I have a short fuse. If the AI doesn’t deliver what I want fairly quickly, I can end up getting verbally abusive toward it.” (P09\_high).

Others report becoming stubborn or even dismissive when the chatbot repeatedly delivers dissatisfying outputs while pushing it to better results – mostly without proper improvement instructions: “(...) it still doesn’t come out right, and you still don’t like it. And you notice that from prompt to prompt it just keeps getting worse. In the end it’s nothing but ‘no, new suggestion; Also no, new suggestion.’” (P08\_medium).

Another mentioned frustration for participants is vague outputs that fail to answer the initial request. One interviewee describes: “One thing that’s frustrating, I’d say, is when it doesn’t tell you what you want to hear. As in, you ask for X and Y and instead of giving you exactly what you entered or the answer you wanted, it comes back with something vague.” (P02\_low).

Emotion regulation becomes a subtle but relevant dimension of chatbot interaction as users have to manage the tension between expectations and the actual system performance. Across AI literacy levels similar emotional reactions and coping strategies are described.

#### *5.3.6. Learning & Adaptation*

Participants describe the need to stay up-to-date with the rapidly changing AI world. Some tend to see this as a burden, especially in professional settings: “In general, I have to say about the whole AI topic: I find it exhausting, because there’s just so much happening and you have to keep up, especially at work, so you don’t fall behind.” (P16\_medium).

And others highlight that experimentation with new tool or features is a way of adopting to change: “I’m very willing to experiment, you just keep trying new things. Does it work, or does it not? And even if it doesn’t, you try again in a few weeks or months, because the feature set keeps being expanded.” (P10\_high).

Overall, participants with higher AI literacy levels tend to stay up-to-date and experiment with new features even for fun while the others experience the constant pace of change more as a burden.

#### *5.3.7. AI Self-Efficacy / Problem Solving*

Only a few participants address their own confidence in handling problems or troubleshooting of AI systems. Those who do describe themselves as capable of solving issues on their own and generally feeling confident in working with AI systems.

### **5.4. Communication Style Change and Human Interaction (RQ3)**

#### *5.4.1. Transfer to Human Communication*

The subcategory “*Transfer to Human Communication*” encompasses all communication patterns participants picked up from conversations with AI chatbots being transferred or not transferred to human communication. The data shows only

limited evidence of such spillover effects. While some participants report adopting phrases and stylistic patterns from the AI, others deny noticeable changes in their communication style.

#### Using AI-generated expressions with humans

A small number of participants describe adopting frequently used AI chatbot phrases and expressions or into their own communication, especially into written communication. One participant explains: “And when the phrases keep being more or less the same, you remember one or two of them and just adopt them.” (P01\_medium). Another one highlights the change in their communication in business contexts: “When it comes to writing, I only use AI in a business context and my writing there has definitely changed.” (P08\_high). While another participant describes concealing their weakness in business communication through it: “I’ve also picked up more stock phrases from the AI, and ways to communicate certain things, because that wasn’t really my strength before.” (P05\_medium).

These references show smaller shifts in communication patterns, in the sense of improvement in wording or phrases, primarily in a written business context, but no complete shifts in communication style are indicated.

#### Adopting prompt-like structure or formality

There was no indication that participants transfer the highly structured and prompt-like style of communication into interactions with other people. None of the interviewees report composing AI-like written texts with bullet point lists, overly structured sentences or detailed instructions. This absence is of interest since some participants adopt typical AI phrases but seemingly not the sentence or text structure itself.

#### No observed change

This category was introduced since most participants report that their human-to-human communication remains unaffected by regular AI chatbot use: “I’d answer no change happened. Nothing specific comes to mind. Maybe unconsciously. Maybe I need to look through my messages again after this interview to see whether they’ve changed.” (P01\_medium). Another participant also denies any changes: “So basically no. It’s not as if I’m more curt or writing simpler sentences. I’d say no across the board.”

(P03\_medium). Nevertheless, some participants acknowledge the possibility of unconscious influence of their communication behavior by frequent AI chatbot interaction: “Never consciously. Maybe unconsciously, but I haven’t caught myself thinking, ‘ah, that was a great e-mail opening’.” (P15\_medium).

Another participant states that such influences do not occur in their native language: “Well, it depends. Not in German.” (P18\_high), not excluding the possibility of influence in a foreign language, where they consider themselves as more susceptible for linguistic formulations.

Overall, the findings show that participants adapt their language to the chatbot during use but mostly do not transfer these adjustments to interpersonal communication. Most interviewees either keep their usual communication style or report not noticing any change. Although, a small number of participants appear to see an influence in professional or foreign language text composition.

#### *5.4.2. Linguistic Accommodation*

Communication accommodation theory highlights the way how interlocutors adjust their language to align with, differentiate from or maintain their position towards their communication partner. This framework has typically been applied to human-to-human interaction, but participants also report forms of accommodation towards AI chatbots while communicating with them. Only a few findings emerged, yet they point to subtle but relevant habits and thinking patterns of participants regarding convergence, divergence and maintenance. No evidence of overaccommodation was observed.

Convergence emerges as the most frequent way of accommodation, where users actively adapt their language to meet the perceived communication standards of the chatbot. Some participants describe becoming intentionally more structured when formulating prompts. One interviewee explains: “I am more structured with AI. I think very carefully about what I ask, how I ask it, how I word it, so the AI understands it exactly the way I want it to.” (P17\_low). This example describes a heightened awareness of precision and efficiency in prompt formulation when interacting with the AI system. Another participant reflects on the paradox of adaption: “How do humans

adapt to the machine? How do I have to phrase things so the right results come out? The whole idea was to move away from that. But we're aligning ourselves to it again. Before, my feeling was that the AI is very human-like and that it interacts with us. But in reality, we're the ones interacting with it much more again, because we're trying to adapt to it again." (P05\_medium).

Participants also describe Convergence regarding politeness and spelling and grammar accuracy when interacting with AI chatbots. One participant notes: "(...) I stopped bothering with proper spelling, articles and the like. And yes, I unfortunately stopped with 'please' and 'thank you' too. At first it felt really wrong, but you get used to it very quickly." (P03\_medium). These examples show that interviewees align their communication behavior with what they perceive as the correct way to communicate with AI machines.

Some participants also display Divergence, intentionally maintaining human communication norms even when these are unnecessary with AI chatbots. As one describes regarding the use of "please" and "thank you": "But it doesn't feel right to leave that out, somehow, when you're just used to it in communication. I don't know, It's simply polite; it's just what you do, and I will continue doing it." (P01\_medium). The refusal to leave out unnecessary politeness markers shows the participant's attachment to the familiar interpersonal way of communication. Several participants also note that greetings such as a simple "hello" are considered as the bare minimum when initiating a conversation, especially since the chatbot is typically addressed with a request in mind. Therefore, participants report, it only feels appropriate or even obligatory to start with some sort of greeting.

Others show Maintenance as their way of communicating, keeping their usual style without adjusting to the chatbot. As one participant notes: "Otherwise, I just write whatever come to mind, the way I would also ask a human." (P08\_medium).

No clear cases of overaccommodation were observed. Participants seem to understand that no excessive adjustment is necessary to be able to communicate with a conversational AI chatbot.



## **5.5. Users' Interpretations of Human-AI Communication (RQ4)**

### **5.5.1. Reflexive Awareness**

The findings show that reflections range from perceived personal change to shifts in media routines and communication styles but also include statements of no impact. Participants describe boundary setting regarding chatbot use, the attribution of human-like qualities and considerations of broader social and normative effects. Together, these examples show how users interpret and make sense of AI in their interactions and their everyday life.

#### **5.5.1.1. Perceived Self-Change**

Participants often describe a sense of becoming lazier through chatbot use. Everyday tasks, such as writing and creating social media posts are increasingly outsourced, even when in some cases, doing them manually might be faster. One participant states it frankly: "I've become lazy. That's honestly pretty awful. You also think much less. I let it do a lot of the work. Sometimes that bothers me, but it helps me." (P07\_medium). Others report, certain skills, such as spelling or wording, declining: "Yeah, I think my spelling has generally gotten pretty bad because when I type something, I type fast and if there are mistakes, I just leave them. And I think that really isn't good because my notes look like that now too." (P18\_high). Some admit using the AI chatbot out of habit even for short mails, though it would be faster typing them themselves.

At the same time, participants describe a rise in their willingness to look up information or do research on extensive topics. The chatbot lowers the barrier to searching and makes it so much easier to quickly check facts, as one participant describes: "Yeah, I research a lot more. Things I might have briefly thought about before but was too lazy to Google, or thought weren't worth it right then, I now just type into ChatGPT and have the answer in four seconds." (P14\_medium). This indicates how quickly people get accustomed to new habits if they are more convenient for them.

Some interviewees also emphasize positive effects on their writing. They feel that the chatbot helps them to formulate clearer, more structured texts and lets them focus on the content itself since layout and structure will be taken care of by the chatbot, as one participant recalls: "I have to be honest, because I now partly compose my e-mails

with the help of AI, I pay much closer attention to what the content is and I also check the much more carefully.” (P04\_high).

For some, however, this convenient utilization comes with a feeling that content is less meaningful, since it is no longer certain whether human effort and thought have gone into its creation. One participant explains: “In terms of thinking, everything feels a bit more worthless to me.” (P06\_low). Several others think alike and describe their work and communication as less meaningful when it could easily have been produced by AI.

Finally, interviewees reflect on the constant availability of AI chatbots and how that shapes their behavior and time management. One participant explains: “I can hardly imagine doing without it now. I’m already adjusting my behavior accordingly (...). I would never have started this late [with my school assignment] back when the chatbot didn’t exist.” (P01\_medium). A few participants reflect that they no longer remember how life was without the chatbot, since it’s already so deeply integrated into their daily routines.

Overall, on the one hand, participants criticize themselves for laziness and the resulting loss of skill due to constant AI use, but on the other hand, they value the increased efficiency and new possibilities opened up by AI. These reflections also reveal how different levels of AI literacy shape the way participants perceive changes, with higher levels seeing the change rather as the natural course of events and that personal skill sets shift over time while lower literacy levels tend to be more judgmental towards themselves.

#### 5.5.1.2. Reflexive Awareness without impact

Several participants reflect that they are not using the AI to its full potential. Some note they could invest more effort in learning how to prompt more effectively: “I keep thinking I should actually prompt better (...). But in practice I don’t do that, unfortunately.” (P05\_medium). Others express a more general sense of underuse: “Yes, I also feel I’m using it too little. There is so much potential.” (P14\_medium).

Participants also emphasize that for certain tasks they still prefer familiar formats since they trust them more. As one explains: “It honestly wouldn’t have occurred to me to

ask ChatGPT for that, which probably would have worked just as well, but with the YouTube video I wanted to see someone demonstrate it. (P15\_medium). Participants mention that choosing the familiar over the unknown is one reason why they don't make broader use of the chatbot's potential.

Finally, interviewees show awareness for the differences of AI use across contexts. Some explain that AI feels like everyday life in their professional setting while in private or family environments it often plays no role since people in their private life are not part of the "AI bubble" that lets them feel like AI is being used by everybody. One explains it as follows: "In my bubble, aside from the work bubble, the private, family bubble has almost nothing to do with it." (P16\_medium). This matter leaves participants reflecting about how some cannot imagine life without AI anymore, while others cannot imagine life with it yet and how quickly this gap is growing.

#### 5.5.1.3. Humanisation & Social Cues

Participants frequently describe attributing human-like traits to the chatbot. Some emphasize that its conversational design and response style feel friendly and as if it were a social being. As one participant describes: "Because it has human traits, which probably feel friendlier to people. If it were too robotic, I don't know how that would affect communication or whether people would still use it as much or ask the same things. And that's exactly what makes it tricky (...) (P01\_medium). Another one reflects: "You're talking to someone, namely the AI, and you just communicate as with a human because you're not really used to doing it any other way." (P03\_medium). Politeness is a recurring theme. Several participants report using greeting phrases and "thank you" or "please" automatically hence the conversational character of the chatbot, feeling like a social being. One explained: "But because I am increasingly treating it like a team member, those polite phrases show up in my language automatically." (P10\_high). Another one even states: "It depends, but in a work context, when I know I'll be interacting with the AI for longer, I include a greeting and a sign-off. (P13\_medium).

A striking number of interviewees mention, mostly with a smirk and only half serious, that they are rather polite to AI chatbots just in case they take over one day. One participant said: "If robots ever take over the world, hopefully they'll spare me

(laughs).” (P02\_low). This phenomenon displays how participants jokingly deal with reflections on AI’s imagined future role.

Participants also report changing their behavior once they become aware of the energy demands of politeness formulas of chatbot use. One mentions: “(...) until I eventually read that it uses so many resources, so much computing power, and that by being polite I’m basically contributing to climate change. So I’ve painstakingly trained myself to stop writing ‘hello’ and to stop saying ‘thank you’.” (P15\_medium).

Overall, all participants show a range of humanizing practices, but differences of AI literacy levels occur. Participants with higher AI literacy levels treat the chatbot as a social partner since they realize this leads to better results while those with lower AI literacy levels do it out of habit or limited AI knowledge.

#### 5.5.1.4. Media Routine Change

Participants emphasize that the AI chatbot alters their everyday media habits more and more. The most frequently mentioned change is replacing Google. One participant explains: “And now I really use it a lot for everyday questions. I hardly Google anything anymore. I just ask ChatGPT pretty much everything (...).” (P14\_medium). Another describes how tasks once solved through web search or the IT support are now handled with the chatbot’s help: “I used to just Google it, but now that’s so interactive, and that’s much better. So I often use it for things where I think, okay, that’s not something I’d ask our IT support. (P11\_medium). These examples show how participants increasingly rely on AI as the new first point of contact for information or help.

Participants also report that the chatbot is has become an additional step in their (media) routines. One explains that the chatbot functions an extra layer verification or a source of feedback: “I’ve taken it a step further. Even when I’ve already finished something, I sometimes think, I could still ask the AI.” (P13\_medium).

High AI literacy users even describe their media change more drastically. They explain how they pursue an “AI-first” strategy in their everyday lives, with the chatbot being so well integrated that new use cases emerge naturally: “More accurate would be to say that, at every step of my workday, and my everyday life, this thing is integrating more

and more. And the use cases keep creating themselves as a result.” (P04\_high). This example shows how AI chatbots do not only change certain media routine steps but are also the source of a completely new media routine development.

Participants with lower AI literacy levels describe using the chatbot in a more superficial way, for example, as a replacement for internet search, while those with higher levels use AI chatbots in significantly more profound ways, restructuring daily processes.

#### 5.5.1.5. Perceived Social Effects

Participants reflect not only on their own habits but also on how AI shapes communication and interaction in society more broadly. A common theme is the changing expectation of speed: “Because, of course, the other side’s expectations keep rising: ‘he always has everything so fast’.” (P04\_high). Many participants note that people are becoming more impatient, expecting faster results from others as a consequence of AI use, which they experience as a new form of pressure or social demand.

Generational differences also play a great role in interviewees’ reflections. One expresses concern that uneven levels of AI adoption caused by an age gap might create a social rift: “(...) You’re not going to teach many people of my generation really good prompt engineering anymore (...). There is already that hurdle: the gap with digital natives, who handle social media and the internet very differently.” (P10\_high).

Participants also note that people often consult the AI first and only turn to humans afterwards, if the AI couldn’t help them, showing a growing hesitation to “bother” others with their questions: “They’ll sometimes ask the AI before ‘bothering’ other people. I, by contrast, ask real people first and then the AI, maybe that’s my old-school way.” (P13\_medium).

Participants also report other social effects as well, such as memes and jokes about AI in everyday life and how people deal with its characteristics: “I just saw a meme that said: ‘Rough day at work, when you have to write the e-mails yourself.’” (P14\_medium). Others note skepticism and even paranoia of online communication resulting in the uncertainty of what’s still ‘real’ and what’s AI-generated: “I feel like

people are either developing a sense for what's AI-generated, or they're super paranoid and assume everything, especially online, is AI-generated." (P12\_medium).

Finally, participants observe that the constant availability of AI changes how knowledge is valued: "And honestly, it's partly no longer necessary for me to know that level of detail to myself. If I know how to use the tool or the technology, what need do I still have, frankly, to write out a complex calculation on a board." (P10\_high).

#### 5.5.1.6. Boundary setting

Participants describe clear boundaries when it comes to AI use, mentioning that certain topics clearly remain off-limits. Personal, emotional or highly private issues are typically off-limit topics, as one interviewee explains: "Basically all personal, emotional, private topics." (P16\_medium). Another one adds: "So, if it's more personal things, or a normal conversation, or advice I'd seek for someone. It would never occur to me to contact a chatbot for that." (P01\_medium).

Boundaries are also established around more critical matters, such as high-stake or sensitive topics. One participant especially expresses caution regarding political topics: "If it's political topics, I'd be very critical" (P17\_low), while another one stresses that they approach health and nutrition topics with similar skepticism.

Some reflect on the use of AI for creative or personal communication, such as birthday card wishes and express how torn they are between the usefulness and impersonality of it: "(...) I do rewrite it, and I put in what I want. But it kind of feels illegal, because I think: is it still mine if, basically, the chatbot wrote it?" (P14\_medium).

All participants express caution in using AI for personal or sensitive areas, aiming to maintain the "human-touch", with no notable differences between AI-literacy levels.

#### 5.5.1.7. Communication Style Awareness

Participants describe awareness regarding different communication styles with the AI chatbot than with humans. They emphasize being more direct and precise with the chatbot: "With an AI I'm much more directive. I want and output, very specific, very fast, very direct." (P16\_medium). Similarly, another one describes: "With humans I say

‘you know’ all the time. You can’t do that with an AI, you have to spell things out very precisely and tell it what you want.” (P01\_medium).

Others mention being less careful with the AI, sending prompts even when they are incomplete or imperfect: “I’ll fire off my prompt before it’s complete (...) if that was an e-Mail to a person, I’d feel really uncomfortable.” (P01\_medium). Some also describe being less emotional to the AI: “I ask the AI much more calmly, because I know it can give me input but can’t actually change my situation. (P13\_medium).

#### 5.5.1.8. Normative Reflections

Participants reflect on the need to set boundaries for AI use without banning it entirely. The educational system is a key area where participants stress that certain skills need to be learned independently: “(...) some things you simply have to practice, some things you have to work through yourself. Read, learn, memorize, review, do the math yourself, formulate the language yourself.” (P11\_medium). Another one adds: “I think young people in particular are affected here, and it largely comes down to how boundaries are set, and how you communicate setting your own boundaries in using it.” (P05\_medium).

Others highlight that AI is not the substitute for a functioning health care system but since most health care systems are overloaded, participants arguing that AI should not be withheld from those who depend on it: “So should we take it away from people now and leave them worse off? We should provide more support so they don’t need to talk to a non-human thing.” (P11\_medium).

#### 5.5.2. Role of AI

The category Role of AI examines how participants define what the chatbot is or isn’t for them. It includes cases where roles are accepted (Assigned Roles), dismissed (Rejected Roles), or a comparison is made to human communicative functions (Human vs AI – Communication Role Differentiation).

Participants describe a range of roles they assign to the chatbot, but most frequently the role of the *functional assistant* in everyday tasks emerges. Several frame it as a

support system: “I’d describe it visually as a little assistant next to me at my desk, something I can quickly ask, or use to brainstorm and get input.” (P16\_medium). Others highlight the practicability of other uses such as information retrieval and text improvement: “At the moment I probably use it mainly as a better search engine, or an alternative to one. That is, either for that or to have something rephrased a bit to improve it. (P15\_medium). Some participants also describe more social functions, such as mediation. One interviewee explains: “My boyfriend and I were discussing something. (...) and it actually acted as a really good mediator.” (P14\_medium). Another participant points out that the AI chatbot can have significant benefits for people with mental health issues even or the elderly: “For people who are ultra introverted, who may also have mental-health issues, it could even be a good substitute, maybe genuinely positive. I’m thinking especially of cases like loneliness in old age, when much of one’s circle of friends has passed away.” (P10\_high). These examples illustrate how participants see the chatbot in many different roles: assistant, tool, and even companion in specific circumstances.

At the same time participants draw clear boundaries regarding what roles the chatbot should not take on. Many reject emotional or therapeutic roles, as one warns: “But if I went to a chatbot with a major problem, say depression, it could, under certain circumstances, tell me, ‘go end your life’. That’s just not acceptable.” (P18\_high). Another emphasizes the lack of genuine human empathy and therefore not being a supportive source for help: “When it comes to my psyche and my emotions and the like, I wouldn’t talk to an AI, mainly because I don’t feel it can really offer good angles or actual help, since it just isn’t a person.” (P17\_low). Some others express great concerns about AI replacing genuine human-to-human connections and what effects that would have on society: “Honestly, I find it pretty pathetic if the AI becomes my ‘friend’, in that sense cutting off human interaction. We already see that phenomenon often enough in society, with the whole incel topic, and especially in parts of Asia where people hardly leave the house anymore, where they have virtual girlfriends and boyfriends.” (P10\_high). These rejected roles illustrate how participants see AI as a supportive communication partner regarding functional topics but do not accept AI as an authentic communication partner for emotional or intimate matters.

Participants consider whether to rely on a human or on an AI chatbot depending on the communicative purpose and context. Many describe turning to AI for questions



regarding factual information or other low-stake topics while emotional and interpersonal matters are discussed with humans. One participant explains: “(...) it depends on why I’m engaging. Do I want answers, factual answers on the topic, or do I want the human side, the exchange with that specific person because I’m interested in that person’s view?” (P02\_low). Another emphasizes the presence of human feelings to lead emotional conversations: “If it’s really the emotions you want to talk about, you can’t discuss that with a cold machine. You need something human, where you also pick up the other person’s emotions.” (P08\_medium).

Participants also explain that feelings of insecurity or potential embarrassment can influence the choice between human or AI chatbot, as one describes: “Especially with things where I feel a bit dumb, I don’t ask real people. I’d rather ask the AI first.” (P07\_medium). Many participants further emphasize that in sensitive areas such as health and well-being human interaction remains irreplaceable. They think that the health practitioner can use AI for diagnosis but also has to have a solid medical foundation to be able to interpret the AI’s output correctly or spot any misdiagnosis. One participant explains: “Anything to do with body, mind and soul, so anything at the doctor’s. The doctor can, for all I care, consult AI to get up to speed, but for the mouthpiece, as the medium, I’d always want a human there. (P06\_low). This example regarding health topics displays that participants do not only fear the AI making mistakes but also that medicine is a highly personal matter, where trust and the perceived competencies of the professional play a central role. These traits are difficult to assess if one only knows a person professionally and are therefore often derived from likeability and interpersonal impression, making the trustworthiness of AI systems hard to evaluate the same way.

Participants with higher AI literacy levels tend to see the chatbot in a more differentiated view, mainly describing it as a tool whose strengths and limitations one has to be aware of to facilitate it properly. Medium AI literacy participants often emphasize pragmatic uses, such as informational search and draw sharp boundaries when it comes to emotional or social roles. Those with lower AI literacy levels tend to reject certain roles quicker, particularly with sensitive matters, such as health. This phenomenon stems from participants’ limited knowledge about AI in general, which makes this highly personal aspect appear uncertain and intangible to them.

## **6. Discussion**

### **6.1. Introduction to the Discussion**

The purpose of this study was to investigate how established theories in communication research can be reconsidered and potentially transformed in the light of the growing use of AI systems and, in particular of generalist AI chatbots. The number of studies addressing AI in communication contexts is growing, yet the rapid pace of technological development makes it essential to continuously reassess and critically question existing findings. Traditional frameworks such as Uses and Gratifications, AI Literacy and Communication Accommodation Theory have provided deep insights into human communication practices, however, their applicability to human-AI interaction requires further reflection, as the focus shifts from interpersonal communication to interaction with machines designed to simulate human behavior. Building on this, the discussion interprets the findings of the thesis in relation to these theoretical perspectives and outlines their implications for communication theory and for future research. The chapter is structured as follows: the findings are first examined through the lens of Uses and Gratifications, followed by AI Literacy, Communication Accommodation Theory and frameworks of Computer-mediated Communication and Humanization in this context. The interpretation of the findings, limitations and implications will complete the discussion.

### **6.2. Research Question 1 - Uses and Gratifications**

Uses and Gratifications (U&G) theory provides a framework for analyzing media adoption by distinguishing between concrete forms of media use and the underlying gratifications that users seek (Katz, Blumler, et al., 1973; Ruggiero, 2000). In the context of generalist AI this study demonstrates that participants' engagement with generalist AI chatbots is primarily driven by instrumental, task-oriented and informational motives, while exploratory, creative and socio-emotional forms occur less frequently in the data.

Task-related applications represent the most prominent use. Participants employed the chatbot for a wide range of text production tasks, such as drafting longer e-mails, rewriting and polishing existing drafts or condensing long and complex materials into

summaries. One participant noted that the tool provided valuable support in drafting or refining e-mail texts, highlighting the role in streamlining work (P16\_medium). These findings align with those from Skjuve et al. (2024), who reported *efficiency at work* and *support in routine tasks* as core drivers of adoption. Particularly interesting was the repeated mention of *translation* and *linguistic refinement*, especially in professional contexts. Previous studies describe that chatbots, pre-generative AI-times, were mainly used as practical tools in customer service and productivity contexts (e.g. Brandtzaeg & Følstad, 2018). The present study, however, suggests that the use of generalist AI chatbots is expanding also into knowledge fields, where strong language skills and high-quality text production are especially important. The task-related use underscores the integration of chatbots into everyday work practices, which aligns with the broader literature in AI as an emerging “productivity technology” (e.g. Dwivedi et al., 2023; Skjuve et al., 2024).

Alongside these functional practices, informational uses formed a second major category. Participants frequently described a behavioral shift in their information-seeking strategies, noting that they ask ChatGPT first before facilitating traditional search engines. One participant explained that they increasingly replace traditional search engines with Perplexity, which compiles information from Google and presents it as a summarized answer (P09\_high). This illustrates a change in media use: rather than scanning through multiple sources, users can direct their query to a single conversational agent that provides tailored answers in a natural dialogue style, a finding that has also been confirmed by Skjuve et al. (2024). Such dynamics are also supported by a large-scale study, showing that generative AI often outperforms traditional search engines. As a result, many users prefer the efficiency of a single conversational source over multiple search queries (Kaiser et al., 2025). This sense of efficiency and the personalization of answers, make generalist AI chatbots an appealing source for quick overviews and targeted information, especially in situations when time is short and the questions are very specific.

Exploratory and creative uses appeared less frequently in the data. Some participants experimented with the chatbot in a playful manner, mostly to test its capabilities and limits. Similar observations were reported by Skjuve et al. (2024), who likewise identified such exploratory behavior. This can be understood as novelty-seeking, a key

driver for exploration, and one that Scherr & Wang (2021) have also highlighted as an important motivation for social media use.

Creative uses, such as brainstorming topics or ideas, were mentioned but remained secondary to more functional applications. This is consistent with U&G research in other contexts, which shows that hedonic or entertainment-related gratifications are present but generally less frequent than utilitarian ones (Sundar & Limperos, 2013). The findings suggest that play and exploration often serve as an initial phase, transitioning later into more stable patterns of functional chatbot use.

Social and emotional uses were the least frequent but are nonetheless analytically interesting. Several participants reported turning to the chatbot for assistance in drafting socially sensitive messages, particularly work-related e-mails, with the aim of reducing strong or potentially inappropriate emotional expressions and ensuring that the message is formulated in a polite manner. In these cases the chatbot functioned less as an information or text-production source per se, but rather as a social filter. Skjuve et al. (2024) found that people used chatbots to enhance human-to-human interaction in personal messages, whereas the data from this study indicates this occurred only in workplace contexts and was explicitly rejected in personal ones. Strikingly, and unlike prior research suggesting that chatbots are used to satisfy social needs (e.g. Gao et al., 2018; Skjuve et al., 2024), these findings do not support this claim.

In this study pragmatic gratifications clearly dominated the data. Participants most frequently emphasized fast information, time-saving and complexity reduction, confirming earlier findings that utilitarian gratifications are more central to chatbot satisfaction and continued use (Cheng & Jiang, 2020). An additional interesting aspect was the value of independence. Several participants stressed that chatbots allowed them to solve problems autonomously without having to ask colleagues or experts for help. While prior U&G frameworks have emphasized related notions such as agency (Sundar & Limperos, 2013), the present findings suggest that independence may be understood as an emerging gratification. Cognitive gratifications, such as learning or gaining conceptual clarity, were mentioned but were typically secondary, while social and emotional gratifications emerged only rarely.

Beyond gratifications, the situational context of use was highly relevant. Participants often described turning to the chatbot in moments of laziness, for example, when they wanted to avoid the effort of routine tasks or in situations of uncertainty, when they lacked the knowledge or the confidence to complete an assignment independently. Prior U&G research has shown that media use is not always driven by clear goals but sometimes by a certain situation (Rubin, 1984; Ruggiero, 2000) or an affective-motivational state.

At the same time participants described tensions that shaped how gratifications were experienced. On the one hand, the AI technology was perceived as a source of pressure – several users reported the fear of falling behind if they did not facilitate chatbots, reflecting findings from research on technostress and the cultural expectation to adapt to digital tools (Tarafdar et al., 2007). On the other hand, the same technology was equally experienced as a relief, taking over routine tasks and reducing workload. This paradox mirrors prior findings on workplace technologies such as e-mail and mobile communication, which simultaneously generate both a burden and flexibility (Mazmanian et al., 2013).

Finally, within task-related uses, the repeated mention of translation as a use stands out. Participants relied on the chatbot to switch between languages, refine non-native writing, and create translations in four different contexts (e.g. works, science). While translation has not been theorized, to the best of the researcher's knowledge, as a distinct use in U&G research, the present findings suggest it should be considered an emerging category, reflecting the need to handle language differences in a globalized world. At the same time, one pragmatic gratification emerged as particularly salient: independence. Participants valued being able to solve problems on their own without asking for help. This suggests that chatbots may reduce reliance on others not only in the workplace but also in private life, where tasks that once required expert advice can now often be managed autonomously.

Together, these findings could add to existing typologies and highlight the growing importance of both being able to communicate effortlessly in non-native languages and autonomy in everyday and professional contexts.

### **6.3. Research Question 2 – AI literacy**

Participants' reported practices and reflections clustered around three dimensions commonly discussed in the AI literacy literature: understanding and evaluation, ethical reflections and applications practices (Carolus et al., 2023; Ng et al., 2021). Instead of measurable "levels", AI literacy emerged as communicative patterns showing how users approached, adapted to and made sense of AI-generated outputs (Carolus et al., 2023).

#### **Understanding and Evaluation**

Many participants described a limited understanding of how generative AI works, often admitting they had rarely reflected on it. As one user described, they had never really thought about the process behind the outputs; when an answer is provided, they simply assumed the information came from the internet and was more or less true (P01\_medium). This observation is consistent with Long & Magerko's (2020) argument that, despite AI's growing presence in daily life, many people have little understanding of what AI is or how it works. Awareness of limitations of AI, such as hallucinations or bias, was even rarer (Lee et al., 2025).

Evaluation practices were pragmatic: most verified answers only in high-stakes situations, while in everyday contexts they accepted outputs as valid information. This resonates with prior research by Klingbeil et al. (2024) showing that people tend to overrely on outputs simply because they know it was generated by AI. Several noted further that continuous fact-checking would undermine the main advantage of AI – speed and convenience. This reliance on unverified outputs suggests a great vulnerability. These findings go hand in hand with Weidinger et al.'s (2022) research on risks posed by LLM's, which emphasizes how coherent and fluent outputs can foster overreliance and make users more vulnerable to risks such as misinformation, manipulation and misuse.

#### **Ethical reflections**

Data and privacy concerns were mentioned, yet broader societal issues were more salient. Participants frequently pointed to worries about cognitive "laziness", potential

job losses and challenges for the educational system which also resonates with Weidinger et al.'s (2022) taxonomy of risks and other research (Rahwan et al., 2019).

Environmental costs and were also acknowledged, with some calling the effects “environmental catastrophe”. Yet this knowledge did not alter their actual usage, illustrating a clear knowledge-action gap (Strubell et al., 2019). When discussing moral boundaries, participants emphasized ethical restraint, while stressing that the mere technical possibility of using AI for certain purposes does not imply that it should be done. This aligns with Floridi & Cowl's (2019) research that AI can have both positive and negative effects on society and that only within a principled framework can its developments and use be directed towards beneficial outcomes.

### **Application and Prompting**

In practice, most participants engaged with the chatbot casually. They typically phrased requests directly, then refined them iteratively until satisfied, without employing prompting strategies. This finding goes hand in hand with Zamfirescu-Pereira et al.'s (2023) description on “ad hoc” prompting, meaning opportunistic trial-and-error techniques. As a result, people rarely develop a deeper understanding of why certain prompts succeed or fail (Zamfirescu-Pereira et al., 2023). An additional finding concerned emotional regulation during the chatbot interaction. Several participants reported frustration when the system failed to provide the expected response and instead of delivering the precise answer they were looking for, it often came back with something vague (P02\_low). Others, however, described patience and repeated iteration. These affective dynamics highlight that users also adapt emotionally when interacting with AI chatbots. This interpretation builds on Nass & Moon's (2000) finding that people apply social and emotional responses to computers, treating them as if they were social actors.

Taken together, the findings indicate that AI literacy manifests not only as cognitive knowledge but also in communicative, reflexive and affective practices that shape interactions with chatbots. This provides empirical support for recent conceptualizations of AI literacy as a multidimensional construct (Carolus et al., 2023) and highlights the need for educational training that not only fosters critical evaluation

but also equips individuals with strategies for managing the challenges of human-AI interaction.

#### **6.4. Research Question 3 – Communication Accommodation Theory (CAT)**

The findings of provided only limited and partly ambiguous evidence of communication accommodation processes in interaction with generalist AI chatbots. While Communication Accommodation Theory (CAT) (Giles et al., 1973; Giles & Ogay, 2007) has been applied to face-to-face interactions as well as to mediated communication (Bunz & Campbell, 2004; Gains, 1999), its extension to human-AI interactions proves less straightforward. Unlike human interlocutors, large language models exhibit highly standardized and neutral linguistic patterns. This relative uniformity reduces the salience of linguistic features, such as accent, emotion, or style that serve as triggers for convergence or divergence (Gallois et al., 2005). Accordingly, explicit style shifts were less prominent in this study than might be expected.

Nevertheless, three forms of subtle accommodation and transfer were observed. First, participants reported the transfer of AI-generated phrases into human communication. One user explained that because the chatbot often produced similar output formulations, they started to recall and adopt some of these phrases in their own e-mail writing (P01\_medium). This finding aligns with research on media influence on linguistic repertoires, as studies of text messaging demonstrate that recurring linguistic practices emerging in digital environments become incorporated into users' everyday communication routines (Tagg, 2012). Such transfer processes suggests that Human-AI interaction can indirectly shape human-to-human exchanges.

Second, participants displayed contrasting perceptions of how much structure or accuracy they must deploy so that AI will understand them. One participant emphasized that they tried to be very structured when interacting with the AI, thinking carefully about how to phrase their prompts so it would understand them as intended (P17\_low). This statement shows that a potentially limited understanding of AI processing can lead users to converge too much and apply overly careful and structured input strategies even when unnecessary (Eiband et al., 2018). Conversely, another participant reported that they no longer paid attention to correct spelling or



politeness markers, noting that even “please” and “thank you” gradually disappeared. They further mentioned that this felt odd initially, but then getting used to it quickly (P03\_medium). Importantly, this practice was not pure divergence but a form of convergence to the perceived norms of the AI, as the participant reasoned that the chatbot does not use or require such expressions. This illustrates how correct or incorrect mental models of AI processing shape whether users adapt by elaborating or reducing their linguistic effort.

Finally, some participants deliberately diverged, keeping their politeness and stylistic individuality to “stay human” and to create distance to the AI system. Such reflexive resistances echoes debates on the humanization on AI (Guzman & Lewis, 2020) and signals efforts to resist anthropomorphism, which is in CAT’s view a strategy of divergence and identity expression (Gallois et al., 2005)

Taken together, the findings of this research suggest that CAT applies only partially to human-AI exchanges. Observable adaptations were fragmented. At the same time, the subtle transfer of linguistic patterns into human-to-human communication indicates that AI-mediated interaction can have downstream effects on interpersonal communication styles (Tagg, 2012).

## **6.5. Research Question 4 – Reflexive Awareness**

Whereas RQ3 examined direct communicative adaptations in interaction with chatbots, RQ4 focuses on how participants interpreted the broader implications of these practices for their everyday lives and potentially also for relations with others. Although explicit changes in interpersonal communication were less frequently reported, the interviews showed significant reflexive considerations: perceptions on self-change, shifts in media routines, ambivalent humanization and reflections on the communicative role of AI generally.

Perceived self-change emerged as a recurring theme. Several participants described feeling “lazier” or less attentive to detail, outsourcing spelling and phrasing to the chatbot. One participant admitted that their spelling got worse because they typed quickly and ignored mistakes, adding that they see that as a negative development since even their personal notes had begun to show these errors (P18\_high). Such

examples suggest that users have already gotten accustomed to constant assistance, even to the point where they can't imagine working without it anymore. These reflections indicate that AI is not only valued for efficiency but also perceived as reshaping cognitive effort, habits and self-discipline. These findings resonate with Hepp's (2020) concept of deep mediatization, where digital technologies gradually reorganize communicative practices and expectations.

These reflections extended into media routine change. Participants increasingly adopted what could be described as an "AI-first strategy". They noted that the chatbot has increasingly integrated into both their workday and everyday life and that new use cases seemed to emerge almost on their own as a result (P04\_high). Guzman & Lewis (2020) also show that AI systems become embedded in communicative processes and reshape interactional expectations. In this study, such integrations affected interpersonal messenger exchanges, for instance when participants sent less polished messages to colleagues, thinking that the receiver was just the chatbot or that the chatbot would refine it.

A third theme was humanization and social cues. Many participants reported that in professional contexts, particularly when interacting with the AI over a longer period of time, they tended to add a greeting and a closing (P13\_medium). Such practices suggest that politeness served as a symbolic rather than functional cue, aligning with research on the humanization of AI, where users attribute social cues to systems while simultaneously recognizing their non-human state (Guzman & Lewis, 2020). A striking and often mentioned joke by participants was that if robots were ever to take over the world, they hoped to be spared (P02\_low). Although intended as a joke, the fact that many voiced similar remarks illustrates how cultural narratives of AI shape communication practices. As Cave et al. (2020) demonstrate, ideas from science fiction, such as robots taking over the world, still shape how people talk about AI in everyday life. Such narratives dealt as a way to cope with the ambivalence of AI. Aware of AI's impressive capabilities and rapid rise, participants created distance by framing it through exaggeration and humor.

Taken together, the findings for RQ4 show that AI is not simply an additional tool but a part of a broader transformation that is reshaping communicative life (Hepp, 2020). Participants reflected on how these changes affected their routines, skills and social

norms. This highlights that the impact of AI lies yet less in immediate interpersonal change than in how individuals interpret and anticipate its growing presence. An important implication is that AI literacy must equip users not only with technical competencies but also with the critical and reflexive skills needed to navigate the new AI-driven world.

## **6.6. Cross-cutting Interpretation**

While each research question highlights a distinct dimension of AI chatbot use, a cross-cutting interpretation reveals several dynamics that stretch through the findings. A first universal theme is the central role of AI literacy. Across all areas, participants' ability to understand, evaluate and reflect on chatbot interaction shaped both their practices and interpretations. This supports prior work that frames AI literacy as encompassing not only cognitive understanding but also critical, reflexive and communicative dimensions (Long & Magerko, 2020; Ng et al., 2021).

A second theme is the tension between efficiency and dependency. The gratifications participants sought, such as time-saving, simplification or independence, were often accompanied by concerns about over-reliance. This resonates with research on digital media showing that convenience-oriented technologies can foster cognitive offloading (Sparrow et al., 2011; Ward et al., 2017). In the case of generalist AI chatbots, the main risks seemed to lie in areas of language production, critical thinking and information retrieval. This points to the need for balanced usage, where AI serves as support without undermining basic human competencies.

A third theme concerns communicative adaptation and its implications for wider societal norms. Several participants adapted their style by becoming more structured because they assumed the system required it, while others maintained distinctive features to stress their humanness. In Communication Accommodation Theory it is demonstrated that such adaptation reflects users' assumptions about the interlocutor (Giles et al., 2023). AI literacy shapes these assumptions: lower literacy fosters overaccommodation, as users lack knowledge about what AI systems actually require, whereas higher literacy enables more selective divergence, knowing that such systems do not depend on certain cues, such as politeness, for example.

Finally, these themes combine how users interpret the role of AI in everyday life. Chatbots are seen as both, empowering tools and as sources of unease or pressure, which reflects on Hepp's (2018) notion on "Mediatization". The findings suggest that AI literacy, user motivations and communicative adaptation are intertwined processes. The overarching tension lies between empowerment and dependency, highlighting both the opportunities and the risks of Human-AI communication for individuals and societies.

## **6.7. Limitations**

Given the exploratory nature of this qualitative study, certain. Limitations should be acknowledged. First, the sample size was very small and participants were deliberately selected to represent heterogeneous user profiles in terms of gender, AI literacy level/prior AI expertise, age and context of use. While this enabled a wide spectrum of perspectives, it inevitably limits the generalizability of the findings. The results should be understood as qualitative exploratory insights and therefore do not allow for quantitative conclusions about frequencies or distribution of motives.

Second, the categorization of participants into different AI literacy levels represents another limitation, since the classification was based on subjective assessment during the research process and could not be validated with an established measurement instrument. This limitation is inherent to the scope of a master's thesis, as conducting a separate study to determine AI literacy levels would have exceeded its limits. For this reason, the categorization was presented only as contextual information in the results and deliberately excluded from the discussion in order to maintain transparency and to avoid being perceived as a validated finding.

A further limitation concerns the theoretical framework. The study combined U&G, AI literacy and CAT theories as a foundation for this research. While this approach was useful in capturing diverse aspects of AI chatbot use, it also came with conceptual overlaps. Certain phenomena, such as politeness strategies or adaptation practices, could not be clearly attributed to only one single framework. Future research must draw clearer boundaries between the theoretical approaches.

Finally, the fact that technological developments around AI chatbots and its features are progressing rapidly sets a potential expiration date for this study. The findings capture a specific moment and may quickly be outdated and overtaken by further advances.

## **6.8. Implications**

The findings of this study carry several implications for education, society and communication practices.

First, AI literacy should be embedded more systematically into educational curricula. As AI systems evolve rapidly, they also bring risks such as the spread of disinformation, manipulation and political interference through AI-generated content. To prepare citizens for these challenges, education must go beyond teaching technical skills. Learners need to develop communicative and reflexive competencies that enable them to critically evaluate AI outputs and recognize their limitations. Finland provides a promising example by consistently topping the European Media Literacy Index since 2017. That has demonstrated that embedding media literacy into curricula at all levels can strengthen societal resilience against misinformation. (Byman et al., 2023). Similar efforts will be necessary to ensure that future generations are properly equipped for the opportunities and risks of Human-AI communication.

Secondly, the results highlight the importance of balance between reliance on AI and independent human capabilities. Participants reported tendencies toward cognitive offloading and reliance on chatbots for routine tasks. While this can increase efficiency, it also risks destroying essential competencies such as independent problem-solving, critical thinking and language production. Sustainable AI use therefore requires practices where technology complements rather than replaces core human skills. This raises important questions for the educational systems as well: at what stage should which skills be taught and which basic competencies must be safeguarded because AI cannot and should not replace them? Ensuring that students continue to learn and practice these foundational skills is crucial to maintaining autonomy and the ability to critically evaluate AI outputs.

Third, the findings suggest that consequences for human communication. Adaptations, such as increased structure or missing politeness may spill over into interpersonal contexts, reshaping communicative norms and expectations. If people become accustomed to instant and polished responses, tolerance for ambiguity or imperfection in human conversation may decline. Over time, reliance on AI could even reduce direct interaction between humans, as the findings already suggest. These developments underline the need to safeguard fundamental communication and cognitive skills.

Finally, the study could also contribute to the Uses and Gratifications research. The results indicate that *translation* should be treated as a distinct use and *independence* as a potentially new gratification. Both would extend existing typologies and underline the specific U&Gs of AI chatbots in everyday communication.

Taken together, the study highlights that the evolving risk landscape of AI can be addressed through comprehensive AI literacy education. Such literacy is not only vital at the societal level to strengthen resilience against misinformation and manipulation but also at the individual level, where it enables users to become more reflective and responsible in their engagement with AI and develop a better awareness of its potential impact on everyday communication practices.

## 7. Conclusion

This thesis set out to explore how individuals interact with generalist AI chatbots, focusing on user motivations, AI literacy, communicative adaptations and reflexive interpretations of Human-AI communications.

With regard to RQ1, the findings show that users primarily engage with chatbots for task-related purposes such as text production, summarizing, translation and information retrieval. Pragmatic gratifications like efficiency, time-saving and cognitive simplification emerged as central drivers.

For RQ2, AI literacy shaped communication styles and strategies not only as technological knowledge but also as reflexive competence that also included normative and affective dimensions.

In relation to RQ3, users displayed both convergence to chatbot conventions and deliberate divergence to assert human-ness, pointing to subtle shifts in communication style.

Finally, RQ4 showed that, rather than fundamental transformations in human-to-human communication, participants reported reflexive awareness of self-change, ambivalence and shifting routines, and situating AI in broader social contexts and everyday practices.

Taken together, these results highlight that Human-AI communication is not merely functional but deeply tied to meaning-making in relation to identity, autonomy and social norms. Theoretically, the study extends the U&G framework by identifying the emerging use of “*translation*” and the gratification “*independence*”. It also enriches communication accommodation theory in the context of human-AI interaction and broadens the idea of AI literacy to include reflexive and affective dimensions. Practically, these findings underline the need to promote AI literacy that goes beyond technical training, integrating critical reflections and communicative awareness.

The study’s qualitative scope and specific sample necessarily limit the generalizability of the findings. Future research could therefore examine longitudinal effects of generalist AI chatbot use and complement qualitative insights with quantitative approaches such as a preliminary study assessing participants’ AI literacy levels with a validated scale to draw better connections between literacy levels and subsequent outcomes.

Despite these limitations, the study demonstrates that AI chatbots are already reshaping communication practices and expectations. Understanding this interplay of motivations, competencies and accommodations is essential for preparing individuals and societies to engage with these technologies in a critical and sustainable manner.

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## APPENDICES

### Appendix A: Interview Guideline



# Semistrukturiertes Leitfadeninterview

**Titel der Studie:**

*Exploring the Role of AI Literacy and User Motivations in Communication with Generalist AI Chatbots and Their Potential Impact on Human Interaction – a qualitative study.*

**Durchgeführt von:**

Student:in

Institut für Publizistik und Kommunikationswissenschaften

Universität Wien

**Sprache:**

Deutsch

**Geschätzte Dauer:**

45-60 Minuten

**Disclaimer:**

Im Rahmen dieses Interviews verwende ich den Begriff „KI-Chatbot“ als Kurzform für „KI-gestützter Chatbot mit allgemeinem Anwendungsbereich“. Darunter werden Systeme verstanden, die vielseitig einsetzbar sind und nicht explizit auf einen spezifischen Aufgabenbereich beschränkt sind. Einige Beispiele hierfür sind ChatGPT, Gemini, Perplexity, Claude, Huggingchat, Grok. Diese Chatbots können in unterschiedlichen Kontexten, wie etwa zur Informationssuche, Textgenerierung oder Problemlösung eingesetzt werden.

## **Demografische Daten**

- 1.) Alter: \_\_\_\_\_
- 2.) Geschlecht: \_\_\_\_\_
- 3.) Höchster abgeschlossener Bildungsgrad:  
\_\_\_\_\_
- 4.) Beruf/Beschäftigung: \_\_\_\_\_
- 5.) Nationalität: \_\_\_\_\_

## **Icebreaker**

- 1.) Wissen Sie noch, wann Sie das erste Mal mit einem KI-Chatbot interagiert haben?

## **RQ1 Uses & Gratifications**

- 2.) Was bewegt Sie dazu, mit einem KI-gestützten Chatbot wie ChatGPT zu interagieren?
- 3.) In welchen Bereichen Ihres Lebens verwenden Sie KI-Chatbots?
  - a. Besonders auch außerhalb von Schule & Arbeit (Evtl. nachfragen – in persönlichen Gesprächen, in der Freizeit etc.)
- 4.) In welchen Situationen entscheiden Sie sich dafür, einen Chatbot zu nutzen, anstatt andere Informationsquellen zu verwenden oder direkt das Gespräch mit einem Menschen zu suchen?
- 5.) Welche Vorteile oder Bedürfnisse erfüllt ein KI-gestützter Chatbot für Sie?

## **RQ2 AI Literacy**

- 6.) Wie gut glauben Sie zu verstehen, wie ein KI-gestützter Chatbot wie z.B. ChatGPT zu Antworten kommt?
- 7.) Gehen Sie mit den Antworten kritisch um oder übernehmen Sie die Antworten eher direkt?
  - a. Wann gehen Sie kritisch damit um und wann nicht?

- 8.) Hat sich Ihr eigenes Denken oder Ihre Recherchebereitschaft durch die KI-Nutzung verändert? Wenn ja, wie?

### **RQ3 Kommunikationsstil und CAT Theory**

- 9.) Wie prompten Sie? Gibt es bestimmte Dinge, die Sie beim Formulieren Ihrer Prompts an KI-gestützte Chatbots beachten? – zum Beispiel bezüglich Sprache, Stil, Rechtschreibung oder Satzbau?
- 10.) Bitte stellen Sie sich folgendes Szenario vor: Es ist Sonntag und alle Geschäfte haben geschlossen. Sie haben vergessen einen Kuchen für ein Familienfest zu backen und realisieren, dass Sie keine Eier mehr Zuhause haben. Sie wollen aber ganz sicher nicht mit leeren Händen auftauchen. Was würden Sie nun in den Prompt für die KI schreiben, um das Problem zu lösen?
- 11.) Inwiefern denken Sie bei sachlich, neutralen und besonders strukturierten Texten auch an die Möglichkeit, dass sie von einer KI verfasst worden sein könnten?
- 12.) Beobachten Sie, dass sich Ihre Kommunikation – insbesondere schriftlich – mit anderen Menschen verändert hat, seit Sie regelmäßig mit KI interagieren? *(evtl. nachfragen - z.B. in Bezug auf Formulierungen, Struktur oder Stil)*

### **RQ4 Deutungen und soziale Wirkung**

- 13.) Wie unterscheidet sich für Sie ein Gespräch mit der KI von einem Gespräch mit einem Menschen – emotional, inhaltlich, zwischenmenschlich?
- 14.) Welche Rolle nimmt die KI in Ihrem Alltag ein? *(evtl. nachfragen - ist sie eher Werkzeug, Sparringpartner, Informationsquelle oder etwas anderes?)*
- 15.) Gibt es Situationen, in denen Sie gezielt nicht mit einer KI sprechen würden und stattdessen lieber einen Menschen fragen?
- 16.) Gibt es – basierend auf Ihrem Wissen, Ihren Beobachtungen oder eigener Erfahrung – Auswirkungen der Nutzung von KI auf die Umwelt oder die Gesellschaft? Wenn ja, welche?
- 17.) Wenn Sie zurückblicken: hat sich Ihre Welt durch KI-gestützte Chatbots wie zum Beispiel ChatGPT verändert – beruflich, privat, im Alltag oder in deinem Denken? Und wenn ja, wie?

## Appendix B: Codebook

### Codebook

| Code System                           | Memo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RQ1 Motivations for Using AI Chatbots |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Uses                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Task-related Use                      | <p>Apply this code when a user engages with the AI chatbot to accomplish specific tasks or productivity goals. This includes practical uses such as drafting texts, coding, scheduling or any functional assistance where the chatbot is used as a tool to get something done. The focus is on task completion or problem-solving.</p> <p>Example: "I asked ChatGPT to help me draft my work Mail."</p>                                                                                                                                                                                                               |
| Feedback                              | <p>Apply this code when the user engages with an AI chatbot to receive feedback, suggestions for improvement, or constructive criticism on their work or ideas. This can include text, code, designs, and a lot more. The plan is always to refine, improve or validate the quality of the given work/ideas.</p> <p>Do not apply when the interaction is about generating new ideas (see: "creative use") or retrieving factual information without the purpose of valuation (see: "Informational Use")</p> <p>Examples: "I asked the chatbot to review my draft and point out areas where my argument was weak."</p> |
| Summarizing / Key Point Extraction    | <p>Apply this code when the participant uses the chatbot to condense text or extract main points from longer content. This includes summarizing all sorts of text, e.g. academic papers or articles into a shorter version, with the most important key points extracted.</p> <p>Example: "I uploaded my lecture transcript and it gave me a bullet-point summary of the key topics"</p>                                                                                                                                                                                                                              |
| Translation                           | <p>Apply this code when the individual uses the AI chatbot to translate text from one language to another. This also includes checking or improving the accuracy of an existing translation.</p> <p>Example: "It helped me with the translation of a client's e-mail"</p>                                                                                                                                                                                                                                                                                                                                             |
| Text-Production/ Writing Assistance   | <p>Apply this code when the user uses the AI chatbot to produce original written text or provide assistance in drafting, rephrasing or rewriting existing text. This includes composing e-mails, marketing copies, and any other form of writing.</p> <p>Clarification:<br/>Do not apply this code if the user only requests an evaluation or feedback of existing text without asking to rewrite or produce new content. In that case apply "feedback" or if necessary apply both codes.</p>                                                                                                                         |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | <p>Example: "I had to write a social media copy and the chatbot formulated some example copies for me"</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Creative Use               | <p>Apply this code when a participant utilizes the AI chatbot for creative endeavors or imaginative activities. This covers scenarios like brainstorming ideas, story or poem writing, generating art, or any inventive use of the AI for creativity's sake. The focus is on exploring creative outcomes with the AI.</p> <p>Clarification: Do not code if the interaction focuses on enjoyment or testing the capabilities of AI, without a defined creative product in mind - in that case apply "Exploration/Play".</p> <p>Example: "I use the Chatbot a lot for the creative process of social media content creation. We brainstorm together. I tell it what my basic idea is and it takes it to next level."</p> |
| Informational Use          | <p>Apply this code when the user turns to the AI chatbot for information seeking or learning.</p> <p>This includes:</p> <ul style="list-style-type: none"> <li>- asking factual questions</li> <li>- asking for the explanation of concepts</li> <li>- asking for advice or instructions or</li> <li>- generally using the AI as an information source or research assistant.</li> </ul> <p>The primary goal is to obtain knowledge or guidance.</p> <p>Example: "I couldn't remember the details of the 1990s Balkan conflict, so I asked the chatbot to get a quick overview of what happened."</p>                                                                                                                  |
| Social Interaction Support | <p>Apply this code when the user uses the AI chatbot to simulate or supplement social interaction. This may involve practicing conversation, seeking companionship when others aren't available, or getting help with social situations (like advice on interpersonal communication).</p> <p>Example: "I just sometimes chat with the AI about my day when I'm feeling a bit lonely."<br/> "The chatbot helped me to figure out a solution for a tough disagreement with my neighbor"</p>                                                                                                                                                                                                                              |
| Emotional Support          | <p>Apply this code when the participants use the chatbot for emotional comfort or support. This includes venting feelings, seeking empathy, stress relief. The chatbot represents a source of encouragement, understanding and a non-judgmental space for the participants emotions.</p> <p>Example: "After a rough day, I told the chatbot I was feeling overwhelmed, and it responded with some genuine comforting words."</p>                                                                                                                                                                                                                                                                                       |
| Exploration/Play           | <p>Apply this code when a user is engaging with the AI out of curiosity, experimentation or entertainment without a serious goal. This covers playful uses such as testing the AI's capabilities, asking random or funny questions, role-playing or exploring imaginative scenarios for fun. The interaction is driven by exploration and playfulness.</p> <p>Example: "I thought it was fun to ask the chatbot to tell me a joke and so it did. The joke was actually quite good."</p>                                                                                                                                                                                                                                |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| Gratifications                         | This category refers to the needs and gratifications that are fulfilled through the use. What kind of benefits, satisfactions do they get out of their interaction?                                                                                                                                                                                                                                                                                                                                                                                    |
| Cognitive Gratifications               | <p>Apply this code when a participant derives intellectual satisfaction or mental stimulation from using the AI chatbot. The focus is on the user's cognitive reward (knowledge gain or thought provocation) from the interaction.</p> <p>Example: I felt really satisfied after our conversation about quantum physics - the chatbot explained complex concepts in a way I understood and I learned a lot in just a few minutes."</p>                                                                                                                 |
| Pragmatic Gratifications               | <p>Apply this code when the user experiences practical or utilitarian satisfaction from the chatbot's assistance. This means, the user feels like the AI helped them accomplish a task, save time, solve a problem or increase efficiency.</p> <p>Example: "Thanks to the chatbot, I finished preparing my presentation slides much fast. I got a real sense of accomplishment and saved at least an hour of work."</p>                                                                                                                                |
| Availability                           | <p>Apply this code when the user highlights the benefits of the AI chatbot being accessible at any time and from almost any location. The gratification comes from immediate responses without boundaries such as geographically, office hours or human availability.</p> <p>Clarification: Do not apply when the focus is on independence from others for task completion (see: "Autonomy/Independence")</p> <p>Example: "It's just great that it's always there, even in the middle of the night, when I don't want to bother any of my friends"</p> |
| Interactivity                          | <p>Apply this code when the user values the conversational and responsive nature of the AI chatbot. The gratification comes from the direct back-and-forth conversational exchange that allows the user to ask specific and follow-up questions to explore a topic more deeply.</p> <p>Example: "It feels more like a conversation than a search engine because I can ask my specific question regarding my problem rather than typing buzzwords into google."</p>                                                                                     |
| Autonomy / Independence                | <p>Apply this code when the user emphasizes the ability to complete tasks without relying on other people - gaining flexibility in time, location, or workflow through the use of AI. The gratification lies in being able to act alone, independently, and on one's own terms.</p> <p>Example: "I like that I can finish my homework without waiting for my classmates to help me. The chatbot gives me the input I need, so I can work completely on my own."</p>                                                                                    |
| Documentation & Traceability of Output | <p>Apply this code when the user appreciates that the chatbots responses are documented and reaccessible. The gratification is linked to being able to revisit and reuse the generated content later.</p> <p>Example: "I can scroll back through the conversation to find the exact answer later"</p>                                                                                                                                                                                                                                                  |

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Objectiveness       | <p>Apply this code when the user values the Ai chatbots perceived neutrality or lack of personal bias in responses. The gratification comes from receiving relatively objective answers without the influence of personal feelings, relationships or hidden agendas.</p> <p>Clarification: Do not apply when the emphasis is on factual accuracy or reliability (See: "Awareness of Limitations" or "Critical Reflections on AI Output").</p> <p>Examples: "Unlike people, it's not going to let personal opinions get in the way."</p>                                                                                                                                                                                                                                                                  |
| Fast Infos          | <p>Apply this code when the user appreciates the immediate delivery of information or answers by the AI chatbot. The gratification comes form speed and instant access to information.</p> <p>Clarification: "Do not apply when the main point is the chatbot's efficiency in completing tasks or saving overall time (see: "Efficiency" or "Time-saving"). The focus of this code is the fast retrieval of information.</p> <p>Example: "I get answers in seconds, without needing to search multiple websites for answers."</p>                                                                                                                                                                                                                                                                        |
| Reducing Complexity | <p>Apply this code when the user values the AI chatbot's ability to simplify complex topics, processes or tasks. The gratification comes from receiving explanations, structures or solutions that make complex content easier to understand.</p> <p>Clarification: Do not apply when the focus lays on reducing the user's mental effort by condensing large volumes of content so they don't have to process it themselves - (see: "Cognitive Relief/Simplification"). If the segment purely describes the act of summarizing or extracting key points as a functional use of the AI, without the gratification being mentioned, apply "Summarizing/Key Point Extraction"</p> <p>Example: "I was finally able to understand physics once it was broken down and explained step-by-step by the AI."</p> |
| Efficiency          | <p>Apply this code when the user experiences a sense of improved workflow or higher output with the same amount of resources or effort. The gratification comes from completing tasks more efficiently.</p> <p>Clarification: "Do not apply when users only refer to the time they saved (see: "Time-saving"). Efficiency involves the overall process becoming smoother and more productive, not just faster.</p> <p>Example: "It streamlines my work process, so I don't waste energy switching tools."</p>                                                                                                                                                                                                                                                                                            |
| Time-saving         | <p>Apply this code when the user specifically highlights that the AI chatbot reduces the time needed to complete tasks or find answers. The gratification comes from finishing sooner, freeing up time for other activities.</p> <p>Clarification: Do not code if the emphasis is on better workflows or productivity (see: "Efficiency") or on making a complex issue easier to understand (see: "Reducing Complexity"). Time-saving is only about the time span/duration being shorter.</p>                                                                                                                                                                                                                                                                                                            |



|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      | <p>Example: "It cuts the preparation time for my slides in half."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Cognitive Relief/Simplification      | <p>Apply this code when the user describes a sense of mental relief or reduced cognitive load because the AI chatbot processes, condenses or organizes information on their behalf. The gratification lies in not having to read, analyze or filter large amounts of material themselves so they experience a mental relief.</p> <p>Clarification: Do not code if the focus lies on understanding something better through simplifying explanations or structures (see: "Reducing Complexity"). This code is about AI taking over mental work of condensing or filtering.</p> <p>Examples:<br/>         "I was completely overwhelmed by the pile of reading for my course but the chatbot condensed it so I could focus without feeling stressed about the workload."</p> |
| Emotional Gratifications (after use) | <p>Apply this code when the user gains positive emotional outcomes or improved mood from interacting with the AI chatbot. The focus is on the affective reward or mood enhancement the user gets.</p> <p>Clarification: "Do not code when the only purpose of the interaction is to seek emotional support for a specific personal issue (see: "Emotional Support"). Emotional Gratification focuses on the outcome, the improved mood or emotional benefit.</p> <p>Example: "After joking around with the AI for a while, I realized I was laughing and in a better mood. It was a rough morning but chatting with it left me feeling happier."</p>                                                                                                                       |
| Social Gratifications                | <p>Apply this code when the user obtains a sense of social satisfaction or connectedness from using the AI. This captures any social or relational fulfillment the user gets such as feeling accompanied or understood even though this interaction is with an AI chatbot and not a human being.</p> <p>Clarification: Do not apply when the main purpose of the interaction is to seek advice or assistance for human interactions (see: "Social Interaction Support"). This code focuses on the experienced social satisfaction during or after the interaction.</p> <p>Example: "Having the chatbot to talk to when I can't reach my friends gives me a bit of that social fix, it's oddly satisfying, it makes me feel less isolated somehow."</p>                     |
| Context of Use                       | <p>Apply this code when the user describes the situational or environmental circumstances in which they engage with the AI chatbot.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Usage Situation                      | <p>Apply this code when the data describes the situational context or environment in which the user engages with the chatbot. It focuses on external contexts like location, time, device, current activities that characterize the usage situation. The emphasis is on setting the scene for the interaction rather than on the purpose of the outcome.</p> <p>Example: "I usually only use the chatbot at work and for work-related topics."</p>                                                                                                                                                                                                                                                                                                                         |

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Private Life                                                          | <p>Apply this code when the user refers to using the AI chatbot in private or personal-life context, outside of professional or academic settings. This includes leisure use, household-related tasks, hobbies or personal conversations.</p> <p>Example: "I like to ask for dinner recipes when I'm cooking at home"</p>                                                                                                                                                                                                                                                           |
| University                                                            | <p>Apply this code when the user discusses using the AI chatbot in an academic context, such as research, homework, exam preparation or university-related tasks/communication.</p> <p>Examples: "It helped me structure my term paper outline."</p>                                                                                                                                                                                                                                                                                                                                |
| Work                                                                  | <p>Apply this code when the user refers to using the AI chatbot in a professional or work-related context. This includes tasks, communication, reporting or brainstorming in a job setting.</p> <p>Example: "When I need to prepare for a meeting, I ask the chatbot to list possible points."</p>                                                                                                                                                                                                                                                                                  |
| Affective-Motivational State (Emotions leading to use and persisting) | <p>Apply this code when the user describes their internal emotional, motivational or mental state that directly led to the interaction with the AI chatbot. The emphasis is the emotion being the trigger or driver to use AI but this code can also be coded when the emotional state persists during the usage, as a carry-on effect. Clarification: Do not apply when the focus is on managing or adjusting emotions in reaction to the chatbots outputs, for this see: "Emotion Regulation".</p> <p>Example: "I felt bored and just wanted to play around with the chatbot"</p> |
| Surprised (positive)                                                  | <p>Apply this code when the user reports a pleasant or positive surprise that led them to engage with the AI chatbot.</p> <p>Example: "I didn't expect it to give such a great answer, so I kept asking"</p>                                                                                                                                                                                                                                                                                                                                                                        |
| Boredom                                                               | <p>Apply this code when boredom is the primary trigger for opening the engagement with the chatbot, often to fill time or seek entertainment.</p> <p>Example: "I was bored at home, so I started chatting with it."</p>                                                                                                                                                                                                                                                                                                                                                             |
| Social Pressure / Peer Pressure                                       | <p>Apply this code when external expectations, encouragement or influence from peers lead the user to try or use the AI chatbot.</p> <p>Example: "My coworkers all used it for the report, so I did too."</p>                                                                                                                                                                                                                                                                                                                                                                       |
| Overwhelm                                                             | <p>Apply this code when the user feels overwhelmed or stressed by tasks or information and turns to the AI chatbot to cope with or reduce this overload.</p> <p>Example: "I had so much data to go through, so I asked the AI to handle it."</p>                                                                                                                                                                                                                                                                                                                                    |
| Discomfort                                                            | <p>Apply this code when the user feels uneasy, awkward or conflicted about interacting with the AI, yet still chooses to engage with it.</p> <p>Examples:<br/>"It feels weird to talk to a bot, but I needed quick help."</p>                                                                                                                                                                                                                                                                                                                                                       |

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| Laziness                     | <p>Apply this code when a lack of willingness or motivation to do a task manually triggers the user to turn to the AI chatbot.</p> <p>Example: "I could have written it myself but I didn't feel like it and so I let the AI do it for me."</p>                                                                                                                                                                                                                                                                                                                                                                                                              |
| Uncertainty                  | <p>Apply this code when doubt or insecurity about how to proceed with a task or question leads the user to consult the AI chatbot.</p> <p>Example: "I wasn't sure how to start the project, so I asked the AI for ideas."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                |
| RQ2 AI Literacy              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Application/Prompting Skills |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Output Style Specifications  | <p><b>Definition:</b><br/>Apply this code when the user describes including instructions in the prompt that specify the desired style, tone, level of formality, or linguistic register of the AI's output. This includes asking for academic language, professional phrasing, simplified wording, or stylistic adjustments to match a specific context (e.g., university assignments, emails, public communication).</p> <p><b>Examples:</b><br/>"I told it to make the paragraph sound more professional."<br/>"Sometimes I write: 'please rephrase this in academic English' when I work on my term papers."</p>                                          |
| Single-Prompting Strategy    | <p>Apply this code when the user tends to use one-off, stand-alone prompts to get answers from the AI instead of an interactive or iterative approach.</p> <p>Example: "I usually just throw one big question at the chatbot and hope it gives me everything I need in one go."</p>                                                                                                                                                                                                                                                                                                                                                                          |
| Multi-Prompting Strategy     | <p>Apply this code when the user employs a multi-step or iterative approach to prompting, breaking tasks into multiple queries or refining the chatbot's answers through follow-ups. This includes strategies like asking an initial question, then building on or clarifying with subsequent prompts to reach a better result. It highlights conversational, stepwise use of the AI.</p> <p>Example: "When I needed help writing my report, I didn't stop at the first answer. I first asked for an outline, then followed up to flesh out each section, and even later prompted it to rephrase certain parts. I kind of guided the chatbot in stages."</p> |
| Clarity & Structure          | <p>Apply this code when the user emphasizes or demonstrates writing prompts that are not only clear and well-structured but also linguistically precise. This includes careful attention to grammar, sentence construction, and correct spelling to ensure effective communication with the AI. The code also applies when users use formatting strategies such as bullet points, numbered instructions, or step-by-step phrasing to make their input more comprehensible for the chatbot.</p> <p>Example:<br/>"I always try to write my prompts using proper grammar and punctuation - it's just easier for the chatbot to understand. I often</p>          |

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|                                       | structure my queries like this: '1) define the term, 2) provide an example, 3) suggest improvements.' Clear language really helps avoid misunderstandings."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Role Framing (Act as..)               | <p>Apply this code when the user sets a specific role or persona for the AI within a prompt to shape the response. This includes telling the AI to "act as" or "pretend to be" someone/something (e.g., a teacher, a recruiter, an expert) to get answers in a desired style or perspective. The user is leveraging role assignment as a prompting technique.</p> <p>Example: "If I need writing feedback, I'll explicitly tell the AI something like: 'You are an editor. Please review the following text for clarity and grammar.' By framing it as an editor, I get more targeted and useful comments on my writing."</p>                                                                                                                                                                                         |
| Source Control / Instructions         | <p>Apply this code when the user instructs the AI on how to handle source material or origin of information. This could involve directing the chatbot to use or not use certain sources, to provide references, or to base its answer only on given input. It captures any user attempt to control where the AI's information comes from or how it cites information.</p> <p>Example: "Before getting an answer, I often feed it a specific article and say, 'Answer using only the information above.' For instance, I provided a news snippet and asked, 'Summarize the key points using just this text as your source.' This way I know where the info is coming from."</p>                                                                                                                                        |
| Prompting Framework                   | <p>Apply this code when the user references or employs a formal prompting method or structure they've learned (outside of basic Q&amp;A) to get better results. This can include known frameworks or techniques for prompts (like step-by-step reasoning prompts, templates, specific formulas, or any systematic approach to prompting). The user is using a sophisticated or learned approach rather than ad-hoc prompting.</p> <p>Example: "When I tackle complex questions, I follow a prompting framework I picked up online. For example, I start by setting context, then specify the task, then request an output format. It's a bit like a template: I might write, 'Context: [background]. Task: [what I need]. Constraints: [any limitations]. Now answer.' It generally yields more focused answers."</p> |
| Understanding & Evaluation            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| General Understanding Of How AI Works | <p>Apply this code when a user demonstrates knowledge about the underlying mechanisms or principles of the AI chatbot. This includes mentions of how the AI operates (e.g., predicting text, using training data, not actually human thinking), what it can or cannot fundamentally do, or general awareness of AI processes. It reflects the user's conceptual grasp of AI technology.</p> <p>Clarification: Do not use this code if user talks about risk awareness (see: "Awareness of Limitations") or detecting AI-created content (see: "Detecting AI-generated Content").</p> <p>Example: "I know it's not truly intelligent like a person - it's basically predicting what to say next based on patterns in its training data. Keeping that in mind helps me frame my questions</p>                           |

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|                                   | <p>better, since I realize it doesn't 'understand' the way humans do."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Awareness Of Limitations          | <p>Apply this code when the user acknowledges the AI's limitations, errors, or potential risks involved in using it. This can include awareness that the AI might provide incorrect or fabricated information (hallucinations), biases in responses, inability to have real-world understanding, or risks like over-reliance, privacy concerns, etc. The user is essentially noting that the AI is fallible and has pitfalls.</p> <p>Clarification: Do not apply when user evaluates output credibility (see: "Critical Reflections on AI Output") or if they describe how AI generally works (see: "General Understanding of How AI Works")</p> <p>Example: "When it comes to medical or legal advice, I'm cautious. I'm well aware the chatbot can sound confident but still give wrong information. I've seen it make facts up, so I double-check important answers and never just blindly trust it, especially on serious topics."</p>                                |
| Critical Reflections On AI-Output | <p>Apply this code when the user evaluates or questions the quality and trustworthiness of the AI's responses, showing an analytical attitude toward what the AI says. This includes instances of the user checking accuracy, comparing the AI's answer with other sources, expressing trust or skepticism, or reflecting on why the AI gave a certain response. It highlights the user's critical engagement with the AI's output rather than accepting the the way it comes.</p> <p>Clarification: Do not use this code when the user describes whether he can detect AI-written content (see: "Detecting AI-Generated Content").</p> <p>Example: "After I got the chatbot's answer, I actually looked up a couple of the claims it made to verify them. I don't take its responses as gospel - like last time it gave me a historical date that seemed off, and sure enough, when I googled it, the date was incorrect. It was a reminder not to be too trusting."</p> |
| Detecting AI-Generated Content    | <p>Apply this code when the user discusses their ability or inability to tell if a piece of text or content was produced by an AI. This code covers any mention of how the user recognizes AI-written content, signs they look for, or conversely, instances where they were fooled or unsure. It captures the user's skill (or lack thereof) in detecting AI-generated material in various contexts.</p> <p>Clarification: This code is about authorship identification, not truth or quality (see: other codes under "Understanding &amp; Evaluation").</p> <p>Example: "I read an online review that sounded a bit off - too generic and overly polite - and I suspected it was AI-generated. Honestly, I'm not always sure, but certain phrasing and the lack of personal details can be a giveaway that a bot wrote it."</p>                                                                                                                                         |
| AI Ethics                         | <p>Apply this code when users make judgments about right or wrong or weigh harms/benefits in a moral sense.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Environmental Concerns            | <p>Apply this code when the user brings up the environmental impact of AI chatbot usage or AI systems in general. This</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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|                         | <p>includes concerns about energy consumption, carbon footprint of training and running large models, or any ecological considerations the user might have regarding AI. The focus is on the environmental cost or sustainability issues tied to AI - stemming either from their own or from societal use.</p> <p>Clarification: Do not code when user proposes rules/policies for others or institutions (should, must, bans, requirements) (see: "Normative Reflections" for either main or subcode).</p> <p>Example: "I do wonder about the carbon footprint of my chatbot habit - like every query I make uses servers somewhere. I've heard these AI models consume a lot of energy, so I feel a twinge of guilt if I'm asking it silly questions and potentially wasting resources."</p>                                                                                                                                                                                                                                                                      |
| Societal Consequences   | <p>Apply this code when the user discusses broader societal implications of AI chatbots. This can range from concerns about job displacement (e.g., AI replacing human roles), effects on human communication patterns, spread of misinformation, or how widespread AI use might change social norms and relationships. It captures any macro-level impact on society that the user is aware of or worried about. This code applies both to personal use and to a more general societal use.</p> <p>Clarification: Do not code when the segment is merely descriptive and has no moral stance (see: "Perceived Social Effects"). If someone calls for regulations or obligations, code "Normative Reflections".</p> <p>Example: "From a societal standpoint, I sometimes worry that if everyone starts using AI for advice or as a companion, people might stop turning to each other as much. Also, with AI writing so many articles now, I'm concerned about the future of jobs in content creation and whether we'll value human-written work the same way."</p> |
| Privacy & Data Concerns | <p>Apply this code when the user raises issues of privacy, data security, or personal data usage in relation to AI chatbot interactions. This includes fears or questions about what happens to the information they enter into the AI, who can access these conversations, whether the data is stored or used to train models, and any related unease about personal data exposure. This concern goes beyond the user's personal use and also affects society as a whole.</p> <p>Example: "I'm pretty careful about not sharing real names or sensitive info with the chatbot. I keep thinking: where is this conversation going? I don't want my personal stories or data being stored and potentially seen by developers or used in ways I don't know about."</p>                                                                                                                                                                                                                                                                                                |
| Moral Boundaries        | <p>Apply this code when the user talks about ethical or moral limits in using the AI. This involves any personal rules or lines they won't cross, such as refusing to use the chatbot for cheating/plagiarism, not generating inappropriate or harmful content, or generally uses that would violate their moral principles. It highlights the user's self-imposed ethical guidelines for AI use, which they also apply on a societal level.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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|                                   | <p>Clarification: If users generalise into prescription for others ("should/must..."), co-code "Normative Reflection" and distinguish from non-moral/pragmatic limits (see: "Boundary Setting").</p> <p>Example: "I won't use AI to write graded assignments."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| AI Self-Efficacy /Problem Solving | <p>Apply this code when users refer to their perceived ability to achieve goals with AI and/or solve issues that arise while using it.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Confidence In AI-related Skills   | <p>Apply this code when the user expresses how confident (or not) they feel in their ability to use AI tools effectively. This can include statements about feeling proficient, capable, and comfortable with prompting and handling the AI, or conversely admitting uncertainty or a lack of skill. It's about the user's self-assessed competence in working with the AI.</p> <p>Clarification: This is the belief about one's ability, not the technique itself. If the user describes concrete prompting tactics see "Application/Prompting Skills". Do not apply this code either when user describes learning regarding AI (See: "Learning").</p> <p>Example: "At first I was unsure about how to get good answers, but now I'd say I'm pretty confident with ChatGPT. I know how to phrase things to get the results I want. For instance, I've become the go-to person in my friend group for crafting prompts because I've gotten quite skilled at it."</p>                                                                          |
| Handling Problems Independently   | <p>Apply this code when the user describes dealing with issues or challenges with the AI on their own, showing problem-solving in the context of AI use. This might include troubleshooting when the AI gives poor answers, figuring out solutions when it glitches or misunderstands, and generally taking initiative to resolve difficulties without needing outside help. The focus is on the user's independence and resourcefulness in managing AI-related problems.</p> <p>Clarification: Do not apply when user states handling his emotions during AI use (see: "Emotion Regulation") or when they judge the quality of the output (see: "Critical Reflections on AI output").</p> <p>Example: "If the AI doesn't give me a good response, I don't just quit - I immediately try rewording my question or breaking it down. For example, it once kept misunderstanding a tech problem I described, so I went step by step instead, and that solved it. I've gotten good at adjusting my approach on my own when things go wrong."</p> |
| Learning                          | <p>Apply this code when users refer to acquiring or maintaining knowledge or skills about AI tools, features or practices.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Staying Up to Date                | <p>Apply this code when the user mentions efforts to keep informed about the latest developments in AI tools or chatbots. This includes reading news, following updates or new features, learning about new AI systems, or otherwise actively maintaining current knowledge in the fast changing AI landscape. The user demonstrates ongoing learning to not fall behind.</p> <p>Clarification: Do not code when users adopt or try a new feature/new AI (see: "Adapting to new Tools and Changes"). Also do not confuse with "General Understanding of How AI Works" or</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



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|                                         | <p>"Awareness of Limitations".</p> <p>Example: "I make it a point to keep up with AI news - like when a new version or feature comes out, I'll read the announcement or watch a quick tutorial. For instance, when plug-ins became available for my chatbot, I immediately looked up how to use them. I don't want to be left in the dust as things evolve."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Adapting to New Tools and Changes       | <p>Apply this code when the user discusses how they adjust to new AI tools, updates, or changes in the technology. This covers adaptability and willingness to learn new interfaces or methods. The user might describe switching to a different chatbot, integrating a new feature into their routine, or overcoming the learning curve of an update. It reflects flexibility and adaptation in practice.</p> <p>Clarification: This code requires behavioral change or skill uptake (not just awareness).</p> <p>Example: "When the interface got redesigned last month, it threw me off for a day or two, but I quickly adapted. I explored the new layout and options, and now I'm using the chatbot just as smoothly as before. Similarly, I've tried other AI platforms - whenever a new one comes out, I poke around to see what it can do and adjust my habits if I decide to incorporate it."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Emotion Regulation (during use)         | <p>Handling frustration, anxiety, overexcitement during AI use</p> <p>Apply this code when the user talks about managing their emotional reactions (negative or positive) that occur while using the AI. This includes strategies or experiences in dealing with frustration (e.g., when the AI misinterprets queries or gives errors), anxiety (perhaps about using the AI or the content of its answers), or even overexcitement (such as becoming too enthused or absorbed in using the AI). It captures how the user stays emotionally balanced and copes with any stress or strong emotions from AI interactions.</p> <p>Clarifications: Do not apply to pre-existing moods that triggered the decision to use the chatbot in the first place (see: "Affective Motivational State). Do not apply when user describes only the emotional outcome without a regulating move (see: "Emotional Gratifications" or when negative see: "Critical Reflections on AI Output/Awareness of Limitations")</p> <p>Example: "I'll admit I sometimes get frustrated when the chatbot doesn't get what I mean after several tries. I've learned to step away for a minute and take a deep breath instead of angrily retyping the same thing. Also, when I first discovered it, I was so excited I'd spend hours on it - now I set a timer for myself so I don't lose track of time. It's all about keeping my cool and not getting carried away."</p> |
| RQ3 Change in Communication Style (CAT) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Linguistic Accommodation                | <p>Apply this code when users describe adjusting their communication style in response to the chatbot's style (sentence structure, tone etc.) during AI interaction.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Convergence                             | <p>Apply this code when the user adapts their language or communication style to more closely match the AI chatbot's style</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



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|                                 | <p>during interactions. This might involve using similar vocabulary, tone, formality, or phrasing that the AI uses, in order to align with it. The user is essentially “converging” toward the AI’s way of communicating, whether consciously to improve understanding or unconsciously due to the interaction.</p> <p>Clarification: Do not code when user describes how their communication with humans changes since they regularly use AI chatbots. These spillover effects belong under “Transfer to Human Communication”.</p> <p>Example: “I noticed that when the AI responds in a very formal tone, I start phrasing my next question more formally too. For instance, I found myself saying ‘Greetings’ and writing full, proper sentences in my prompts - something I normally wouldn’t do in a casual text to a friend.”</p> |
| Divergence                      | <p>Apply this code when the user deliberately emphasizes a different communication style from the AI, rather than matching it. In this case, the user’s language stays distinct - for example, they might continue using slang, dialect, or a very casual/personal tone even if the AI is formal. This shows the user distancing or differentiating their style from the AI’s style, either to assert their identity or simply because they choose not to adapt.</p> <p>Example: “I’ll use a lot of emojis and informal language with it - ‘LOL that’s wild’ - even if it never uses emojis back.”</p>                                                                                                                                                                                                                                  |
| Overaccommodation               | <p>Apply this code when the user over-adjusts their communication style in an exaggerated or overly simplified way for the AI, beyond what is necessary. This often comes off as unnatural or patronizing (as if the user is “talking down” to the AI). Examples include using excessively basic words, repeating oneself unnecessarily, or over-politeness to a point of awkwardness, all in an attempt to make the AI understand or respond “better.”</p> <p>Example: “At first, I was so worried the AI wouldn’t get me that I ended up over-explaining everything. I’d type in this stilted way like, ‘Hello. I have a question. I will now explain. Please answer.’ It was as if I was talking to a child. I realized I was overdoing it - the AI didn’t actually need me to dumb things down that much.”</p>                      |
| Maintenance                     | <p>Apply this code when the user maintains their normal communication style with the AI, making little to no accommodation or change in response to the AI’s way of speaking. The user speaks to the AI just as they would in their typical style (for example, same level of detail, tone, or formality they use with humans or in general), regardless of the AI’s style. This is essentially no convergence or divergence - the user keeps their customary way of communicating.</p> <p>Example: “Honestly, I talk to the chatbot just like I talk to anyone else. If I’d normally say, ‘Hey, I need help with this thingy, any ideas?’, I’ll type exactly that. I don’t really alter my wording or tone to fit the AI - I figure it should adjust to me, and so far, that’s been fine.”</p>                                         |
| Transfer To Human Communication | <p>Apply this code when users report that AI-shaped styles spill over into human-to-human messages.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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| Using AI-generated Expressions with Humans                         | <p>Apply this code when the user incorporates phrases, expressions, or styles of speech that they picked up from the AI into their communications with other people. This might happen if the AI often uses certain formal phrases, transitions, or unique terms and the user starts unconsciously or consciously using those in emails, texts, or conversations with humans. It highlights the AI's influence on the user's vocabulary or expression choices in real-life communication.</p> <p>Clarification: Do not code when the speaker makes an explicit meta-reflection about themselves (habit-level), e.g. "I realized, I've become more formal". With RQ3 the linguistic matter is in focus and not the self-reflection of personal habit change.</p> <p>Example: "I now preface my points with "Key takeaways" in my emails."<br/> Perceived Self-change: "I noticed, I've become the kind of person who always writes "key takeaways now."</p> |
| Adopting Prompt-like Structure or Formality in Human Communication | <p>Apply this code when the user's communication with other people starts to show the structured, formatted, or overly formal characteristics of how they write prompts to the AI. For instance, the user might write very detailed, structured messages or use list formats and explicit questions in personal or professional communication, mirroring how they interact with the chatbot. This code captures the spillover of the prompt-writing style into human-to-human communication.</p> <p>Example: "After months of using ChatGPT, I realized my texts to friends became weirdly formal and structured. I request work from colleagues like a prompt: context, task, output."</p>                                                                                                                                                                                                                                                                |
| No Observed Change                                                 | <p>Apply this code when the user reports that their communication style with other humans has not changed as a result of using the AI, or when no noticeable transfer of AI-influenced language is present. This is used if the user explicitly denies any influence or if data shows their human communication remains as it was before, despite interacting with the chatbot.</p> <p>Example: "I really don't think using the chatbot has affected how I talk to real people. My texting style with friends and my email tone at work are the same as they've always been. Using AI hasn't rubbed off on my other communications - at least none that I or others have noticed."</p>                                                                                                                                                                                                                                                                     |
| RQ4 User Interpretation of AI-Mediated Communication               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Reflexive Awareness                                                | <p>Apply this code when users reflect on themselves, norms or boundaries in relation to AI-mediated communication.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Reflexive Awareness without impact                                 | <p>Apply this code when the user expresses a clear awareness of certain aspects of AI use - such as social effects, ethical concerns, communication dynamics, or behavioral patterns - but also emphasizes that this awareness does not actually influence their behavior, decisions, or usage patterns. This code captures a disconnection between reflection and action, highlighting moments where users remain cognitively aware but practically unchanged.</p> <p>Example: "I know it can hallucinate but it hasn't changed how I</p>                                                                                                                                                                                                                                                                                                                                                                                                                 |

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|                               | <p>use it."</p> <p>"I know about the environmental footprint but it hasn't influenced my usage frequencies."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Perceived Self-Change         | <p>Apply this code when the user reflects on how using the AI chatbot has changed their own behavior, habits, or attitude over time. This includes perceived shifts in effort, motivation, independence, or reliance on AI - especially when recognized critically or ambivalently.</p> <p>Clarification: If a concrete linguistic behavior change in H2H communication is observable, use RQ3 codes.</p> <p>Example: "It's crazy how quickly you get used to not having to do it yourself. I realized I've become too lazy to even try now." "I used to figure things out on my own - now I just type everything into the chatbot without thinking much."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Communication Style Awareness | <p>Apply this code when the user shows awareness of their own communication style or patterns in the context of using the AI. They might comment on how they phrase things to the AI, note differences between how they talk to the AI versus humans, or generally demonstrate self-reflection about their communication behaviors. The key is that the user is consciously noticing and thinking about their style of communication, often as a result of using the AI (the AI interaction triggers this self-awareness).</p> <p>Clarification: Do not apply when an observable style change in H2H communication is described (see: RQ3)</p> <p>Example: "Using the chatbot has made me realize how verbose I can be. I caught myself rambling in a question and noticed the AI got confused, which made me reflect on how I often over-explain things even in regular conversations. It's interesting - interacting with the AI actually highlighted that aspect of my communication style to me."</p>                                                                                                                                                                                |
| Media Routine Change          | <p>Apply this code when the user describes a change in their habitual media or communication routines attributable to their adoption of the AI chatbot. This could include new habits like consulting the AI at certain times, replacing or reducing use of other media (e.g., searching the web less and asking the AI more), or any shift in how often/when they engage in communication activities because of the AI. It's about the user recognizing that their routine or habits have evolved due to the AI.</p> <p>Clarification: Do not code when the user reflects on themselves and not particularly on the media routine, .e.g. "I've become someone who.." (see: "Perceived Self-Change") and also do not code when users just describe a current situation without claiming change (see: "Context of use").</p> <p>Example: "Since I started using the chatbot, my morning routine looks different - now I often begin the day by asking it to outline my tasks or even just chatting about the news. I've noticed I spend less time scrolling through news apps because I just get a summary from the AI. It's become a new ritual for me, edging out some old habits."</p> |

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| Boundary Setting           | <p>Apply this code when the user describes personal boundaries, limits, or self-imposed rules in how they interact with AI chatbots. This includes decisions about what kinds of topics are off-limits, how emotionally open they are willing to be, and whether or how they use AI in social or communicative contexts. The emphasis is on individual choices that define the appropriate role or scope of AI use in their private or social life.</p> <p>Clarification: Do not apply when user describes a right/wrong claim in a more societal/moral way ("that would be dishonest/cheating/harmful..") (see: "Moral Boundaries").</p> <p>Examples: "I don't use AI in personal chats, that feels inappropriate."</p>                                                                                                                                                                                                                                                                                         |
| Humanization & Social Cues | <p>Apply this code when the user describes attributing human-like qualities to the AI or interacting with it as if it were a social being. This includes instances of the user being polite to the AI (saying "please" or "thank you"), feeling the AI has a personality or feelings, naming the AI, or interpreting the AI's responses with social meaning (like thinking it's friendly, funny, or upset). It captures the anthropomorphic tendencies and reading of social cues in an AI that isn't actually human.</p> <p>Clarification: Do not use this code when the user describes a certain stylistic communication behavior change (tone/format/phrasing) towards the bot with the aim of accommodating to or distinguishing oneself from the AI (see: "Linguistic Accommodation"). If the user mentions etiquette ("please, thank you") then it should be coded with "Humanisation &amp; Social Cues".</p> <p>Example: "I felt like it understood me, so I thanked it, because that's what you do."</p> |
| Perceived Social Effects   | <p>Apply this code when the user reflects on how they perceive the broader social impact of AI chatbot use. This includes observations or beliefs about how AI affects human interaction, communication habits, social relationships, or everyday practices in society. It also covers concerns that people might lose certain skills, become overly dependent on AI, or change how they relate to others due to increasing reliance on artificial assistance. The focus is on subjective interpretations of societal or cultural change triggered by AI use.</p> <p>Clarification: if the statement focuses on the speaker's own behavior or habits, code "Perceived Self-Change" or RQ3. If a moral stance is added ("worrying", "harmful", "problematic"), code "Societal Consequences". If a prescription is added ("Should/must", policies, bans), code "Normative Reflections".</p> <p>Example: "In our department, people now send brief AI summaries instead of full reports."</p>                       |
| Normative Reflection       | <p>Apply this code when the user expresses value-based, ethical, or moral judgments about how AI should or should not be used - either by themselves or others. These reflections often go beyond individual practice and imply or propose broader norms, rules, or societal expectations. The user is not just describing their own behavior, but articulating what they believe is right, wrong, appropriate, or problematic in a normative sense.</p> <p>Clarification: Do not apply this code when the speaker states one's own changed habits (see: "Perceived Self-Change") except they extend this into a rule for others as well ("students</p>                                                                                                                                                                                                                                                                                                                                                          |

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|                                                  | <p>should..."). When user describes a neutral observation about how others interact or how norms shift, code "Perceived Social Effects" and if the user evaluates macro effects as good(bad but does not propose what should be done, code "Societal Consequences".</p> <p>Example: "Universities should restrict AI during exams to protect learning."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Role Of AI                                       | <p>Apply this code when the user defines what the AI is/should be for them (tool, assistant, coach...).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Rejected Roles                                   | <p>Apply this code when the user discusses roles or personae that they consciously refuse to assign to the AI. The user makes it clear that, despite the AI's capabilities, they will not regard it as (or use it as) certain things - for example, they might reject the idea of the AI being a friend, a moral guide, or an equal partner in conversation. This code captures the boundaries the user sets by saying "I won't treat the AI as X." It often highlights a stance that the AI is "just a tool" or at least not suitable for that particular role in the user's view.</p> <p>Clarification: Do not code when user sets situational, pragmatic or comfort-based limits on when/how they use AI ("I don't use it in context X..."). Role denial ("Rejected Roles" versus contextual usage limits ("Boundary Setting"))</p> <p>Example: "I don't see the chatbot as a companion, I won't use it for emotional support."</p> |
| Assigned Roles                                   | <p>Apply this code when the user explicitly or implicitly assigns a certain role or persona to the AI in their life or usage context. This means the user views or uses the AI as if it were filling a particular function such as a friend, mentor, assistant, teacher, therapist, etc. It's about the user framing the AI as occupying that role for them (even while knowing it's an AI) in their mindset or usage pattern.</p> <p>Clarification: Do not confuse with "Role Framing" (a prompting tactic).</p> <p>Example: "The chatbot is mainly my sparring partner that challenges my arguments."</p>                                                                                                                                                                                                                                                                                                                            |
| Human vs AI - Communication Role Differentiation | <p>Apply this code when the user reflects on how they choose between interacting with a human or an AI chatbot depending on the communicative purpose or context. This includes statements that explain when they turn to AI versus when they prefer human interaction, typically based on goals such as factual precision, emotional exchange, or social presence.</p> <p>Examples:<br/>         "If I want a real opinion, I ask a person. If I want quick facts, I ask the bot."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Appendix C: ChatGPT - Instruction for Translation

### ChatGPT - Instruction for Translating Interview Quotes

- Translate the interview quotes **as literally and accurately as possible**, staying very close to the original wording.
- Preserve the **tone, register, and conversational style** of the speaker. Do not polish into academic English or simplify the language.
- Pay close attention to **nuances, connotations, and implicit meanings**. The translation must not weaken, exaggerate, or reinterpret the participant's statement.
- Use **idiomatic English** only insofar as it preserves the original meaning. If a German expression has no direct equivalent, provide the closest possible formulation in English that conveys the intended sense.
- Translate **sentence by sentence**, with no omissions or summarization.
- **Fillers, hesitations, and markers of spoken language** (e.g., "ähm", "sozusagen") should be handled carefully: retain them if they contribute to meaning, emphasis, or the participant's speaking style; omit them only if they are irrelevant noise.
- Retain the **grammatical tense (present, past, future)** of the original statement. Do not introduce unintended changes in tense.
- Do not signal "literal translation" in the output. Instead, always provide the **most faithful rendering** of the original German statement in English.

### ChatGPT - Instruction for Improving Translation Wording

Please refine the following English sentences to improve clarity, grammar, and academic style. Do not alter the meaning, argument, or structure of the text. The content must remain unchanged; only wording may be adjusted to meet formal academic standards.