AI Autocomplete and User Confidence in Email Writing

Introduction

AI writing assistants are now common in email platforms like Gmail and Outlook. These tools suggest words and phrases as you type, promising to make writing faster and easier. However, we don't fully understand how these suggestions affect users emotionally specifically, whether they make people more or less confident in what they write. This review examines existing research to understand what we know about AI autocomplete in writing contexts and identifies where my study can contribute.

Research Question: **Does AI autocomplete functionality affect users' confidence in their email message content?**

Proxy Paper: Gmail Smart Compose

Chen et al. (2019) published a paper on Gmail's Smart Compose system. They built a neural language model that predicts what you might type next and offers suggestions in real time. The system was designed to reduce repetitive typing and help users write emails faster. Their paper focuses on the technical side and how they trained the AI model and deployed it to millions of Gmail users.

The authors mention that the user acceptance rate was important for their design, but they don't investigate the user experience deeply. They measured technical performance like accuracy but didn't explore psychological questions: Do users feel confident in emails written with AI help? While Chen et al. focused on whether Smart Compose works effectively and efficiently, I will study how it affects users emotionally. I'll measure whether using autocomplete makes people more or less confident in their email content. I'll use surveys comparing writing with and without AI assistance..

Related Work

Trust in AI Generated Content

Recent research shows that trust in AI systems varies based on how well users understand them. Buçinca et al. (2021) found that people sometimes over rely on AI suggestions, even when they're wrong, because they trust machines over their own judgment. This "automation bias" raises questions about whether autocomplete undermines users' confidence in their own writing abilities.

Liu and Chilton (2024) studied AI tools in communication and found an interesting tension: users appreciated the speed of AI assisted writing but worried about authenticity. Participants questioned whether AI enhanced messages truly reflected their voice or intentions. This directly relates to confidence if you're unsure whether an email sounds like "you" you may lack confidence in sending it.

Autocomplete's Effect on Writing Behavior

Thompson et al. (2024) conducted one of the few studies specifically testing Google Smart Compose. They had people write with and without the feature enabled and compared the results. Interestingly, they found that autocomplete didn't dramatically change writing length or structure emails looked similar either way.

However, this study only measured observable writing characteristics, not how users felt. They didn't ask whether writers felt confident, authentic, or satisfied with their emails. This is the gap my research addresses.

Research Gap

Despite millions of people using AI autocomplete daily, we lack research on its psychological effects. We know the AI model works (Chen et al., 2019) and that it doesn't drastically change writing output (Thompson et al., 2024), but we don't know how it makes users feel about their own writing.

This matters because confidence affects communication beyond just speed. If users doubt their AI assisted emails, they may experience anxiety about how recipients will perceive them. Alternatively, if autocomplete reduces uncertainty about grammar or phrasing, it might actually boost confidence.

My study fills this gap by directly measuring confidence when writing emails with versus without AI autocomplete. This will help us understand whether these tools support or undermine users' sense of ownership over their communication.

References

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