An Exploration of Contemporary Factors that Influence Adoption of Instant Messaging by Academics in Higher Education

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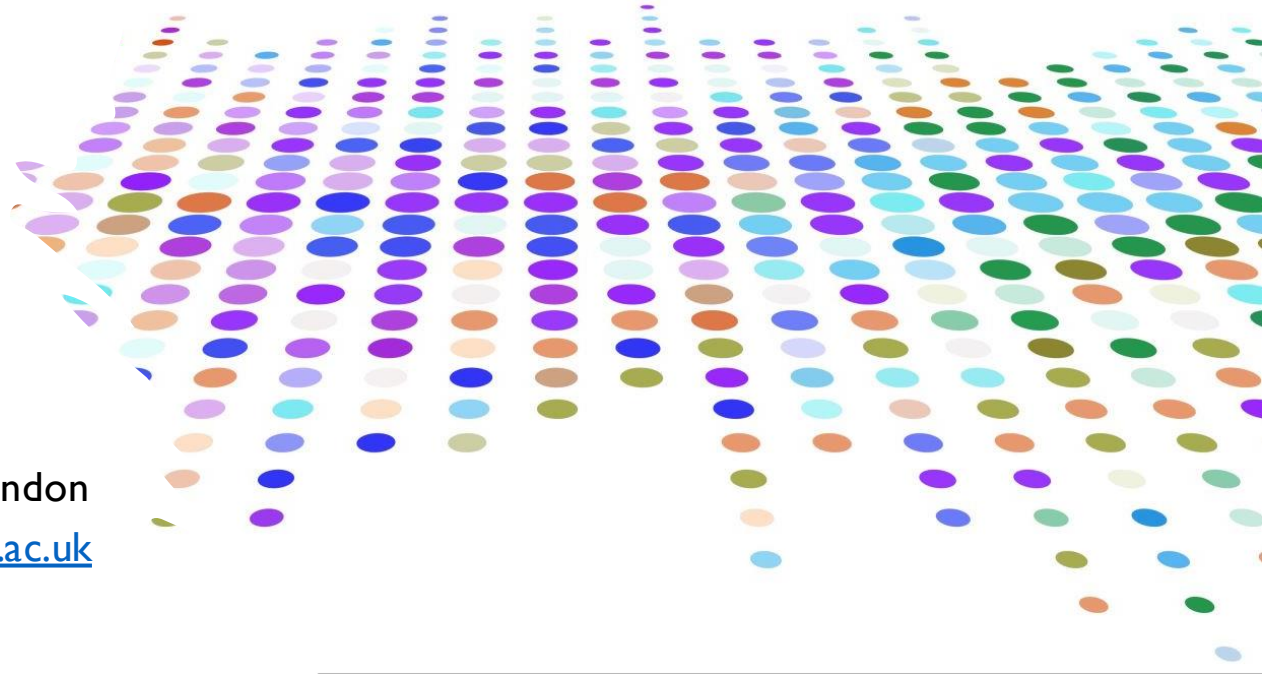


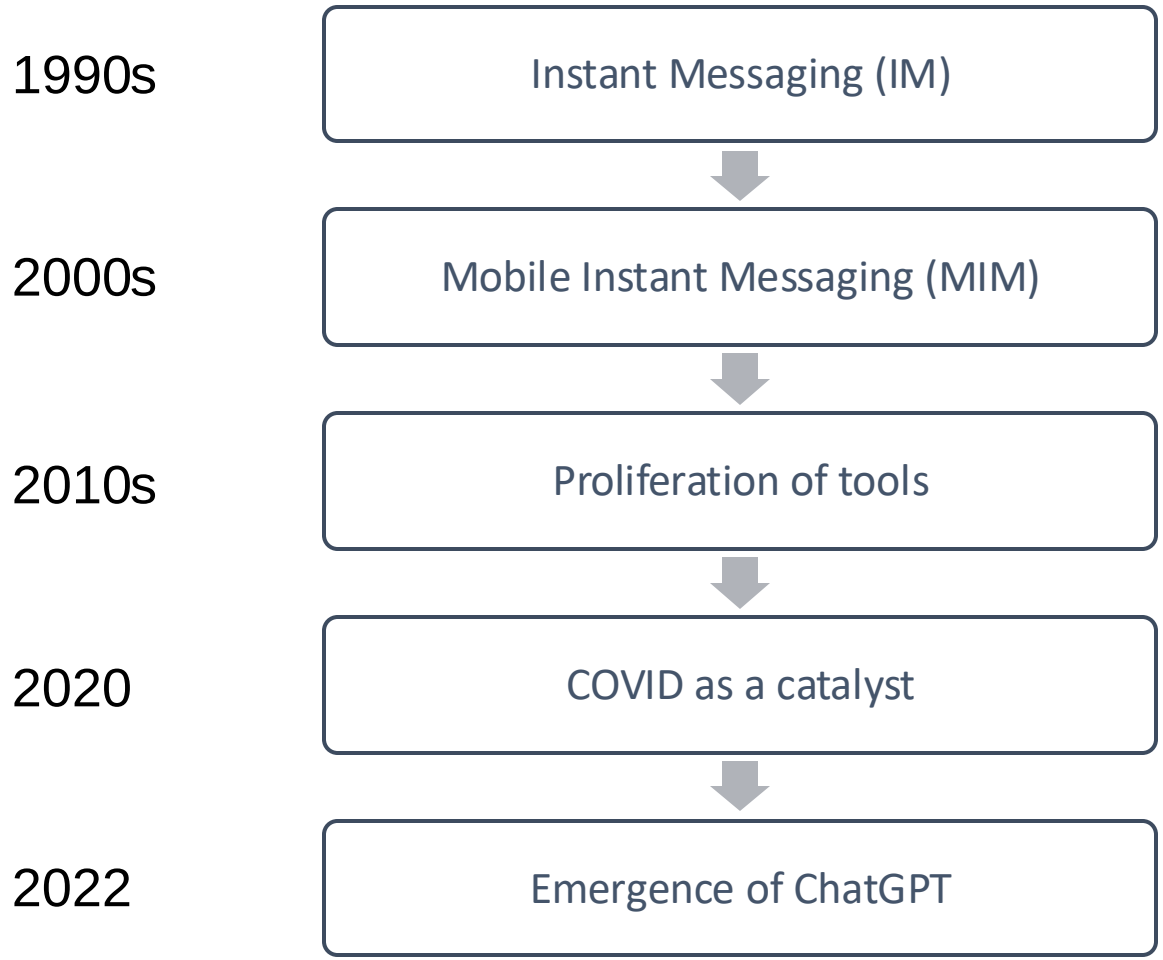
Research Aim

This research aims to explore the adoption of Instant Messaging (IM) tools by teachers in HE institutions and the impact of IM tools on the stress levels and well-being of academic staff.

RQ1: What are the contemporary barriers, facilitators and stressors that impact the adoption of IM by academic staff within Higher Education contexts?

RQ2: What are practical solutions to achieve optimal adoption of IM in Higher Education contexts?

Context


1990s
Instant Messaging (IM)
2000s
Mobile Instant Messaging (MIM)
2010s
Proliferation of tools
2020
COVID as a catalyst
2022
Emergence of ChatGPT

Related work

2000-2015

- De Bakker and colleagues (2007) reported that approximately 75% of participants in their study utilise IM tools at least once a day for five out of seven days a week.
- Learners were able to communicate with academic staff, in contexts where they may have felt inhibited in large class sizes (Lents and Cifuentes, 2010).
- Learners used IM to coordinate work and receive answers to queries outside of timetabled sessions (Hrastinski and Aghaee, 2012).
- Lauricella and Kay (2013) found learners were predominantly comfortable or ‘very comfortable’ with text and instant messaging.
- Bouhnik and Deshen (2014) explored the use of WhatsApp by high school students to communicate with each other and with teaching staff

Related work

WhatsApp

Zoom

Microsoft Teams

(logos removed)

2015: WhatsApp enables cross platform communication

2020: COVID-19 causes widespread adoption of IM tools

Related work

2016-current

- Quasi-synchronous nature of MIM attributed to the portability and mobility of mobile devices – benefits and drawbacks (So, 2016)
- Tang and Hew (2019) examined the usefulness of mobile instant messaging (MIM) in a graduate-level course to support teaching and learning, and found social benefits (presence, interaction).
- A study conducted in 2020 (during COVID), sampling over 1700 undergraduates, found a statistically significant interaction between formal and study Academic Instant Messaging Groups (AIMGs) and academic performance, in addition to lower academic stress levels (le Roux and Perry, 2022).

Theoretical Background

Understanding technology usage behaviour.

- Information Systems Success Model (ISSM) (DeLone and McLean, 2003)
- Technology Acceptance Model (TAM) (Davis, 1989)
- TAM2 (Venkatesh and Davis, 2000)
- TAM3 (Venkatesh and Bala, 2008)
- Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, et al., 2003)

TAM

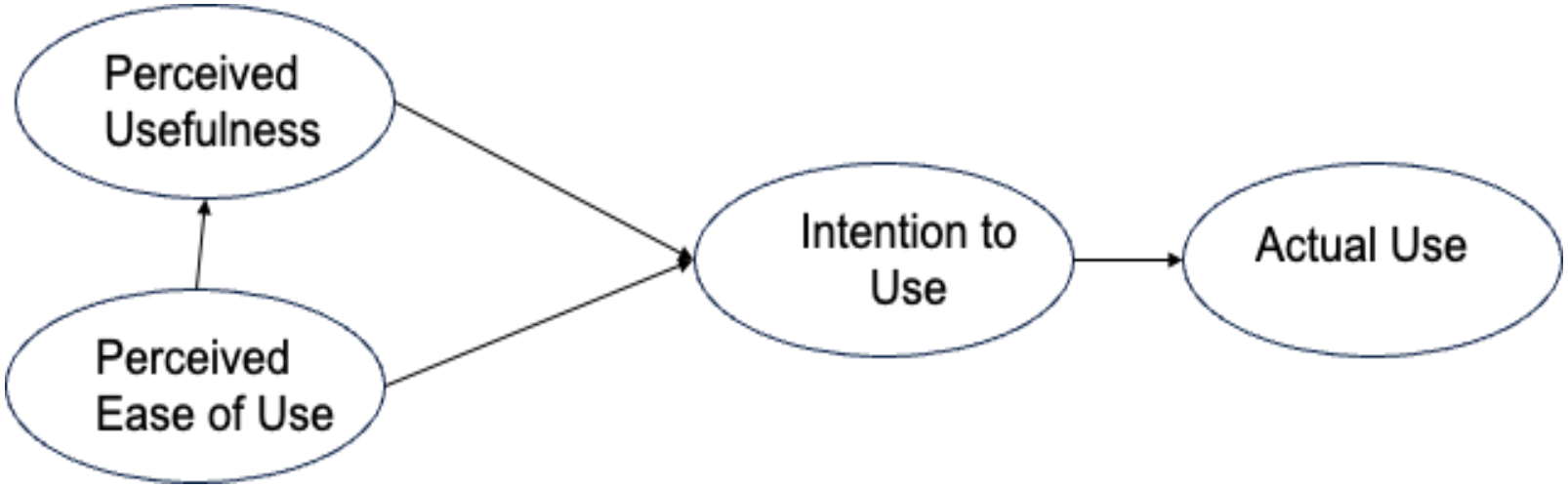


Figure 1. Technology Acceptance Model (TAM) (Davis, 1989)

Technostress

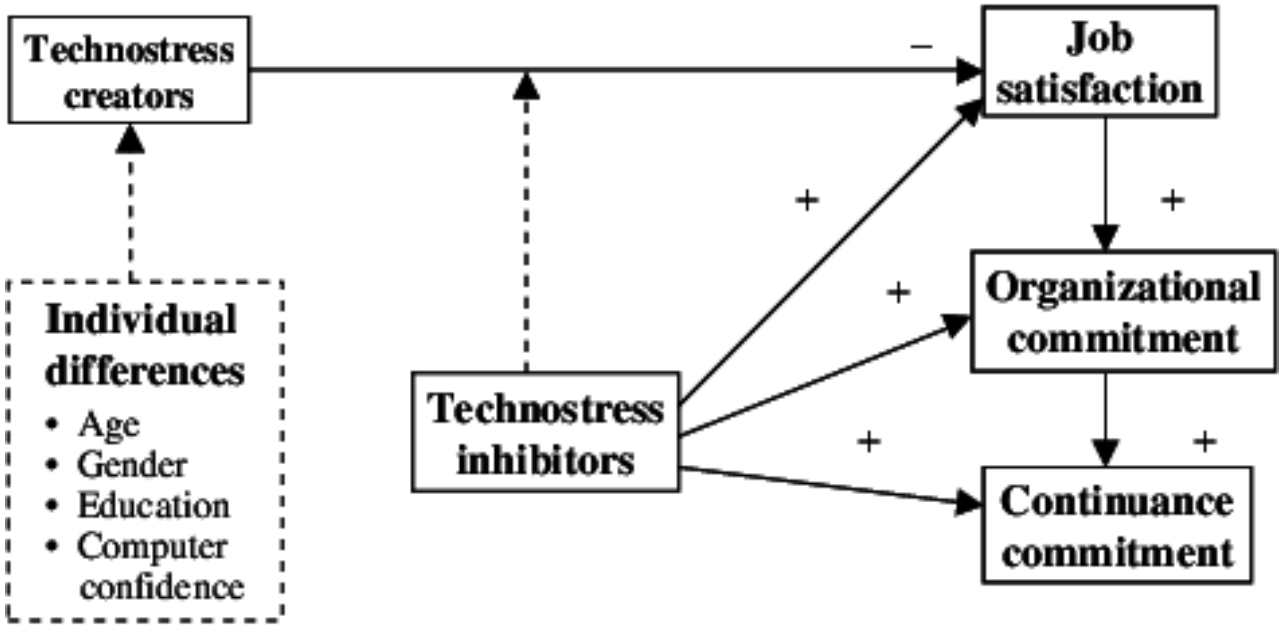
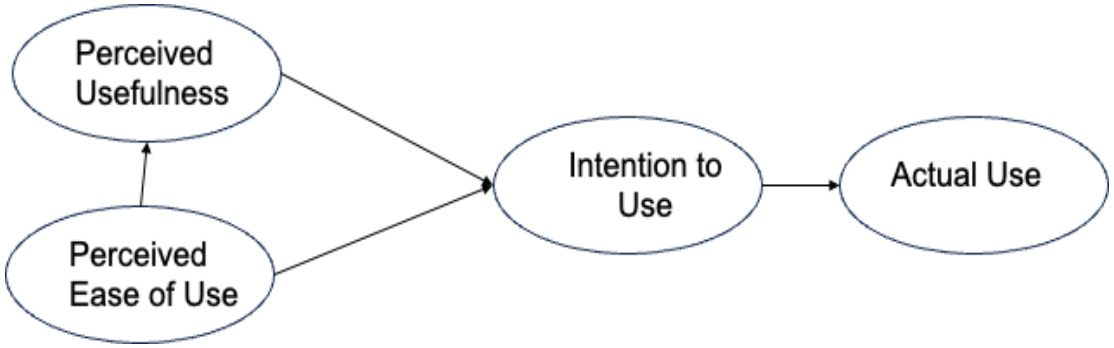
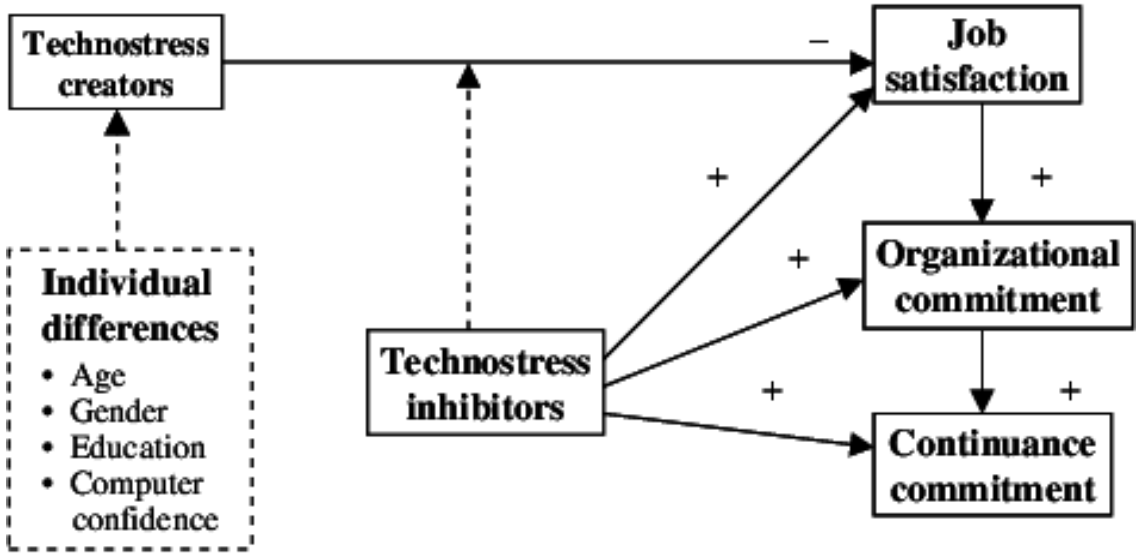


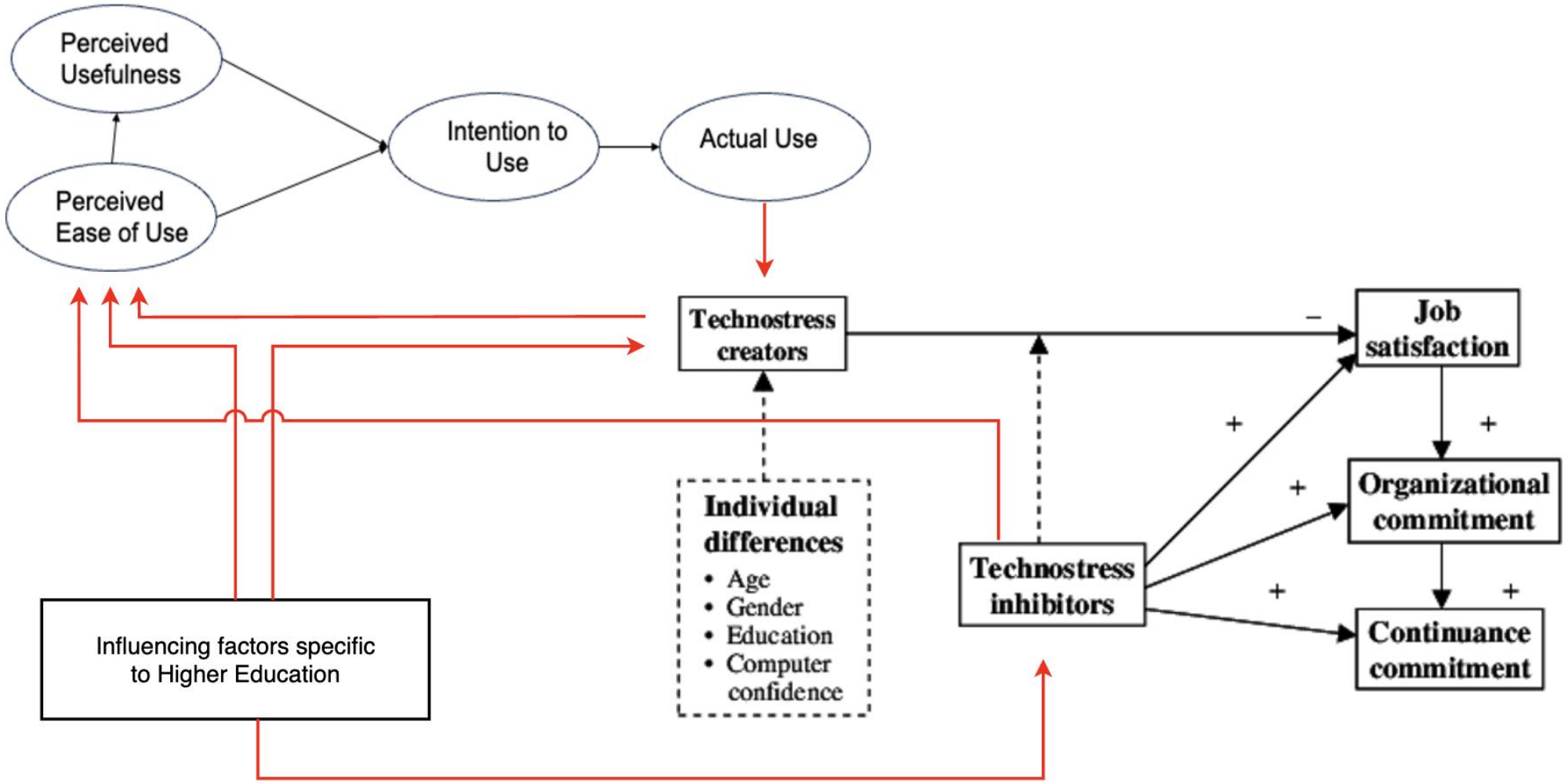
Figure 2. Conceptual Model for Understanding Technostress (Ragu-Nathan et al., 2008).

Composite Model





Composite Model



Questionnaire Design

Intention to capture the following data regarding academic staff in High Education contexts:

- Demographics and current usage levels of IM.
- Stressors (potential and actual) hindering adoption of IM.
- Current perceived ease of use (PEOU) and perceived usefulness (PU) of IM.
- The impact of other influencing factors specific to the HE context.

Next steps

- Design, refine and evaluate questionnaire.
- Deploy questionnaire (RQ1).
- Analyse highest impact factors from TAM and Technostress models
- Propose recommendations for optimal IM adoption in HE and (RQ2).
- Validate recommendations through further research.

Thank you!

Questions?

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