

Technology adoption by professional caregivers

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Purpose Technology acceptance is one of the most intense topics of discussion in the information system literature. We will refer to the state of the art of the theory of technology adoption (2021 onwards), particularly to the refinements and the critiques to the Technology Adoption Model (Davis, 1989), often referred as TAM. Developed from the TAM, The Unified Theory of Acceptance and Use of the Technology (UTAUT, Venkatesh, 2003) is one of the most widely cited theory. Along the perceived usefulness and ease of use, it introduces new contextual moderating variables, increasing its reliability. However, we will work with UTAUT adapted to the care sector by Wutz et al (2023). The rationale for choosing Wutz et al adaptation to the health care sector is that the sector has its own idiosyncrasies and the post-working population also shows specificities in its own market segmentation (Venkatesch, 2012; Golant 2017). Moreover, we will refer here to the Hofstede's cultural dimensions which have a direct effect on technology acceptance (Jan et al, 2022; Metallo et al, 2022). In the case of care organizations, the following three factors have a direct effect on the technology acceptance within the organization: Uncertainty avoidance, Individualism and Power Distance. It was shown that *Uncertainty Avoidance* is the best predictor for Perceived Ease of Use (Effort Expectancy) and has a positive effect. In cultures such as Portugal, users will try to avoid risk more than in Denmark. *Individualism* and *Power Distance* are best predictors of Behavioral Intension (Intension to use). Where is a higher degree of individualism, the intention to use is expected to be lower - When individualism is high, there is more to overcome for employees to use new technology. Higher the Power Distance, higher the intension to use within care organization. In countries with high Power distance (i.e. Portugal), with the strong support of senior management, employees will be more likely to use the new technology. **Method** We have undertaken a qualitative approach to the UTAUT adapted by Wutz et al (2023) and inquired into professional caregivers' perceptions in 4 countries: Switzerland (2), Portugal (3), Denmark (3) Romania (2), though interviews and testimonials of the total of the 10 care professionals involved. Their large majority were women (only 1 man) and their age varied: Denmark and Portugal had 2 young professionals aged between 35 to 44 and one senior aged 55 to 64. While Romania had both of 35 to 44 and Switzerland had one middle aged and the other senior. The interviews included a socio-demographic questionnaire and semi-structured interviews related to a) caregiver satisfaction and b) technology acceptance and c) peace of mind related questions. **Results and Discussion** **Gender as a moderator.** We argue in favor of mainstreaming gender in technology adoption needs and analysis. We argue that the care sector is overwhelmingly womanized, whereas senior management are men, performance expectancy matter most than effort expectancy. Women tend to give less emphasis on perceived usefulness and are inclined to adopt technology that requires little or no effort and, thus, they tend to emphasize perceived ease of use (A4A Field Work, 2024; Srite and Karahanna). **Age correlated to experience in the field** was found to be a moderator as most of the PCPs were between 35-44 years old and the large majority has more than 10 years' experience as care provider. Those who are younger, would engage with the A4A Solution easier: they felt that their stress is reduced, while for the persons aged between 55-65 yrs old, the stress is not reduced at all. Similar, except for the person aged between 55 and 65, everyone sees in the adoption of A4A Solution a more efficient time spending within the organization, time to feel more relaxed (less accidents, less emergencies), peace of mind and scaling up. **Cultural factors as moderators. A) Uncertainty avoidance:** It is emblematic how Denmark (23 points at Uncertainty Avoidance) perceived A4A Solution comparative to Romania, which scores 99 (Jan et al, 2024). PCPs supported tested but the perseverance, diligence and stubbornness would vary, based on cultural factors. PCPs from Denmark would try to adapt the Solution to their needs, put things in perspective and an emphasis on learning, while all others show lower availability. Willingness to involve into testing is common only to large businesses because small PCP businesses are already exhausted. In conclusion, based on the country of origin, the PCPs would risk to put effort for gaining efficiency and, therefore, Effort expectancy stays as a cultural factor. **Power Distance.** In countries with high Power distance (i.e. Romania and Portugal), with the strong support of senior management, employees would be more likely to use the new technology. **Hindering factors** Our findings also show that PCPs in Portugal worried about efficiency and implementation. In Romania, it has been thoroughly discussed in the pre-recruitment stage that PCPs on the field do not have technology literacy and monitoring would be another task. Moreover, taken data-based decision would require a legislative change in the job description. Comparatively, in Denmark, technology is part of the job hence, the openness is higher.

References

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