Digital skills of older Brazilians: An analysis using the cross-culturally adapted Computer Proficiency Questionnaire (CPQ-Brazil)

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Purpose The digital landscape is undergoing constant evolution, and the global pandemic has accelerated access to technology. All age groups, including older individuals in Brazil, are engaging with technology and acquiring information and communication technology (CPQ-Brazil) skills. This study aims to map the proficiency of older individuals in Brazil, using the cross-culturally adapted Computer Proficiency Questionnaire (CPQ). Method The research was based on the application of a socio-economic questionnaire and the Computer Proficiency Questionnaire adapted to the Brazilian context, which includes six subscales: Computer Basic, printing, Communication, Internet, Scheduling Software, Multimedia Use. In addition to mean analyses, correlations between age, education, and CPQ-Brazil skills were conducted. Results and Discussion The study included 179 participants, aged 60 years or older, from nine Brazilian states (Rio Grande do Sul, Santa Catarina, Paraná, São Paulo, Rio de Janeiro, Mato Grosso do Sul, Pará, Paraíba, and Alagoas). Among the participants, 29.1% were male and 70.9% were female. Regarding marital status, the majority of participants were married (49.7%), followed by widows (21.2%), divorced (16.2%), and single (10.1%). In terms of age, there is a varied distribution, with approximately one-third of participants in the 66-70 age group (29.1%) and the 71-75 age group (27.4%). In terms of income, there is a wide range of situations, with 36.9% of participants having an income of more than five minimum wages in Brazil (equivalent to \$1,312.69), while 3.4% have an income of less than one minimum wage (equivalent to \$262.54). Regarding the number of people in the household, the majority of participants live with one to three people (66.5%). It is also important to note that 65.4% of participants have a computer at home. The results indicate an overall reasonable level of digital literacy among older participants (Figure 1). The "Computer Basic" subscale had an average score of 3.45, indicating a solid level of proficiency. On the other hand, the "Scheduling software" subscale had a mean of 2.18, suggesting a potential area for improvement. The quartiles highlighted the variability in digital literacy, with some participants demonstrating lower proficiency in specific areas. The correlation analysis between age and CPQ-Brazil skills yielded a value of -0.25, indicating a weak negative correlation. This implies that there is no discernible trend for CPQ-Brazil skills to decline as age increases. Conversely, the correlation between education and CPQ-Brazil proficiency yielded a value of 0.68, indicating a moderately strong positive correlation. This suggests that as education levels increase, CPQ-Brazil proficiency tends to increase. The majority of older adults are seeking to familiarize themselves with technology, demonstrating their recognition of the importance of these skills for participation in modern society. This is particularly relevant in a post-pandemic world where remote and digital activities have become essential. However, as identified in Figure 1, there are significant challenges that older adults face in adopting digital technologies. The relevance of these findings lies in the need to develop effective digital inclusion strategies for older adults. As society becomes increasingly reliant on technology, leaving this population behind could lead to social and economic exclusion. Conclusion This study contributes to the understanding of digital literacy among Brazilian older adults, highlighting the ongoing need for digital training programs tailored to identified needs. Correlations between age, education, and skills provide valuable insights to guide strategies to promote effective digital inclusion among older people. The path to digital inclusion begins with comprehensive analysis and an informed approach to meeting the specific needs of each demographic group.

References

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Figure 1. Digital proficiency of elderly Brazilians by CPQ subscale