

Elder's ICT device usage / not-to-use: Survey comparison in Japan, Germany, Sweden, and the US

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Purpose Elders' ICT usage is one of the central subjects of ISG. The cabinet office of Japan has conducted "The International Comparative Survey on the Daily Life and Attitudes of the Elderly" every five years, covering individual men and women aged 60 and over (excluding institutionalized residents) in Japan and three foreign countries. The survey provides information on matters related to home life, health and welfare, economic life, employment, housing and living environment, and social relations and purpose in life of the elderly in the countries. The latest 2021 survey has been done in Japan, Germany, Sweden, and the US (<https://www.e-stat.go.jp/stat-search/files?page=1&layout=dataset&toukei=00100106&metadata=1&data=1>). In Japan and Sweden, 2,500 participants each country were invited by mail. In Germany and the US, 1,000 participants per country were asked by phone. All participants were chosen by random sampling. The survey period was from Dec. 2020 to Jan. 2021. The result of the survey was open for further analysis and research. Survey data was counted and provided as simple tables or cross tables. In this paper, we chose Q.34, Usage of ICT devices, and Q.35, Reason for not-to-use of such devices. The latter question was asked to participants who responded that they are not using any ICT devices. We have analyzed survey data with Correspondence Analysis to reveal four countries of elders' ICT usage features. **Method** Two question branches are analyzed in this research. Q34 has nine activity categories. All appropriate activities should be answered (multiple answers): 1. Fax to family members and friends, 2. PC e-mail to family and friends, 3. Mobile phone calls (including mail) to family and friends, 4. Net search for information and/or net shopping, 5. Using SNS, 6. Home Page making or Blogging, 7. Netbanking / Net trading, 8. E-government (tax etc.), 9. No ICT usage. Q35: 1. No needs regarded, 2. ICT devices are hard to understand, 3. Have interest, but no clues for purchase/shop, 4. Have no one to instruct device usage, 5. The problem of price/money, 6. The display is unreadable, 7. other reasons. Correspondence analysis was computed with the FactoMineR package (<http://factominer.free.fr/>), developed by statisticians at d'Agrocampus Rennes. Analysis was done on statistical computing environment R 4.1.2. **Results and Discussion** Figures 1 and 2 show the ICT device usage. Japanese favor Mobile phone talk and mail. In Japan, Fax and No ICT usage has larger than in other countries. SNS, HP/blog, E-government, and Netbanking are relatively minor. US participants favor SNS, PC mail, and HP/blog. Swedish more favors SNS, Netbanking, and E-government. Germans favor Net searching and shopping and are close to the countries average. Figures 3 and 4 show the reasons for not-to-use ICT devices. Germans with negative ICT device attitude tend to think they do not need to use them. A negative attitude in the US is slightly close to having no instructor. Japanese negative attitude is close to readability problem and understanding device.

References

Lê, S., Josse, J. & Husson, F. (2008) [FactoMineR: An R Package for Multivariate Analysis](#). *Journal of Statistical Software*. **25**(1). pp. 1-18.

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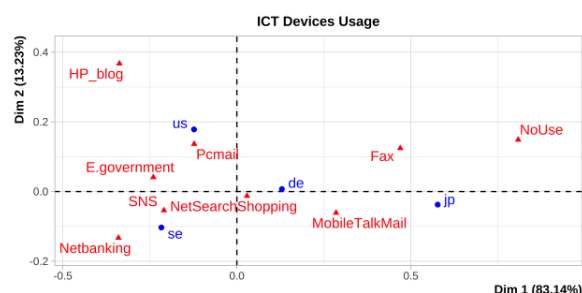


Fig 1 Correspondence Analysis of ICT device usage.

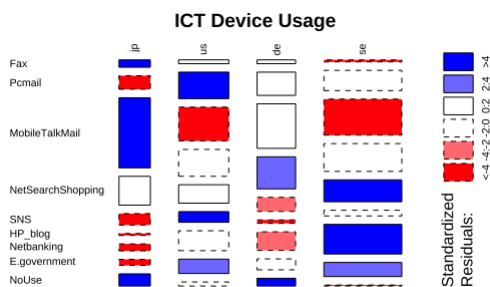


Fig 2. Mosaic graph

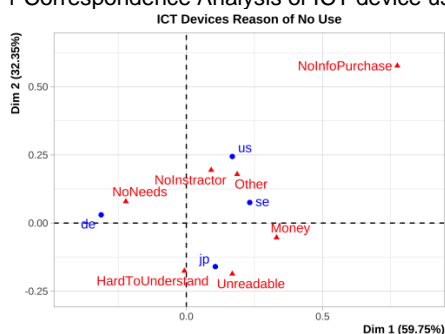


Fig 3 Correspondence Analysis of Not-to-use ICT device.

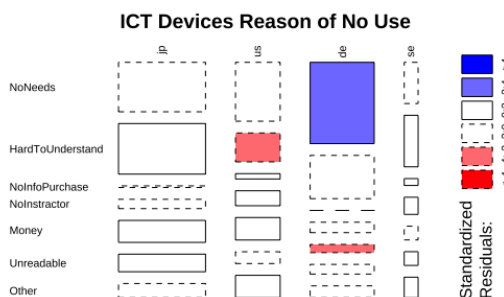


Fig 4. Mosaic graph