

## SYMPOSIA 3

### Appropriate level technologies in aging: Economic, public policy, human factors, and psycho-social perspectives

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**Participants:** J. L. Fozard (USA), G. M. Gutman (CA), W. D. Kearns (USA), C. Kunze (FRG), Y. R. Park (RoK). **ISSUE** Appropriate Level Technology (ALT) considers the extent of adequacy for the maintenance and promotion of elders' biopsychosocial well-being: It can be understood as a method to avoid 'technology overkill,' if simple means are readily available. ALT principles are frequently neglected by researchers and practitioners of technology and aging. **CONTENT** Empirical research findings with hard data in engineering, policy-making, psychology, as well as sociology illustrate the suitability of designs and devices for old individuals. Non-adherence to ALT-associated standards hampers both the cost-effectiveness and the successful performance of gerontechnologies. **STRUCTURE** The concepts gerotechnics, gerotechnicals, and gerontechnologies (together: the 'three Gs' or '3 Gs') introduce a classification of technologies that considers their appropriateness within the ALT framework (Kwon). On the 'tool side' of gerontechnology, elders have prevalently been viewed as being in a 'steady state.' In many cases, engineers created technologies that could not flexibly adjust to changes during the aging process. Covariations of cognition with disordered mobility must be taken into account for adequate gerontechnology design solutions (Kearns & Fozard). The underestimation of complexities and an overreliance on 'technology hypes' impede usage of simple-yet-matured digital technologies. Based on mainstream technology, the arrangement of social with technical factors for senior citizens' active participation must be reinforced, instead of focusing on specific assistive technologies (Kunze). Data from old South Koreans living alone furnish important leads – not just for the RoK – with respect to policy-making as well as R&D in the context of ALT implementations: Smart AI-equipped speakers function well in social companionship, while emergency alarm systems provide a sense of both guardianship and safety (Park). The implication of ALT thinking in gerontechnology: The expression 'get the right technology to the right person at the right time and at an affordable price' is deceptively straightforward, but presents major challenges (Gutman). **CONCLUSION** The adoption of Appropriate Level Technology orientations is instrumental for advancing both the efficiency and efficaciousness of gerontechnologies in real-life settings.

**Keywords:** Appropriate Level Technology (ALT), design, R&D, policy-making, three Gs (3 Gs)

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