

POSTER PRESENTATION 7: OTHERS

Innovative design of Transformed Assistive Tableware (TAT) for the elderly

H. C. Y. Liu

Purpose Transformed assistive tableware (TAT) is an innovative tool, which not only does facilitate the convenience of eating for the elderly, but also is useful for people who bring it out. At the same time, TAT is a storage to save the assistive tableware, including chopsticks and a spoon (Chang, 2007). However, there are few considerations for designing the figures, colors, or transformed storage for assistive tableware. The problem of lacking innovative design of the TAT negatively impacts the elder people taking food, as well as the urgent need of handicapped people. A proper design of TAT, regarding its figures, should manifests the users' noble tastes and brings them in vogue. At the same time, TAT is also beneficial to the elderly to use in public, without embarrassed feeling of using conventional assistive tableware. Even though assistive tableware are usually discussed and designed by geriatric technologists, there are a few designs cover the convenience and transformed storage of assistive tableware (Ho, 2021). The purpose of this paper, therefore, is to explore a suitable design of TAT, which can eliminate the inconvenience of taking, using, and saving problems of a conventional assistive tableware for older adults. **Method** The author adopted creative problem solving (CPS) method, which involves breaking down a problem to understand it, generating ideas to solve the problem and evaluating those ideas to find the most effective solutions (Baumgartner, 2022). The design of TAT should abide by the concept of auxiliary design, including: 1. It is suitable for human body; 2. It is suitable for symptoms; 3. It is suitable for living conditions (Lee, 2006). Only with these three core considerations can we meet the needs of users. According to these requirements, we design the TAT as a set of spoon and chopsticks (Figure 1). the design of the spoon and the gradual widening of the tail of the spoon handle can also reduce the occurrence of food dropping. Chopsticks design because of the traditional separation of chopsticks, need to have the skill of exerting force, it is not easy to pick up food, and easy to slide, so the design of chopsticks, using the auxiliary device to fix chopsticks, to fix the chopsticks body to prevent the phenomenon of "falling", make the operation easier and avoid the falling of food caused by shaking. The TAT (chopsticks and spoons) which are often used in daily life are combined into one piece. This design is convenient for storage and carrying. In addition, its innovative design looks like an ornament to dress on necklace for avoiding lost (Figure 2). It can be a vogue design for the elderly with dementia escaping from the discrimination or ageism. **Results and Discussion** This TAT design can not only help the elderly and the handicapped people, but also improve the problems of hand shaking or disharmony, which is inconvenient to take tableware. This original and innovative design had been exhibited on the 3rd Elderly Welfare Products and Innovative Service Design Competition of Taiwan College Students. It was developed to provide a convenient, multifunctional with concept of universal design to inform the development of more inclusive age-friendly environments. Since its inception, this practical perspective have informed the progression of universal design initiatives to better understand the utensil for the elderly- for enhancing their life quality and lifting their ability of self-control. According to the results, further development and impact of leading-in the TAT still needs deeper examination to provide evidence for its functions, and thereby to shape a new idea for pursuing better life quality for the elderly across place and time.

References

- Baumgartner, J. (2022). The Basics of Creative Problem Solving – CPS. 2022/07/20, Retrieved from <https://innovationmanagement.se/2010/06/02/the-basics-of-creative-problem-solving-cps>.
- Chang, C.H. (2007). The Investigation of Table Ware for the Elderly. Thesis of Department Industrial Design of National Yunlin University of Science and Technology. Yulin: National Yunlin University of Science and Technology.
- Ho, Z.T. (2021). Design and using tableware for the elderly basing on human engineering. *Art Science and Technology*, 34(21), 167-170.
- Lee, C.F. (2006). Approaches to product design for the elderly, *Journal of Design*, 11(3), 65-79. <https://doi.org/10.6381/JD.200609.0065>

Keywords: transformed assistive tableware (TAT), universal design, the elderly

Address: School of Management, Putian University, China

Email: hubertiuliu@sina.com

Acknowledgement (if applicable) The author appreciated facilitation from the Research and Development Center of Medical and Health Industry, Putian University. This project in some part was financially supported by Fujian Provincial Social Science Fund Program (No. FJ2021T006).

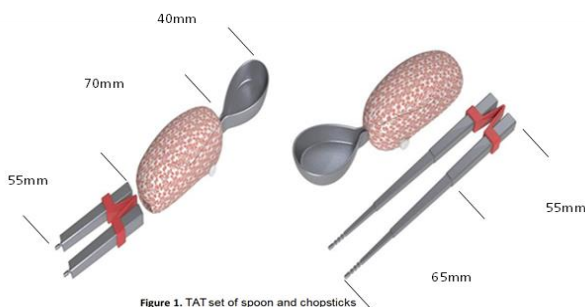


Figure 1. TAT set of spoon and chopsticks



Figure 2. Illustrates the TAT set to show its convenient for storage and carrying