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A survey of the bathing environments and habits of the elderly in winter in Fukuoka, Japan

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Abstract: In Japan, drowning has been reported to occur particularly in home bathrooms among the elderly in winter. Recently, the relation between regional trends of bathing environment or custom and regional variations in drowning rates has been considered. Fukuoka Prefecture has the second highest rate of drowning in Japan. Though it was hypothesized that there is a peculiar environment or custom among the elderly in Fukuoka related to drowning, such a situation has not get been confirmed. Therefore, the purpose of this study was to ascertain the bathing realities of the elderly in Fukuoka in winter.The bathing environment and customs of elderly and young people were investigated by questionnaire, and compared. The subjects were 103 elderly people and 109 young people living in Fukuoka. Assorted traits are Face Sheet (Age, Previous history etc.), Bathing Environment (Type of house, Thermal sensation in each room etc.), Bathing Custom (Length of bathing time,Temperature of water etc.), andPhysical Condition and Accident Experience while Taking a Bath (Acknowledgment level of heat shock etc.). Our results might be useful for the examination offactorsin the regional variation of the drowning rate.

Key words: Thermal environment, Psychological response

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Study of natural indoor temperature by thermal environment simulation with or without soil wall, window opening ratio, etc. as parameters

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Abstract: In recent years, the traditional construction with natural materials has been reevaluated in terms of the natural environmental protection and the health trend. So far, we took a measurement of the indoor thermal environment, had the occupant questionnaire, and did the experiment of the traditional construction and the modern construction using the small outdoor equipment. Based on these previous studies, we did a computer simulation of the indoor thermal environment to analyze the heat storage performance and the humidity conditioning of the soil wall.
As a result of the simulation, the longer the length of eaves becomes, the lower the degree hour becomes in summer.
The degree hour of the night ventilation was lower than that of the daytime ventilation in summer. It appears that the length of eaves and the night ventilation in summer have the effects of insolation shielding and heat relief.

Key words: Thermal environment, Simulation