

EFFECT OF OTHER PEOPLE'S ACTIVITIES ON INACTION IN ELDERLY DEMENTIA RESIDENTS IN COMMON SPACE

—Research on indirect interaction by automated face recognition technology part1 —

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Because group homes (GHs) for elderly dementia residents have more patients in advanced stages in Japan, GHs find it more difficult to evaluate the suitability of the environment only by residents' activities. In this study, the behavior of eight residents in GH was observed using a Real-time Estimation of Smile Intensities (Automated Face Recognition Technology). This technology was developed to compare targets' faces to the happy model face with a rate approximation from 1 to 100% as a smile index (SI).

In previous behavioral tracking surveys, "inaction" was understood as a non-active, relatively negative state. Since facial expressions were analyzed, residents' "inaction" was found to be different in each case and should not be treated the same.

In the result of the study, measures of facial expression objectively reveal that some of the idle residents are also affected by others' actions. The values in the facial expression measurements were particularly high when some others are having conversation and doing housework around. However, residents in advanced stage had very little effect from surrounding activities on their facial expression. This points out an issue how GH should care for residents in advanced stages.