

論文 / 著書情報
Article / Book Information

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種別(和文)	論文要旨
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論文要旨

THESIS SUMMARY

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申請学位 (専攻分野) : 博士
Academic Degree Requested Doctor of (Philosophy)

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要旨 (英文 800 語程度)

Thesis Summary (approx.800 English Words)

In this thesis, the central theme was to provide effective support to people's daily and working lives in an ageing society. The elderly persons who are in better health can work longer and need less healthcare service. Physical activity is linked to improving individuals physiological and psychological functions. In addition, wearable physical monitoring technology offers promising improvement to the person's activity engagements. Therefore, the first research intended to support elderly daily life by promoting physical activity for elderly persons using wearable trackers. A 12-week trial was conducted with thirty elderly persons during the beginning of the COVID-19 pandemic. We explored the impact of activity self-monitoring on the elderly' behavior and awareness. Results showed that the elderly enhanced their awareness of physical activity benefits, willingness to self-monitoring, and commitment to physical activity. Regarding the effect of COVID-19, the participants decreased their walking steps by a small percentage (11%) after their daily routines changed due to this pandemic. However, they showed high commitment to complete the recommended daily activity targets. In addition, many participants agreed with the necessity to maintain activity, the importance of activity self-monitoring and reduce the pandemic's negative impact on physical activity during the spread of COVID-19. Therefore, we would suggest that healthcare and public organizations should promote the use of wearable activity monitoring among the elderly to improve their health and mitigate the adverse effects of the COVID-19 epidemic.

The ageing society situations are projected to be more critical when the current youth generation become older because of the steady decrease in the birth rate. Sedentary behavior has increased among youth due to lifestyle changes created by technological life interventions. The habituation of physical activity can be a promising solution to enhance the youth current and future health. Therefore, the second research intended to effectively support youth current and future life by providing them with activity self-monitoring technology. The self-monitoring feedback is expected to increase the youth awareness of physical activity and health-related issues. This increased awareness may encourage them to engage more in physical activity. In this research, forty university students participated in a 12-week trial. Contrary to the expectations, neither youth awareness nor their activity level was positively impacted by self-monitoring using wearable activity trackers. Therefore, it is suggested that healthcare and public organizations should develop successful initiatives to educate young people about the long-term implications of adopting an active lifestyle at a young age.

The age factor is usually projected to influence the ability to adapt and use new technology. The differences in the impact of activity self-monitoring on young and older persons have yet to be confirmed. A comparison between the elderly and youth was carried out based on the data collected from both previous studies of youth and elderly persons for six-week. There was no notable difference in the walking steps between youth and elderly participants based on the results. In addition, older persons are more likely than youth to have positive awareness and a higher activity obligation when using activity self-monitoring trackers.

Since the effective employment of older adults is one of the most critical managerial concerns to be addressed to compensate for the lack of younger workers. The fourth research focused on supporting working life by investigating the age-related safety for occupational truck drivers. In addition, the factors that may have an impact on their safety performance were identified. We aimed to provide managerial policies to promote employment and safety for older adults. For this purpose, empirical data of 26 trucking companies were analyzed. Based on the analysis results, older drivers do not necessarily have a higher risk of accidents than younger ones. The older driver showed more stability in the work tasks as fewer factors significantly influenced older drivers than those for younger drivers. It is suggested that older adults can be effectively hired or prolong their career lives. The increase in the degree of obesity was found

to negatively impacted their safety. Therefore, it is recommended that older adults could be engaged in physical activity to enhance their health and safety.

This work results and conclusions may somehow shed light on some practical support of the ageing society by providing a valuable source of information and suggestion for effective support for ageing society in daily and working life.

備考：論文要旨は、和文 2000 字と英文 300 語を 1 部ずつ提出するか、もしくは英文 800 語を 1 部提出してください。

Note : Thesis Summary should be submitted in either a copy of 2000 Japanese Characters and 300 Words (English) or 1copy of 800 Words (English).

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