Future work skills for older workers

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Purpose A consequence of the increase of the retirement age to 67 years in the Netherlands is that employees are required to work at least 2 years longer than before. This increase in the retirement age, but complex working conditions, such as open-plan offices and the use of new technology, pose challenges for older workers to continue performing optimally at work. One of these challenges are age-related change in cognitive domains, such as attention, working memory, and flexibility, that take place during the normal human aging process (Mozolic et al., 2011). These age-related changes result from a decrease in neural connectivity in the brain, particularly in the prefrontal cortex, which is relied upon for complex cognitive processes. A cognitive training program could limit these changes and optimize capabilities that contribute to the sustainable employability and future work skills of older workers (Dahlin et al., 2008). We therefore developed an online Future Work Skills training for older workers to make them resilient to these age-related changes at an age (50 and above) when they may not experience them fully yet. We expected more improvement in performance among older workers who participated in the future work skills training group than the older workers who only received general information about cognitive functioning. **Method** The training program focused on cognitive domains (attention, working memory, flexibility) that are most affected by age and could benefit from a dedicated training program (Dahlin et al., 2008; Karbach & Kray, 2009; Mozolic et al., 2011). Participants were recruited through social media. They first took part in an online pretest session, then proceeded to work on six online training sessions that were available through a link to the Qualtrics platform and that consisted of several exercises for which the performance was recorded in the cognitive domains. After 3 weeks, participants finished the training program with a posttest. The pretest and posttest involved working memory, flexibility, and attention tasks where the tasks were the same, but the materials were different. This allowed us to measure the degree of improvement on a task from the training during the posttest compared to the pretest. Participants in the training sessions were randomly assigned to either a future work skills training group or a general information group. In the future work skills group, participants learned to better ignore physical distractions (such as noises and pop-ups) to improve their attention and inhibition skills, to apply memory strategies (mnemonics) to improve their working memory, and switch between tasks with multiple interruptions to improve their flexibility. In contrast, the general information group only involved watching videos about cognitive domains and answering questions about them. **Results and Discussion** Repeated Measures ANOVA analyses were performed in SPSS. The results demonstrated higher performance on the verbal working memory, $F(1,39)=4.18$, $p=.048$, $\eta^2=.089$, and flexibility tasks, $F(1,39)=11.63$, $p=.002$, $\eta^2=.230$, in the future work skills training group over time relative to the general information group. For the attention task, $F(1,39)=10.21$, $p=.003$, $\eta^2=.236$, and the numerical working memory task, $F(1,39)=12.11$, $p=.001$, $\eta^2=.237$, there was an improvement in performance for both groups over time. Overall, the results of this study show transfer from trained skills to performance on another task in a similar domain. The findings demonstrate an effective method to contribute to the sustainable employability of older workers in a positive and constructive manner.

References

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