Self-monitoring, Feedback, and Behavior Change

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Social Cognitive Theory of Self-Regulation

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In social cognitive theory human behavior is extensively motivated and regulated by the ongoing exercise of self-influence. The major self-regulatory mechanism operates through three principal subfunctions. These include self-monitoring of one’s behavior, its determinants, and its effects; judgment of one’s behavior in relation to personal standards and environmental circumstances; and affective self-reaction. Self-regulation also encompasses the self-efficacy mechanism, which plays a central role in the exercise of personal agency by its strong impact on thought, affect, motivation, and action. The same self-regulative system is involved in moral conduct although compared to the achievement domain, in the moral domain the evaluative standards are more stable, the judgmental factors more varied and complex, and the affective self-reactions more intense. In the interactionist perspective of social cognitive theory, social factors affect the operation of the self-regulative system. © 1991 Academic Press, Inc.
Older adults overreport moderate and vigorous intensity physical activity.

Research Article

"Keeping Moving": factors associated with sedentary behaviour among older people recruited to an exercise promotion trial in general practice

Ruth Heisstine, Dawn A. Skilton, Denise Kendrick, Richard W. Morris, Mark Griffin, Deborah Haworth, Tahie Maxud and Steve Iliffe

To reduce sedentary behaviour we must first quantify it. Although challenging, several studies have quantified SB in older people [19, 22–24]. Whilst younger adults are engaged in SB during 60 % [25] of their waking hours, older adults have been shown objectively (using accelerometry) to be sedentary more than 70 % of the time [22, 24], for around 8–10 h of the waking day, and this increases linearly with age [22, 26]. Conversely, self-reported SB is typically underestimated by as much as 50 % [23, 27]. Espuna-Romero et al. [28] showed that older people both overestimate their physical activity and underestimate their sedentary behaviour; men by 26 % and women by 34 % amounting to a difference of 4–6 h/day. Sedentary behaviour is thus commonplace in older adults and under-estimated by self-report.

Influencing Factors on the Overestimation of Self-Reported Physical Activity: A Cross-Sectional Analysis of Low Back Pain Patients and Healthy Controls

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Introduction: The aim of the present study was to determine the closeness of agreement between a self-reporter and an objective measure of physical activity in low back pain patients and healthy controls. Beyond, influencing factors on overestimation were identified. Methods: 27 low back pain patients and 33 healthy controls wore an accelerometer (objective measure) for seven consecutive days and answered a questionnaire on physical activity (self-report) over the same period of time. Differences between self-reported and objective data were tested by Wilcoxon test. Bland-Altman analysis was conducted for describing the closeness of agreement. Linear regression models were calculated to identify the influence stage, age, and body mass index on the overestimation by self-report. Results: Participants overestimated self-reported moderate activity in average by 62.2 min/day (p = 0.002) and vigorous activity by 13.1 min/day (p < 0.001). Self-reported sedentary time was underestimated by 122 min/day (p < 0.001). No individual related variables influenced the overestimation of physical activity. Low back pain patients were more likely to underestimate sedentary time compared to healthy controls. Discussion: In rehabilitation and health promotion, the application-oriented measurement of physical activity remains a challenge. The present results contrast other studies that had identified an influence of age, sex, and body mass index on the overestimation of physical activity.
EMPOWER

mHealth Needs

• Quick access
• Based on objective data in real-time
• Immediate feedback
• Supported by coaching to enhance self-evaluation and tangible outcomes**

Fanning et al., 2018
Key Tools

Home Screen

Resources

Social Feed

Data Viewer

Date Picker
Intervening on exercise and daylong movement for weight loss maintenance in older adults: A randomized, clinical trial

Jason Fanning† | W. Jack Rejeski‡ | Iris Leng¹ | Cheyenne Barnett³ | James F. Lovato⁷ | Mary F. Lyles⁷ | Barbara J. Nicklas³

Body Weight

Adjusted % Change

Follow-up (month)

- Weight Loss plus Exercise
- Weight Loss plus SitLess
- Weight Loss plus Exercise plus SitLess
A Mobile Health Behavior Intervention to Reduce Pain and Improve Health in Older Adults With Obesity and Chronic Pain: The MORPH Pilot Trial

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A remote group-mediated daylong physical activity intervention for older adults with chronic pain: results of the MORPH-II randomized pilot trial

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Value

Agency
CDAPDT

• Module Based
  • Chat
    • Private
    • Group
  • Notifications
  • System Messages
  • Survey
  • Weight
    • BodyTrace
  • Steps
    • Fitbit
  • Badges
Thank You!

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