

# Improving Work Ability and Return to Work among Women on Long-term Sick Leave

Akademisk avhandling

som för avläggande av medicine doktorsexamen  
vid Sahlgrenska akademien, Göteborgs universitet,  
kommer att offentlig försvaras i hörsal Hamberger,  
Medicinaregatan 16 A, Göteborg,  
måndagen den 6 oktober 2014, klockan 09.00  
av

Linda Ahlstrom

Fakultetsopponent  
Professor Kerstin Ekberg  
Linköpings Universitet

Avhandlingen baseras på följande arbeten:

- I. **Ahlstrom, L.**, Grimby-Ekman, A., Hagberg, M., & Dellve, L. (2010). The work ability index and single-item question: associations with sick leave, symptoms, and health—a prospective study of women on long-term sick leave. *Scand J Work Environ Health*, 36(5), 404-412.
- II. Dellve, L., **Ahlstrom, L.**, Jonsson, A., Sandsjö, L., Forsman, M., Lindegård, A., Ahlstrand, C., Kadefors, R., & Hagberg, M. (2011). Myofeedback training and intensive muscular strength training to decrease pain and improve work ability among female workers on long-term sick leave with neck pain: a randomized controlled trial. *Int Arch Occup Environ Health*, 84(3), 335-346.
- III. **Ahlstrom, L.**, Hagberg, M., & Dellve, L. (2013). Workplace rehabilitation and supportive conditions at work: a prospective study. *J Occup Rehabil*, 23(2), 248-260.
- IV. **Ahlstrom, L.**, Ahlberg, K., Hagberg, M., & Dellve, L. (2014). Women with neck pain on long-term sick leave – strategies and approaches used in the rehabilitation process for returning to work. (Submitted)

Göteborg 2014



UNIVERSITY OF GOTHENBURG

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## ABSTRACT

The overall aim of this thesis was to gain new knowledge of factors and interventions that improve work ability and return to work (RTW) among women on long-term sick leave from human service organizations (HSOs). The specific aims of the studies were: to evaluate the associations between the self-rated Work Ability Index (WAI) and Work Ability Score (WAS), and the relationship with prospective sick leave, symptoms, and health (Paper I); to investigate whether intervention with myofeedback training or intensive muscular strength training could decrease pain and increase work ability among women with neck pain (Paper II); to examine the associations between workplace rehabilitation and the combination of supportive conditions at work with work ability and RTW over time (Paper III); and to explore experiences, views, and strategies in the rehabilitation process for RTW (Paper IV). This thesis is based on a prospective cohort study (n=324) and a randomized controlled study (RCT) (n=60, participants with neck pain). Both quantitative and qualitative methods were used. The data collection consisted of questionnaires, laboratory-observed data, register-based data, and interviews. The results showed a very strong association between WAI and WAS, and results predicted future sick leave degree, health-related quality of life, vitality, neck pain, self-rated general health, self-rated mental health, behavioral stress, and current stress (Paper I). In the RCT (Paper II), individuals in the myofeedback intervention group increased their vitality and work ability over time and individuals in the intensive musculoskeletal strength training group increased their WAI, WAS, and mental health over time. WAI, WAS, and RTW increased over time among individuals provided with workplace rehabilitation and supportive conditions at work (Paper III) such as a sense of feeling welcome back at work, influence at work, possibilities for development, degree of freedom at work, meaning of work, quality of leadership, social support, sense of community, and work satisfaction. Women described (Paper IV) how they were striving to work and how they had different views, strategies, and approaches in the rehabilitation process for RTW. They expressed a desire to work, their goals for work, and their wishes for work. In the rehabilitation process for RTW they described their interaction with stakeholders as either controlling the interaction or struggling in the interaction. They described strategies to cope with RTW in terms of yo-yo (fluctuating) working: yo-yo working as a strategy or yo-yo working as a consequence. This thesis identifies factors of importance in improving work ability and RTW among women on long-term sick leave from HSOs. For women with neck pain, the intervention study showed feasibility of the intervention and demonstrated improved work ability and decreased pain (Paper II). The intensive muscular strength training program, which is easy for the individual to learn and perform at home, was associated with increased work ability. The results regarding rehabilitation highlight the importance of integrating workplace rehabilitation with supportive conditions at work to increase work ability and improve RTW (Paper III). Women expressed that they were striving to work and that they wanted to work (Paper IV). These women were “going in and out” of work participation (yo-yo working) as a way to handle the rehabilitation process. For assessing the status and progress of work ability among women on long-term sick leave, the single-question WAS may be used as a compliment to the full WAI as a simple indicator (Paper I).

**Keywords:** work disability, sickness absence, back to work, randomized controlled trial, chronic pain, musculoskeletal disorder, rehabilitation activity, female, cohort, longitudinal data, grounded theory

**ISBN:** 978-91-628-9093-3 (printed)

**ISBN:** 978-91-628-9095-7 (e-pub) Electronic version available at: <http://hdl.handle.net/2077/35953>