



# Work time control in Sweden: Findings from a representative cohort

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## Introduction

Two aspects of work time control (WTC) can be distinguished: an individual's autonomy regarding the duration of the working day (number of hours worked and start and finish times) and the distribution of working time (taking work breaks and vacation).<sup>[1]</sup> We examine whether this structure, often neglected in past research, can be seen in a representative sample of Swedish workers.

Differences exist in the degree to which workers have control over their working time. Women and shift workers have often reported low control over scheduling and time off. In regard to age and family situation, findings are inconclusive.<sup>[2,3]</sup> However, the latest European research is now a decade old.

## Aim

The present study aimed to

1. replicate the two-dimensional structure underlying WTC (control over scheduling and control over time off),
2. investigate differences in the levels of control over scheduling and over time off by gender, age, family situation, occupational sector, and work schedule.

## Methods and Materials

The study was based on cross-sectional data (n = 14,974) from the 2014 data collection of the Swedish Longitudinal Occupational Survey of Health (SLOSH), which follows up a sample of the Swedish working population. WTC was measured using an adapted 6-item index developed by Ala-Mursula et al.<sup>[4]</sup> We assessed the WTC structure with exploratory and confirmatory factor analysis. In order to examine differences in levels of control over scheduling and time off by demographic and work characteristics, independent sample t-tests and one-way ANOVAs were performed.

## Results

The best model fit was found using 5 items of the WTC measure and a two-factor structure that distinguished control over scheduling and over time off (Figure 1). Women, public sector and shift workers reported lower WTC (Figure 2 and 3). Age, marital status, and having children living at home were slightly but significantly associated with both WTC dimensions.

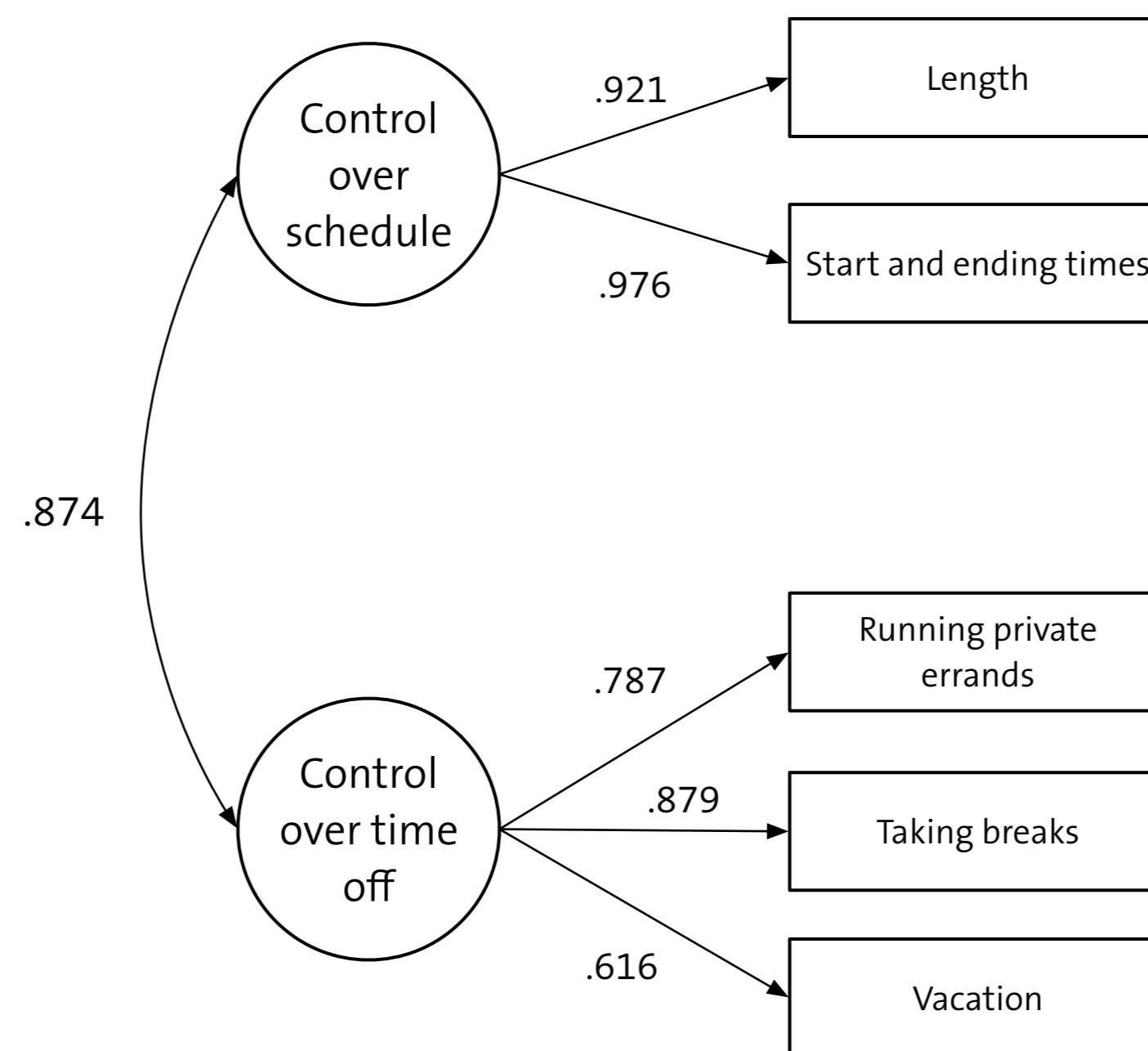
## Conclusions

We confirmed that WTC has a two-dimensional structure with the components: *control over scheduling* and *control over time off*. Women, public sector and shift workers report lower control over scheduling and time off, with implications for their work-life balance. Future research could examine whether the negative outcomes for health generated by overtime hours or shift work could be counteracted by greater control over scheduling and time off, particularly in the light of gender differences.

## References

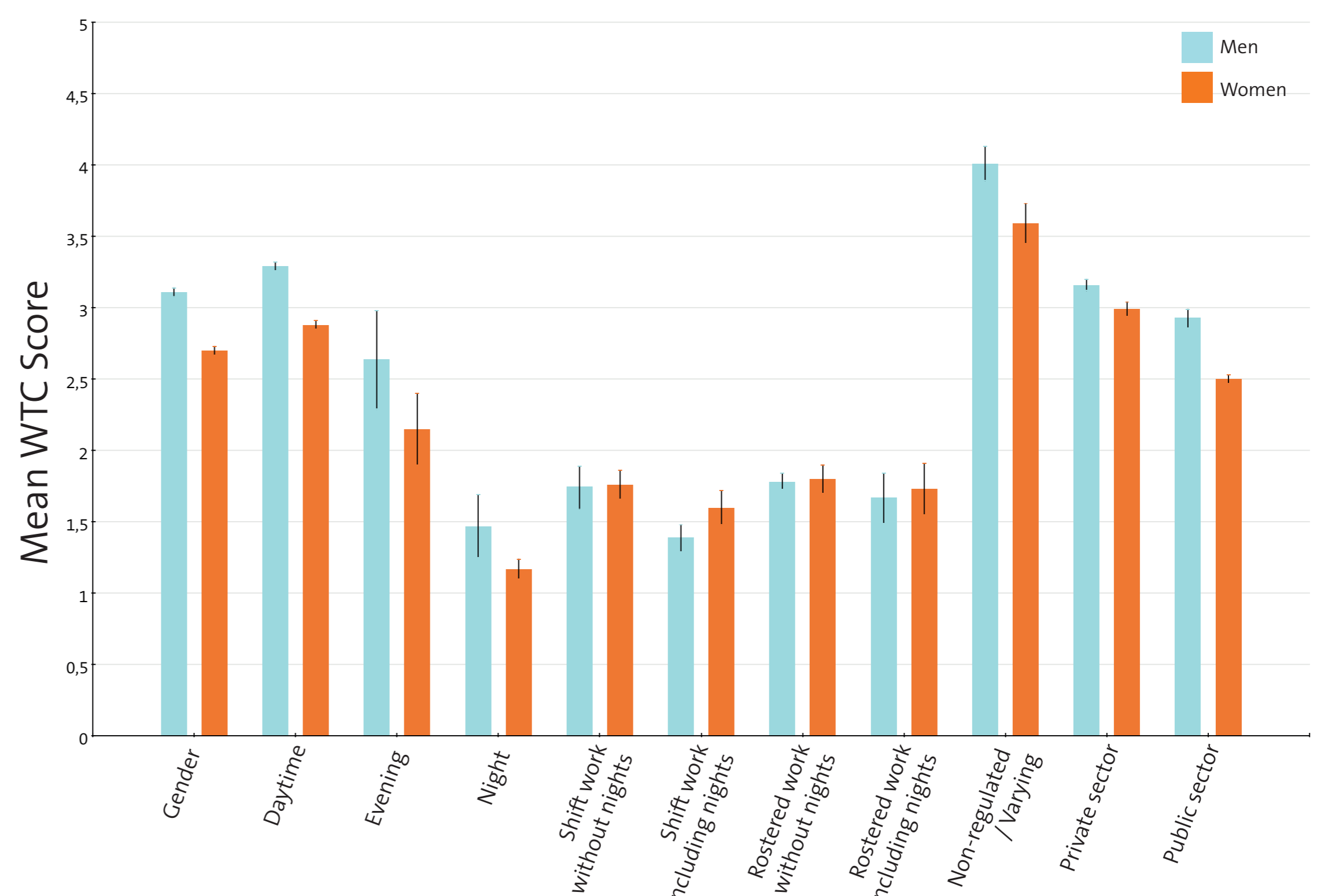
1. Knauth P. Innovative worktime arrangements. *Scandinavian journal of work, environment & health*. 1998; 24: 13–7.
2. Ala-Mursula L, Vahtera J, Linna A, Pentti J, Kivimäki M. Employee worktime control moderates the effects of job strain and effort-reward imbalance on sickness absence: the 10-town study. *Journal of epidemiology and community health*. 2005; 59: 851–7.
3. Takahashi M, Iwasaki K, Sasaki T, Kubo T, Mori I, Otsuka Y. Worktime control-dependent reductions in fatigue, sleep problems, and depression. *Applied ergonomics*. Elsevier Ltd; 2011; 42: 244–50.
4. Ala-Mursula L, Vahtera J, Kivimäki M, Kevin M V, Pentti J. Employee control over working times: associations with subjective health and sickness absences. *Journal of epidemiology and community health*. 2002; 56: 272–8.

Figure 1



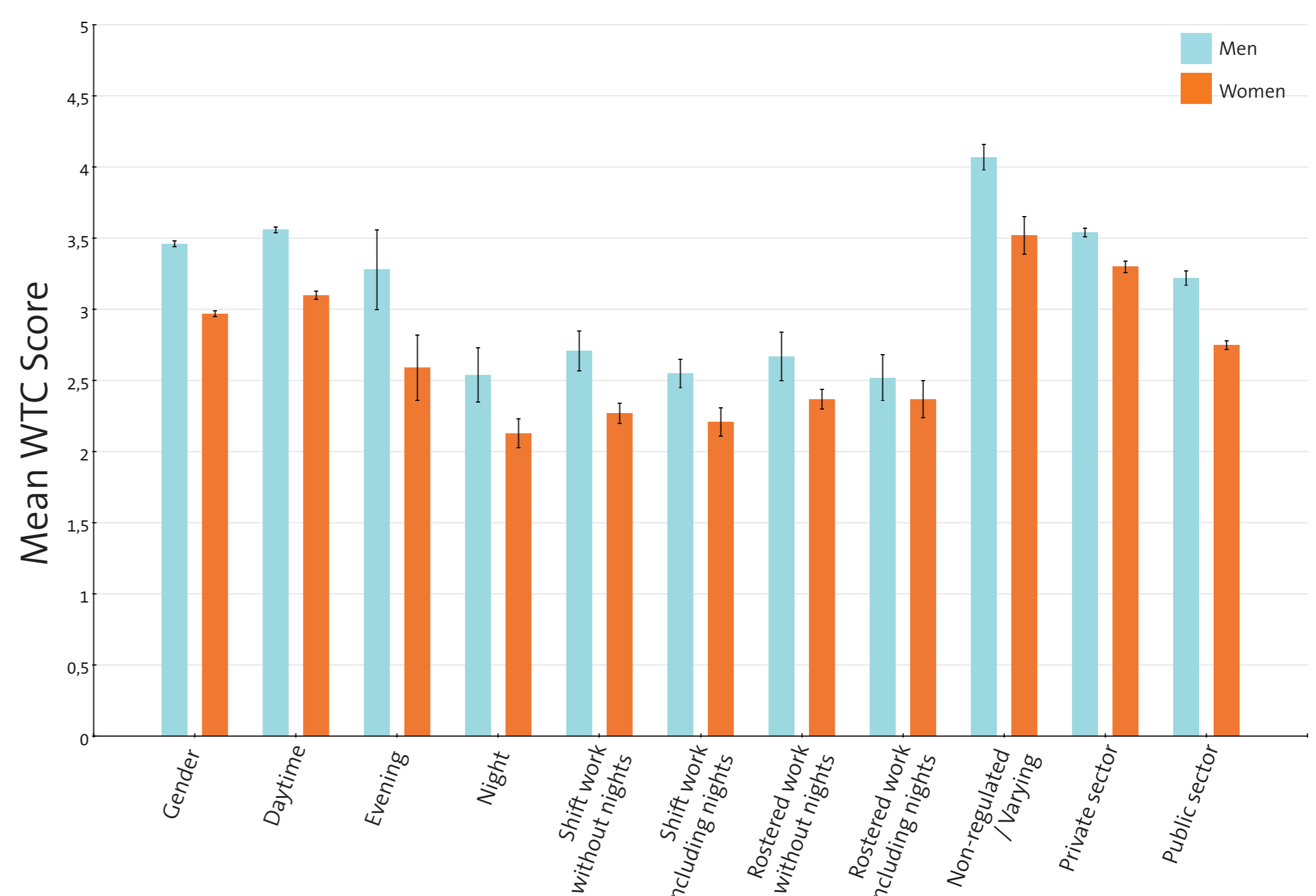
Factor loadings/correlation in the two-factor model of WTC with the best model fit (RMSEA = .06; 95% CI: .04 to .09; CFI = .99).

Figure 2



Gender-stratified averages in *control over schedule* regarding working time and sector (95% confidence intervals).

Figure 3



Gender-stratified averages in *absence control* regarding working time and sector (95% confidence intervals).

## CONTACT