

Interruptions at work as risk for high work intensity and their relation to negative short-term consequences of strain – A diary study among tram drivers¹

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ABSTRACT

The aim of this study was to investigate whether specific indicators of interruptions at work are related to negative short-term consequences of strain throughout a workday under conditions of high time constraints and low control. To do this, 40 tram drivers were accompanied for one workday. The additional temporal effort due to interruptions as well as the proportion of work breaks with delays was recorded via observations. Negative short-term consequences of strain were measured every two hours via a questionnaire. Multilevel modelling indicated that the additional temporal effort due to interruptions was a significant predictor of an immediate fatigue reaction, whereas there was a delayed fatigue and stress reaction to shortened breaks due to interruptions. The results are interpreted in terms of the compensatory effort the drivers use to compensate for shortened breaks and extra time due to interruptions. Furthermore, implications for the measurement of interruptions as well as for the occupation of tram drivers are discussed.

Keywords

Interruptions – work intensity – short-term consequences of strain – stress – fatigue – tram drivers

1 This research was conducted with the approval and support from the Municipal Transport Services in Halle, Germany. During conducting the study, interim results were presented at the 10th Conference of the section Work-, Organizational- and Business psychology of the German Psychological Society (September 2017). Furthermore, some of the data (strain ratings) are included in a manuscript, which was published in another journal (Kästner, Schweden, & Rau, 2019). The general research issue is different, as the dependent strain variables are analyzed regarding other independent variables. The manuscript at hand is included in the doctoral thesis of the first author.