WORK IN PROGRESS REPORT

Giving Work a Rain Check: Relationship Between Soldiering and Positive Work Outcomes Within the Job Demands-Resources Model

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Soldiering is defined as engaging behaviourally or cognitively into non-work-related activities during working hours with no intention of harming the employer, co-workers, and/or clients. The present study will investigate this phenomenon using the Job-Demands Resources Model. The proposed model will consider the influence of job demands and resources on soldiering, as well as the relationship of soldiering with employee wellbeing and performance. The data, collected via online questionnaires across seven European countries, will be analysed using structural equation modelling in order to explore the goodness-of-fit of the proposed model as well as its potential cross cultural variations.

Keywords: Soldiering; JD-R Model; Work engagement; Employee Wellbeing; Performance

Editor’s Note
This work in progress report (WiP) was developed by the 2014–2015 cohort of the Junior Researcher Programme (JRP), a service supported by the European Federation of Psychology Students’ Associations (EFPSA). During the course of the JRP calendar, the six research groups that are initiated via the European Summer School submit the WiPs of their research to the Journal of European Psychology Students (JEPS). The WiPs are short methodology papers that outline steps undertaken by research groups in developing and carrying out a research project in the context of low-resource, independent, student-driven, cross-cultural research. The WiPs are submitted prior to project completion to enable the authors to improve their research according to the comments resulting from the peer-review process. WiPs also support the dissemination of methods used by student-driven, independent research projects, with the hope of informing others carrying out such work.

The 2014–2015 cohort was inducted into the JRP at the European Summer School 2014, held in Vorarlberg, Austria.

Introduction
People tend to spend approximately one hour and twenty minutes during work days on non-work-related activities according to an online self-report questionnaire, costing employers over 8000$ per employee per year in lost productivity (D’Abate & Eddy, 2007). This type of self-regulatory failure at work is considered to be extremely prevalent (Steel, 2007) and can be referred to as soldiering. The term soldiering was first coined by Taylor (1911) to describe “under working, that is, deliberately working slowly so as to avoid doing a full day’s work” (p. 10). Recently, Metin, Taris, and Peeters (in preparation) adopted this definition for contemporary work contexts as “conscious or unconscious delay of work without the intention to harm the organizational stakeholders, workplace or client”. Having longer coffee breaks or checking vacation websites are examples of soldiering. Metin et al. (in preparation) addressed the deficiency of a valid measurement tool to assess a wide range of soldiering behaviours and consequently developed a scale to measure this behaviour.
This study aims to explore the relationship between particular work characteristics, certain work outcomes, and soldiering. Work environment will be examined through the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007), which differentiates work characteristics into two categories to examine work stress. Some aspects of the job, such as workload, require certain psychological or physical costs from employees, and these are called job demands. The positive aspects, such as colleague support, which help employees reduce job demands, complete goals, or achieve personal growth, are called job resources. There is strong empirical evidence that job resources are associated with positive work outcomes, such as work engagement (Halbesleben & Wheeler, 2008), and job demands are related to negative work outcomes, such as burnout (Bakker & Heuven, 2006). Previous findings show that low resources and low demands have been linked to boredom, which is characterised by low arousal, and has been shown to lead to different types of non-work related behaviour (Reijseger et al., 2013). We expect soldiering to be a behavioural manifestation of boredom and thus to be related to low job demands and resources.

In this study work engagement, job performance, and job satisfaction will be investigated as possible occupational outcomes associated with soldiering. According to Bakker, Schaufeli, Leiter, and Taris (2008), work engagement is a fulfilling state of mind which is characterized by vigour, dedication, and absorption. Job performance is defined in accordance with the goals of the organization, and whether the shown work behaviour brings them closer to these goals or not (Campbell, 1990). Locke (1976) defines job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1304). We expect soldiering to be nurtured by an understimulating work environment and to be related negatively to all three positive occupational outcomes. The expected relationships between the study variables are illustrated in Figure 1.

This study is necessary in order to understand aspects of the workplace associated with soldiering and its organizational outcomes. In addition, by including respondents from seven European countries, cross-cultural variations in soldiering can be examined to inform future research.

**Method**

**Participants and Procedure**

Participants in this study will be full-time white-collar employees performing administrative or managerial work in an office setting, who also have internet access. Approximately 1400 employees from seven European countries (Czech Republic, Croatia, Finland, the Netherlands, Slovenia, Ukraine, and the United Kingdom) will be targeted to participate in this study. An equal number of participants from each country will be recruited to obtain suitable data for comparative analysis between samples from different cultures.

Companies’ human resources departments will be contacted, informed about the study, and asked how to gain access to those employees who meet the above stated criteria. If they agree to participate, access to an online survey hosted on Limesurvey will be delivered to the prospective participants, and they will be able to complete it at their leisure.

**Measures**

Data will be collected through a 57-item online survey constructed from existing valid scales. The scales that do not have valid translated versions will be translated to the official languages of the countries included in this study using the “translation-back-translation” method. Although the psychometric characteristics of these measures are presented below (Table 1), three of the variables require further explanation.

There are no published scales on soldiering. However, Metin and colleagues (in preparation) have developed and validated a measure with two subdimensions—delay (delaying the completion of work tasks), and cyberslacking (personal use of the internet in the workplace).

Job satisfaction will be measured through Kunin’s single item Faces Scale (1955), which has been proposed to capture the influence of both cognitive and affective aspects of job satisfaction (Kaplan, Warren, Barsky, & Thoresen, 2009). Although this is a single-item scale, there is evidence that such tools are reliable and correlate highly with longer measures, making them acceptable substitutes for multi-item scales (e.g., Wanous, Reichers, & Hudy, 1997).

Finally, task performance (behaviours aimed at fulfilling job role responsibilities) and contextual performance (behaviours supporting the social environment of the workplace) will be assessed through the Individual Work Performance Questionnaire (IWPQ; Koopmans et al., 2012). Compared to traditional measures that focus exclusively on task performance, the IWP framework will allow this research to evaluate the effect of soldiering on a wider range of workplace behaviours.

Demographics and recovery after breaks will be measured as control variables. Recovery after breaks will be assessed in order to explore its fundamental differences from soldiering using the three-item scale developed by Demerouti, Bakker, Sonnentag, and Fullagar (2012), which addresses the feeling of recovery that employees have after a pause during working hours.

**Proposed Analysis**

The goodness-of-fit of the proposed model of soldiering will be analysed using structural equation modelling (SEM). If necessary, modified alternative models will be examined. Possible variations between different cultures in the level of soldiering will be investigated using ANOVA. The goodness-of-fit of the proposed model will be analysed across cultures to observe potential variations.

**Ethics**

Ethical issues will be considered by the Ethical Committee of Utrecht University (UU). An ethics application is submitted to the Social Sciences Ethics Board of UU. Therefore, companies whose employees will be approached will be assured that there are no ethical concerns in the study.
Figure 1: Proposed model of employee functioning.
design. This approval will be sufficient for all collaborators given that participants will be approached in an individual manner through digital means. Nevertheless, an ethics proposal will still be submitted to the local university of every researcher of the group for confirmation if needed. Soldiering, which might potentially be a harmful work behaviour, may be a sensitive issue to measure as employers may wish to know which of their employees are soldiering. However, participant anonymity will be ensured for the confidentiality of participants and the validity of results.

Practical
All members of the research team have specific roles and are expected to contribute equally to the study. Online workgroup meetings are conducted via Skype and Facebook. Meetings are set up every three weeks to discuss the completed tasks and make plans for the study as it progresses. Dropbox and Google Drive are used for content exchange, and data will be stored securely on each member’s PC. Confidentiality of data will be guaranteed through the use of a coding system to identify each participant.

In the course of our project some of the study scales, including the soldiering scale, will be translated and validated, as some of the study countries do not have their own language-specific versions of the measures. Therefore, for these countries, using the translated scales for the first time might require additional focus when interpreting the results. This problem should be eliminated by applying a thorough translation-back translation procedure.

Even though translation-back-translation generally results in well-translated instruments, there may be some barriers regarding equally relevant methods. Potential methodological bias can be reduced with consideration of metric equivalence (Peña, 2007), which will be investigated by SEM. It will be beneficial to ensure equivalence of the measures as the ability to test and extend theories is made increasingly possible when cross-cultural research methods are utilised (Peña, 2007).

Current Status of the Project
A model for the expected relationships of the study variables has been proposed (Figure 1) to be tested. Measures for job demands and resources, soldiering, work engagement, job satisfaction, and performance have been determined. The measures have been translated and uploaded online. Data collection has been started in all of the countries included in the study.

Prospective Discussion
The findings are expected to be reported before September 2015. By examining soldiering we aim to enhance our knowledge of its workplace associations. Moreover, unveiling important aspects of the relationship between work climate, soldiering, and work outcomes for practical use is another major goal of this research. We aim to understand the deep-rooted associations between the study variables, and propose ways to limit soldiering and increase employee wellbeing for a better person-job fit. Additionally, as possible variations between culture-specific datasets will be investigated, findings related to the cross-cultural implications of soldiering and employee functioning are considered relevant to this research.

Competing interests
The authors declare that they have no competing interests in publishing this article.

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Table 1: Summary of the measures used in the study.

| Variable          | Scale                          | Subdimension     | Items | Cronbach’s α | Reference                  |
|-------------------|--------------------------------|------------------|-------|--------------|---------------------------|
| Soldiering        | Soldiering Scale               | Delay            | 8     | .84          | Metin, et al. (in preparation) |
|                   |                                | Cyberslacking    | 4     | .69          |                           |
| Job Demands and Resources | Questionnaire on the Experience and Evaluation of Work | Independence | 3     | .79          | Schaufeli, Bakker, & van Rhenen (2009) |
|                   |                                | Workload         | 5     | .78          |                           |
|                   |                                | Variety at Work  | 5     | .86          | Bos, Donders, Schouteten, & van der Gulden (2013) |
|                   |                                | Ambiguities about Work | 6     | .86          |                           |
| Work Engagement   | Utrecht Work Engagement Scale | Vigour           | 3     | .92          | Tims, Bakker, & Derks (2013) |
|                   |                                | Dedication       | 3     | .95          |                           |
|                   |                                | Absorption       | 3     | .83          |                           |
| Job Satisfaction  | Kunin Faces Scale              | –                | 1     | –            | Kunin (1955)              |
| Performance       | IWPQ                           | Task Performance | 5     | .78          | Koopmans et al. (2012)    |
|                   |                                | Contextual Perf. | 8     | .85          |                           |
| Recovery          | Recovery After Breaks          | –                | 3     | .85          | Demerouti, et al. (2012)  |
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