

Summary

Introduction

Due to due to increasing economic globalization and corresponding competitiveness between companies all over the world, the economic recession in many countries, and the growing need for sustainable employability, it becomes increasingly important to maintain, improve, and optimize the individual work performance (IWP) of employees (Chapter 1). Different scientific fields have proposed approaches and solutions for doing so. For example, the field of occupational health performs health risk appraisals or develops intervention studies targeting employee health (e.g., by improving working conditions, ergonomics, or a healthy lifestyle). The field of work and organizational psychology has been involved in hiring and recruiting personnel, assessment procedures, and training and development programs. The field of management and economics has primarily focused on the larger work system, including factors such as work processes, technological constraints, and organizational structure.

Despite the importance and popularity of IWP, there is little consensus on how to define and conceptualize this construct. When considering the research on IWP from the different research fields, it seems evident that a clear definition and conceptual framework of IWP is lacking. In accordance, a multitude of instruments exists to measure IWP (or one of its related constructs). This lack of consensus on how to define, conceptualize, and measure IWP is undesirable, because valid measurement is a prerequisite for accurately establishing the effectiveness of interventions, procedures and strategies to maintain, improve, or optimize IWP. Therefore, the objective of this thesis was to develop and validate a comprehensive, generic, and short questionnaire to measure IWP.

Part I. Developmental phase

The first step towards a comprehensive, generic, and short measure of IWP was establishing a clear definition and conceptualization of IWP. Chapter 2 presents a multi-disciplinary, systematic review of the literature on conceptual frameworks of IWP. In this chapter, the definition of IWP as “behaviors or actions that are relevant to the goals of the organization” (Campbell, 1990) was adopted. An integrated, conceptual framework was proposed, in which IWP consists of four broad and generic dimensions, namely, task performance, contextual performance, adaptive performance, and counterproductive work behavior.

This conceptual framework was used as the starting point for the development of the Individual Work Performance Questionnaire (IWPQ). In order to

operationalize the dimensions in this conceptual framework, numerous indicators used to measure IWP were identified in Chapter 3, via the scientific literature, existing questionnaires, and expert interviews. Subsequently, the most relevant indicators per dimension were selected by experts from different professional backgrounds. These indicators were used to construct a first version of the Individual Work Performance Questionnaire (IWPQ).

Part II. Field-testing phase

In Chapter 4, the field-testing of the first version of the Individual Work Performance Questionnaire (the IWPQ 0.1) is described. In order to examine its generic applicability, the IWPQ 0.1 was tested in a large sample of Dutch blue, pink, and white collar workers. The results of the field-test showed that the factor structure of the IWPQ consisted of three dimensions, with the contextual performance and adaptive performance questions loading on one factor. The conceptual framework was changed accordingly, by merging the contextual performance and adaptive performance dimensions. In addition, Rasch analysis (Rasch, 1960) was used to examine the functioning of the IWPQ items in more detail. Only items that showed good fit to the Rasch model, and that were generically applicable, were included in the second version of the IWPQ (the IWPQ 0.2).

For the IWPQ 0.2, it appeared that the targeting of the scales was not yet optimal. For task and contextual performance, there were insufficient items located at the higher range of the scale (i.e. difficult items), while for counterproductive work behavior, there were insufficient items sensitive to the lower range of the scale (i.e. easy items). As a consequence, the IWPQ was less able to discriminate workers with high task and contextual performance, and less able to discriminate workers with low counterproductive performance. In order to improve the targeting of the IWPQ, an improvement round was held, described in Chapter 5. Improved targeting of the task and contextual performance scales was achieved, by adding new items to the scales. The final version of the questionnaire – the IWPQ 1.0 – is presented.

Part III. Validation of the IWPQ

In Chapter 6, two types of construct validity of the IWPQ were examined. First, the relations of the IWPQ with presenteeism and work engagement were examined (convergent validity). The IWPQ scales appeared to correlate lower than expected with absolute presenteeism. These lower than expected correlations may be due to several reasons, such as limitations in administering the presenteeism measure in

the study, or lack of conceptual similarity between IWP and absolute presenteeism. As hypothesized, the IWPQ correlated weakly with relative presenteeism (own IWP compared to that of colleagues), and moderately with work engagement. Second, it was examined whether workers low and high in job satisfaction, and workers low and high in overall health, could be discriminated on IWPQ scores (discriminative validity). As expected, the IWPQ was able to discriminate between these groups. Overall, these results indicate acceptable construct validity of the IWPQ.

In Chapter 7, the responsiveness of the IWPQ was examined in the Be Active & Relax randomized controlled trial. The aim of this trial was to investigate the effectiveness of an intervention to stimulate physical activity and relaxation of office workers on need for recovery. Correlations between changes on the IWPQ and changes on similar constructs (e.g., presenteeism) and distinct constructs (e.g., need for recovery) used in the trial were examined. Although at least 85% of the correlations between change scores were in the expected direction, most of the correlations were weaker than expected. This may indicate low responsiveness of the IWPQ, but can also be explained by several other reasons, such as a relatively healthy, well-functioning study population at baseline, small changes on many constructs in the study, or unclear guidelines on how to interpret correlations between change scores. Thus, no firm conclusions could be drawn about the responsiveness of the IWPQ, and future research regarding this characteristic is recommended.

In order to promote international use of the IWPQ, Chapter 8 presents the cross-cultural adaptation of the IWPQ from the Dutch to the American-English language, using the guidelines of Beaton et al. (2000). This process consisted of five steps: a forward translation by two independent native-American translators, synthesis, back-translation by two independent native-Dutch translators, an expert committee review, and pilot-testing. During the pilot-testing, cognitive interviews with 40 American workers were performed, to examine the comprehensibility, applicability, and completeness of the American-English IWPQ. The translation was conducted without major difficulties. In general, participants were positive on the comprehensibility, applicability and completeness of the questionnaire. Five items were adapted to better suit the American-English language. The pilot-test showed good results concerning the internal consistency of the American-English IWPQ (Cronbach's alphas for the scales between 0.79 and 0.89) and good content validity. The results indicate that the cross-cultural adaptation was successful, and that the measurement properties of the American-English IWPQ were good.

Discussion and conclusion

Chapter 9 provides an overview of the main findings and a discussion of the results. Methodological issues, such as generic applicability, the choice for self-report, and the lack of a golden standard for validation, are discussed. Strengths and limitations of the current thesis, as well as recommendations for future research on the IWPQ, are considered. The current thesis contributes towards consensus on the definition and conceptualization of IWP, and provides an instrument to measure IWP in a standardized way. Hopefully, this provides a push towards integration between research fields interested in IWP. Finally, applications of the knowledge gained in the current thesis are discussed for research and practice.

In conclusion, the objective of this thesis – to develop and validate a comprehensive, generic, and short questionnaire to measure IWP – was achieved. The main benefits of the IWPQ are that it measures all relevant dimensions of IWP, it is generically applicable to workers from different occupational sectors and workers with and without health problems, and it is short with 18 items. Such a measurement instrument is a prerequisite for accurately establishing the effectiveness of interventions, procedures and strategies to maintain, improve, or optimize IWP.