

# Relations of the Job Demands-Control-Support Model of Job Strain with Personality Attributes: A Comparison between Switzerland and South Africa

## Introduction

The JDCS model posits three principles causes of job strain: high job demands, low job control and poor social support in the work place. However, there are individual differences in the reactions to the environmental stressors, namely in terms of personality dimensions (Massoudi, 2009), core self-evaluations (Judge et al., 1998), or sense of coherence (De Jonge et al., 2000).

To better understand which personality traits are protective and risk factors based on the JDCS model, we investigated the moderating effects of the Big Five personality traits on the relationship between job demands and work-related health outcomes.

## Materials and Method

### Participants

363 working individuals in **Switzerland** (52.1% women and 47.9% men), between 17 to 69 years old (*mean age* = 40.56, *SD* = 13.36), and

641 working individuals in **South Africa** (57.4% women and 42.4% men) aged 16 to 64 years old (*mean age* = 34.44, *SD* = 11.45).

### Instruments

The **JCQ** was used to assess work conditions: Psychological Job Demands, and Job Control.

Personality was assessed with the **NEO** (NEO-FFI-R): Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness.

The **MBI** is a measure of Burnout. We used the total score which includes three dimensions: Depersonalization, Emotional Exhaustion, and Personal accomplishment.

The **UWES** measures Work Engagement and is based on three dimensions: Vigor, Dedication and Absorption.

### Statistical analyses

✓ We did multiple regression analyses to look at the direct effect and the moderating effects of personality traits in relation to job conditions in predicting job strain.

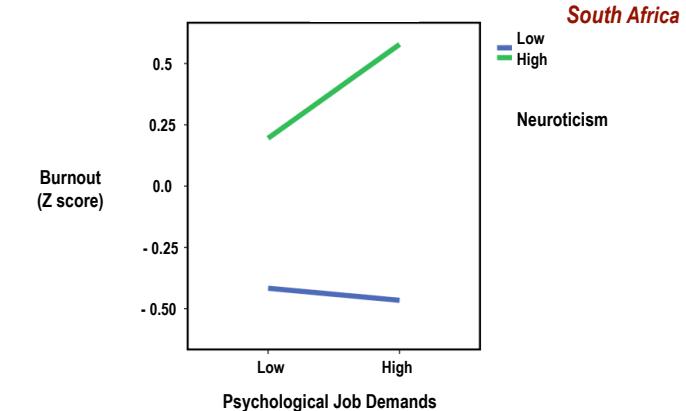
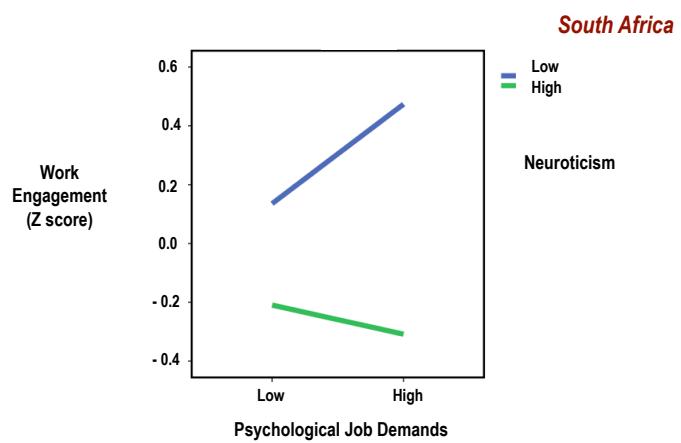
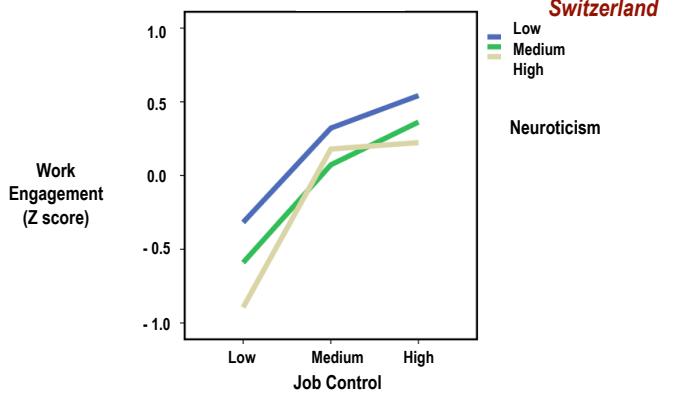
## Results

✓ **In Switzerland**, Neuroticism had a moderating effect in relation to Job Control and Work Engagement ( $\Delta R^2 = .01$ ,  $\beta = .10$ ,  $t(328) = 5.25$ ,  $p > .05$ ): As Job Control increases, Work Engagement will increase (but Work Engagement will be the lowest for individuals high in Neuroticism).

✓ **In South Africa**, Neuroticism had a moderating effect in relation to Job Demands and Work Engagement ( $\Delta R^2 = .03$ ,  $\beta = -.17$ ,  $t(606) = 20$ ,  $p > .001$ ): As Job Demands increase, Work Engagement will decrease for individuals high in Neuroticism.

✓ Finally, Neuroticism had a moderating effect in relation to Job Demands and Burnout ( $\Delta R^2 = .02$ ,  $\beta = .16$ ,  $t(600) = 21.15$ ,  $p > .001$ ): As Job Demands increase, Burnout will increase for individuals high in Neuroticism.

✓ **Figures. Examples of the moderating role of personality traits in the relationship between job conditions and health-related work outcomes.**



## Conclusions

✓ Individual and environmental characteristics both contribute strongly to the prediction of work-related health outcomes in Switzerland and in South Africa.  
✓ High Neuroticism is a risk factor in combination with high Job Demands conditions for South Africa and in combination with either low or high Job Control conditions for Switzerland.

## References

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