

Impact of Digitization on Job Satisfaction and Stress in Service Companies

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Zusammen.
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The KODIMA project

- Five partners from research and practice
- Goal: Investigation and reorganization of work processes within the scope of digitized work using the example of tax consulting companies
- Why tax consulting companies?
 - Good example for knowledge-intensive services
 - Highly affected by digitization
(Arntz, Gregory, Lehmer, Matthes & Zierahn, 2016)

Digitization

„Digitization is the introduction or increased use of information and communication technologies (ICT) by (working) individuals, organizations, industries and societies with the characteristic consequences of acceleration, increasing abstractness and flexibility, and individualization of processes and outcomes.“

(Traum, Müller, Hummert & Nerdinger, 2017, p. 4)

Our research questions

- 1. How are the working conditions in tax offices changing due to digitization?**
- 2. What is the impact of digitization on job characteristics, job related stressors and well-being?**
3. What conclusions can be drawn for the optimal design of work processes?
 - Previous studies have largely dealt with the loss (or creation) of jobs on an abstract level.
 - We focus on the individual worker.

Hypotheses

Based on 14 semi-structured interviews in tax consultancies we formulated the following assumptions:

1. Digitization leads to an acceleration and densification of the work contents and thus to a higher quantitative workload.
2. Digitization leads to a focus on highly knowledge-based work contents and thus to a higher qualitative workload.
3. The impact of digitization on (a) job satisfaction and (b) work related stressors is mediated by job content und job resources.

Development of a measure to assess the degree of digitization in organizations

- Goal: Reliable and valid assessment of the degree of digitization in service organizations from the worker's perspective
- First step: Development of a scale specific to the tax consultancy sector
- Several validation studies have been conducted
(Görs, Hummert, Traum & Nerdinger, 2019)
- Resulted in two scales:
 - **Degree of digitization on the individual (workplace) level**
(13 items)
 - Degree of digitization on the organizational level (15 items)

Method

- Online questionnaire, only employees of tax consultancies were invited to participate
- $N = 457$, 70% ♀, $M_{Age} = 37.70$ ($SD = 12.0$)
- Average professional experience: 15 years ($SD = 10.8$)
- 94 tax consultants (*Steuerberater*), approx. 250 assistant tax consultants (*Steuerfachangestellte*)

Questionnaires

- Degree of digitization from the worker's perspective (ADG), $\alpha = .82$
(13 items; Müller et al., 2018)
- Short Questionnaire for Job Analysis – 4 dimensions consisting of 11 sub scales (26+2 additional items; Prümper et al., 1995)
 - Job content: variety, holistic job
 - Job resources: scope of action, social support, cooperation
 - Stressors: i. a. qualitative stress at work, quantitative stress at work
 - Organizational climate
 - α 's between .56 and .8
- Job satisfaction (1 item, Kunin, 1955)
- Demographic items

Results

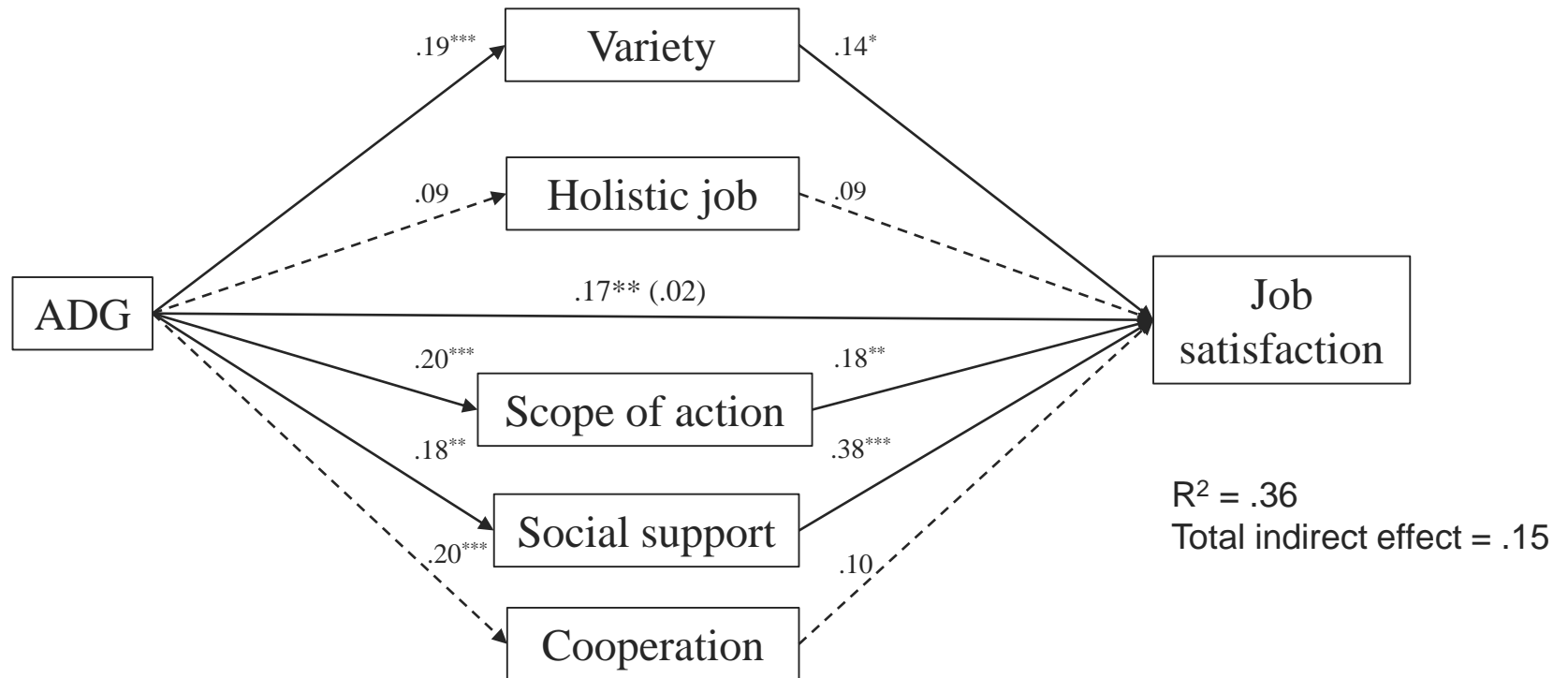
Correlations between ADG-scale and job analysis dimensions

		1.
1. ADG		
2. Work related stressors		
a. Quantitative stress at work	.14**	H1
b. Qualitative stress at work	-.02	H2
3. Job satisfaction	.16**	
4. Variety	.21***	
5. Holistic job	.11*	
6. Scope of action	.21***	
7. Social support	.14**	
8. Cooperation	.19***	

Note. N = 444 – 445. * $p < .05$, ** $p < .01$, *** $p < .001$

Results (H3a)

Mediation model: ADG – Job content/resources – Job satisfaction



Solid lines represent significant indirect effects.

Results (H3b)

Mediation models:

1. ADG – Job content/resources – Quantitative stress at work
 - $R^2 = .11$
 - significant indirect effects, but rather small
2. ADG – Job content/resources – Qualitative stress at work
 - $R^2 = .07$
 - significant indirect effects, but rather small

The impact of digitization on work related stressors cannot be explained through the examined variables.

Discussion

- During the preliminary interviews employees conveyed vague feelings of fear in connection with digitization
- Although there is an increase in the quantitative workload, progressing digitization does not lead to an increase in qualitative workload
- We even observed an increase in job satisfaction. Why?
 - Digitization has a substantial positive impact on (task) variety, scope of action and social support by colleagues and superiors.
 - This outweighs the negative impact of acceleration and densification caused by digitization.

Thank you very much.

Any questions?

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Dieses Forschungs- und Entwicklungsprojekt wird im Rahmen des Programms „Zukunft der Arbeit“ (FKZ 02L15A311) vom Bundesministerium für Bildung und Forschung (BMBF) und dem Europäischen Sozialfonds (ESF) gefördert und vom Projektträger Karlsruhe (PTKA) betreut. Die Verantwortung für den Inhalt dieser Veröffentlichung liegt beim Autor.



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Literature

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