Chair of Work and
Organizational Psychology

Technological self-efficacy and occupational mobility intentions in the face of technological advancement: A moderated mediation model

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Adopting an Occupational Lens in Contemporary Career Research (1/2)

Occupations …

- are fundamental reference points in individuals' careers (Anteby et al., 2016)
- consist of collections of tasks and work role requirements, that call for a particular set of knowledge and skills to successfully complete these tasks (Dierdorff et al., 2009)
- guide career development, create meaning and direction (Kreiner et al., 2006; Lee et al., 2000)
- provide individuals with specific occupational identities (Hauschildt & Heinemann, 2013)

- Socio-economic and technological changes (will) transform work design across all occupations (Greenhaus & Kossek, 2014; Parker & Grote, 2020)
- Technological development will change and possibly abolish numerous tasks within occupations (Arntz et al., 2016; Bessen, 2016)
- Individuals must respond to changes in work environments and job requirements (Jansen & Shipp, 2019; Van Vianen, 2018), and engage in personal development throughout the entire career (Van der Heijden et al., 2016)

Adopting an Occupational Lens in Contemporary Career Research (2/2)

- Facing these developments, individuals have two options: Adapt to changes within the boundaries of their occupations or leave the occupation
- Occupational change as the movement into a new occupation that requires additional training, education, or vocational preparation (Feldman, 2002)
- Occupational change is a costly, major transition (Kidd & Green, 2006; Feldman & Ng, 2007)
  - Loss of occupational identity and human capital investments (Becker, 1962; Skorikov & Vondracek, 2011)

- Research on career mobility mostly focused on job and organizational mobility (Rodrigues & Guest, 2010), research on occupational mobility is scarce (Anteby et al., 2016; Carless & Arnup, 2011; Dlouhy & Biemann, 2018)
- Because occupational affiliations are expected to fill the void of destabilized organizational affiliations in boundaryless careers (Currie et al., 2006), research on occupational career trajectories is called for (Anteby et al., 2016)

Three Analytical Lenses on Occupations (Anteby et al. 2016)

Becoming

- Adopting values, norms, and worldviews of the occupational community: Becoming socialized
- Focus: Worldviews of occupational members, especially newcomers

Doing

- Performing occupational tasks and practices: Emphasizing the agency of occupational members
- Focus: Actions of occupational members that impact career outcomes like occupational identity

Relating

- Building relations and collaborations between occupations and their surrounding ecosystem
- Focus: Relations between an occupation and its broader field (e.g., technology)

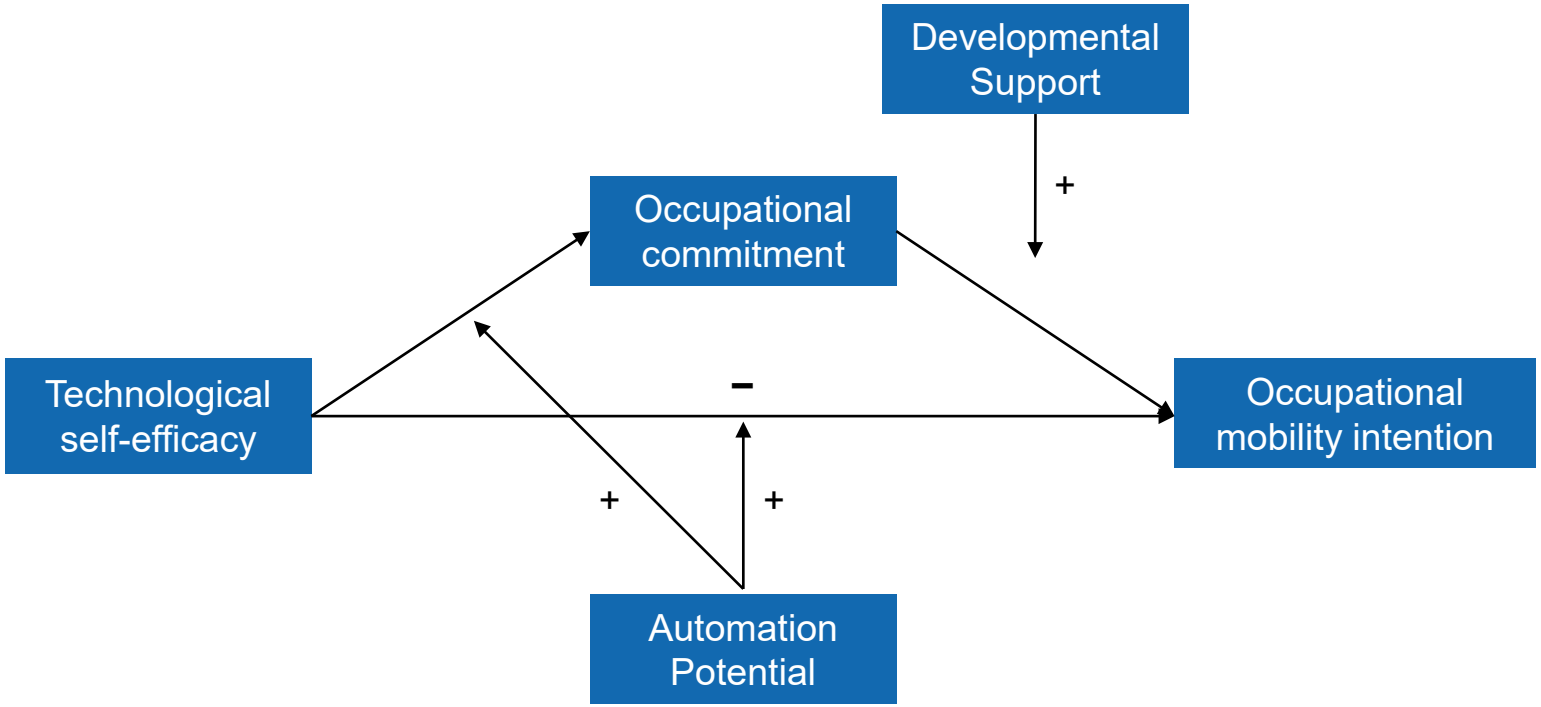
Aim of the present study

Aim: Investigate the influence of individual and contextual factors on occupational mobility intentions in light of technological advancement

- Technological advancement will affect tasks (Frank et al., 2019) and change established work design in all occupations (Parker & Grote, 2020)
- Impact on individual career trajectories not yet well understood

- Capacity to cope and deal with changes in occupational context depends on self-efficacy (Savickas, 1997), which also relates to constructs of individual career development, like occupational commitment and occupational mobility intentions (Cooper-Hakim & Viswesvaran, 2005; Klassen & Chiu, 2011; Lee et al., 2000)
- Technological self-efficacy: Belief to successfully perform a new, technologically sophisticated task (McDonald & Siegall, 1992)

Hypotheses



- Social cognitive career theory emphasizes self-efficacy for adaptive career behaviour (Lent et al., 1994)
- Occupational commitment: Psychological link between a person and their occupation (Lee et al., 2000)

- Automation potential: Degree to which occupational tasks can be substituted by existing technology (Dengler & Matthes, 2018)
- Developmental support as an important contextual factor for adaptive career self-management (Lent & Brown, 2013)

Method

Participants and procedure

- Online survey (Switzerland/Germany), *N* = 512
- Two measurement waves in November 2019 (4-week time-lag)

- Average age 46.7 years (*SD* = 11.4)
- 54.7% female
- 89.3% worked 50% or more, most full-time (59.4%)
- Occupational tenure 16.4 years (*SD* = 11.4)
- Organizational tenure = 10.6 years (*SD* = 9.7)

Measures

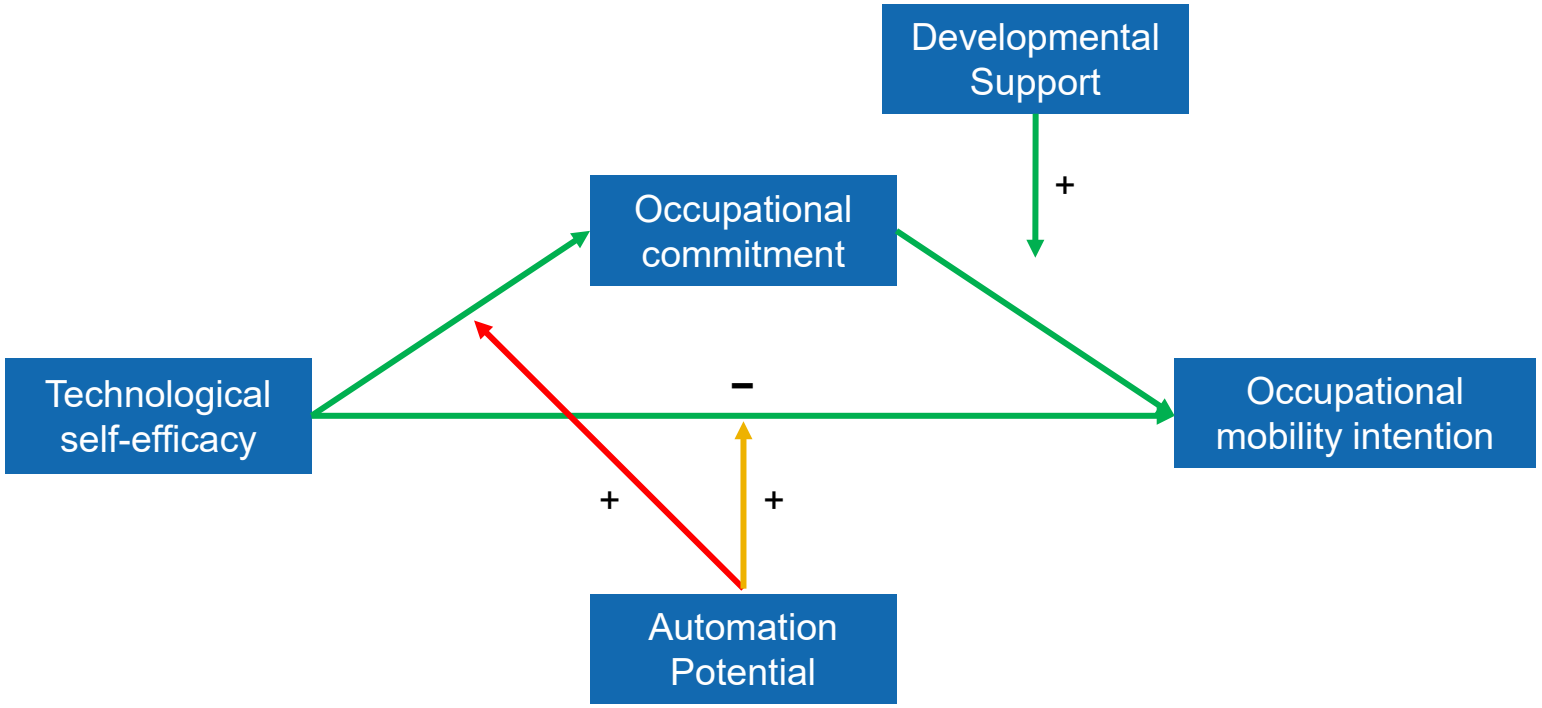
- Technological self-efficacy (Neyer et al., 2012)
- Occupational commitment (Felfe et al., 2014)
- Occupational mobility intention (Blau, 2000)

- Automation Potential (tool by Dengler & Matthes, 2018)
- Developmental support (Greenhaus et al., 1990)

- Control variables: Occupational self-efficacy, organizational turnover intentions, gender, age

Data analysis in SPSS 26, using PROCESS macro for moderated mediation (Hayes, 2013)

Results Overview



- H1/2: Supported, significant positive direct and indirect effect of TSE on occupational mobility intention via occupational commitment, *ab* = .05, *SE* = .02, 95% CI [.02, .08]
- H3: Rejected, no moderation of automation potential as hypothesized
- H4: Supported, moderation of developmental support
- H5: Full model, including both moderators had to be rejected

Theoretical and Practical Implications

Relating

- Technological advancement impacts contemporary occupational career trajectories
- Individual and contextual factors jointly impact adaptive career decision making

Practical Implications

- Adequate learning opportunities enable individuals to adaptively deal with changing work environments, promote technological self-efficacy, and prevent costly occupational mobility

Conclusion and Contribution

- Technological self-efficacy relates both directly and indirectly to occupational mobility intentions
- Negative relationship between technological self-efficacy and occupational mobility intention is stronger, when automation potential is low (not high)
- Developmental support strengthens the negative relation between occupational commitment and occupational mobility intentions

- Technological self-efficacy as a relevant person-specific factor for adaptive career management
- Automation potential and developmental support as important objective and subjective contextual variables

- Promoting technological self-efficacy and providing developmental support as crucial for empowering employees in dealing with changing work environments and sustaining occupational stability

Thank you very much!