

# 14. Kongress für Wirtschaftspädagogik

## The Potential of Massive Open Online Courses in Stimulating Intrapreneurship

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# What do we know so far? What did we miss? Why bother?

## The return of intrapreneurship

- **Employees innovating within established organizations**  
Pinchot 1985; Gawke et al. 2017; Bosma et al. 2021
- **Potential** to overcome innovation dilemma  
Bierwerth et al. 2015; Felício, Rodrigues & Caldeirinha 2012;
- **“Renaissance” of individual level & call for integrated approach**  
Amo 2010; Badoiu et al. 2020; Baruah & Ward 2014; Blanka 2018; Ireland et al. 2009; Neessen et al. 2019
- **Intrapreneurship Training**
  - **Agreement on importance** e.g. Bacigalupo et al. 2016; Boon et al. 2013; Molina & Callahan 2009; Kuratko & Morris 2018; Thornberry 2001; EC 2016
  - **Some studies indicate potential** e.g. Durand 1975; Nicholson, Shen & Nicholson 2019; Santos & Spann 2011; Thornberry 2003
  - **however missing conceptual clarity** (unclear mix of attributes, complexity, and as “limited” version of an entrepreneur) and **no evidence to digital training** approaches yet

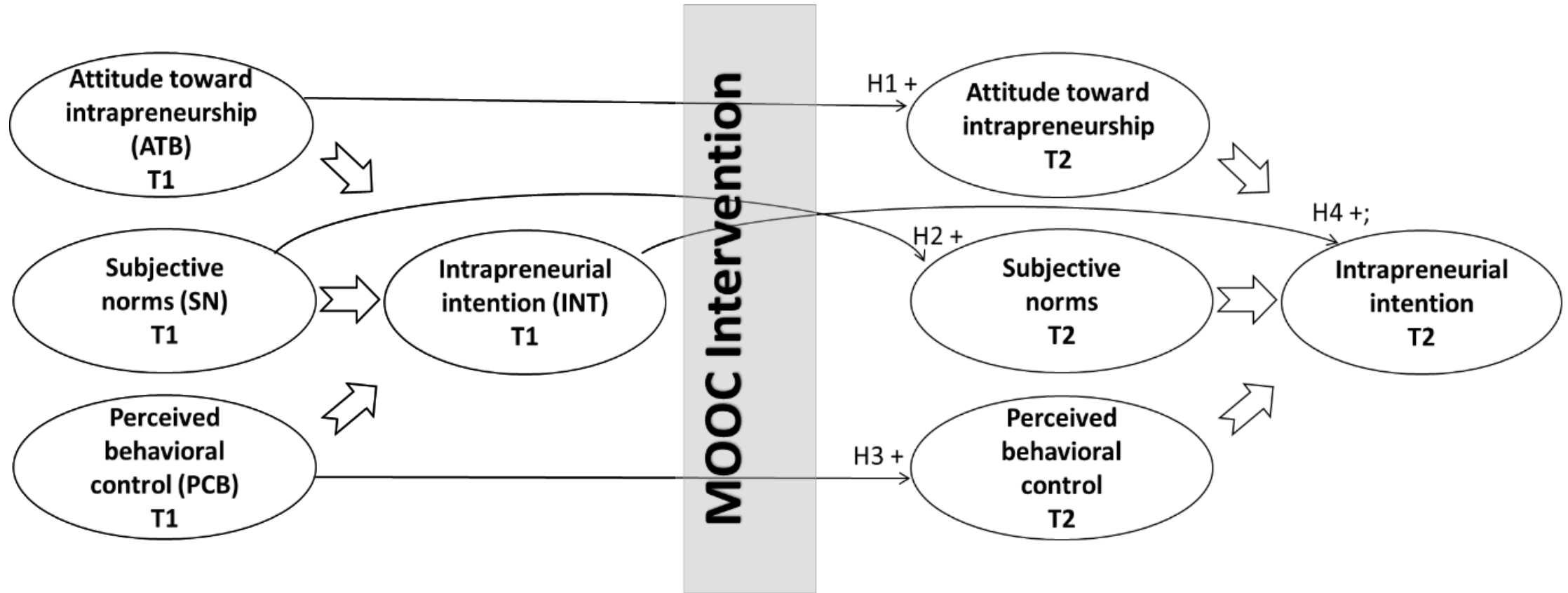
## The advent of Massive Open Online Courses (MOOCs)

- **Massive & scalable** Egloffstein & Ifenthaler 2017; Mohamed & Hammond 2018, increased **openness & interactivity** Chen, Lee & Hsiao 2018; Fidalgo-Blanco, Sein-Echaluce & García-Peñalvo 2016
- **On the rise since 2012**, now discovering the **business learners** and **corporate eLearning** Ong & Jambulingam 2016; Park, Jeong & Ju 2018; e.g. Adidas, Audi, Deutsche Telekom, Erste Bank, Google, L'Oréal, McAfee, SAP
- **In 2020:**
  - 110 mio learners & 13,500 courses Shah 2020a
  - **re-accelerated** by the pandemic Rindlisbacher 2020
  - +500 entrepreneurship MOOCs Class Central, March 2021
- **Research in its infancy** Zhu, Sari & Lee 2018: different streams, more empirical research lately, however, **no peer-reviewed study on effect of entre- or intrapreneurship MOOCs yet**



# EDUTAINMENT – OR MORE?

*In which ways can MOOCs stimulate intrapreneurial intentions on individual-level (employees)?*

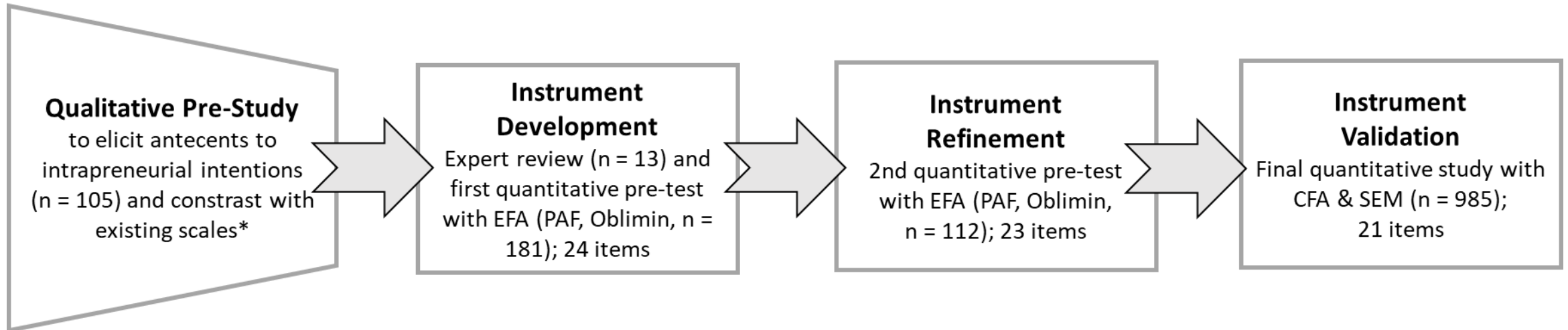


**Figure 1** Integrative Model of Assessing the Impact of a MOOC on Intrapreneurial Intention embedded in the Theory of Planned Behavior; T1 = first measurement point at course start; T2 = second measurement point at course end. Source: adopted from Ajzen 1991, vol. 50, p. 182.

# Research Design

*„In which ways can MOOCs stimulate intrapreneurial intentions among employees?“*

## Preparation of instrument (study 1 and study 2)



**Figure 2:** Exploratory sequential mixed methods research design for the instrument development.

\* Scales adapted: *Corporate Entrepreneurship Assessment Instrument* (Hornsby et al. 2002; 2013);  
*Employee Intrapreneurship Scale* (Gawke et al. 2019), *Entrepreneurial Intention Questionnaire* (Liñán & Chen 2009)

## Study 3: Implementation in MOOC

- Wilcoxon signed rank-test (n = 412)
- Longitudinal SEM
- Controlling for initial levels, non-response bias, prior experience

# MOOC Intervention: “Intrapreneurship: Employee-driven innovation” on openSAP (11 Feb 2020 - 18 March 2020)

- **Course Statistics**

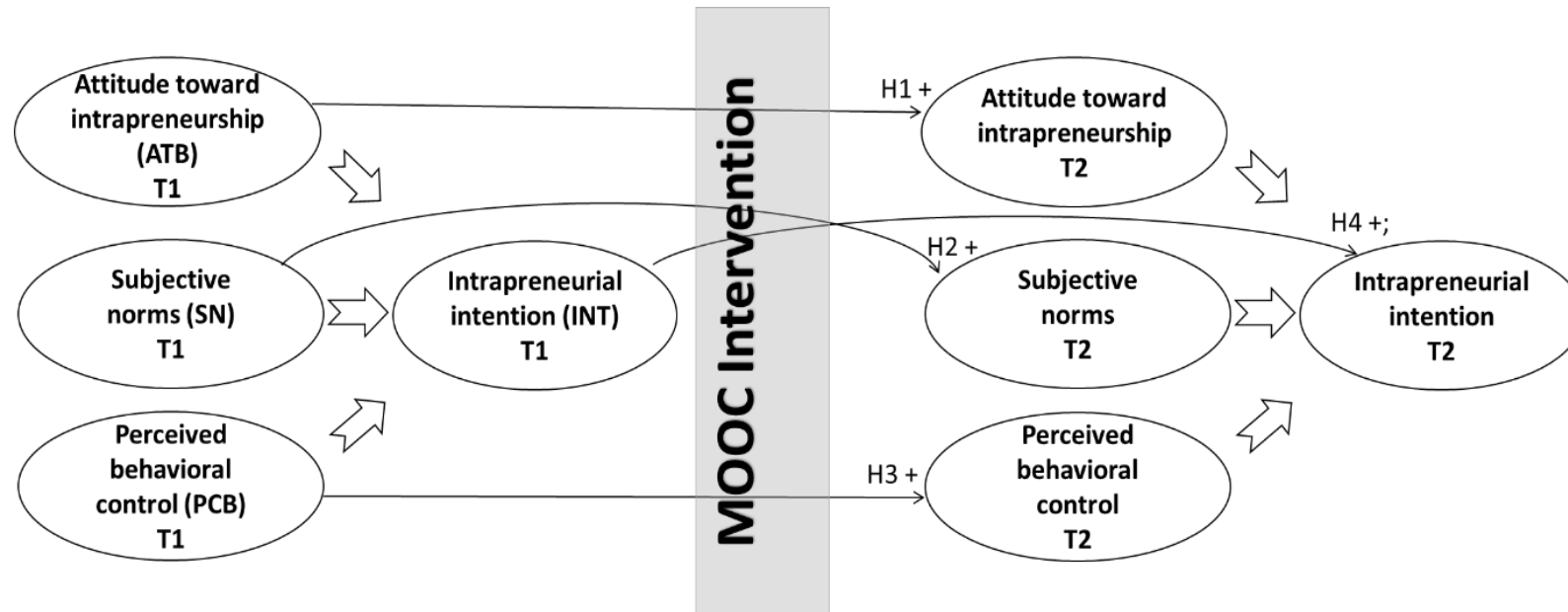
- 2,990 learners enrolled at course start
- 4,596 learners enrolled at course end (grew to 6,311 in self-paced mode)
- 1,075 respondents to pre-course survey
- 485 respondents to post-course survey
- 414 matched data sets (*70% of course completers*)
- 592 records of achievement (*32.4% based on half-way attendance/active learners*)
- 850 certificates of completion
- 480 answers to course satisfaction survey: positive learner feedback > 98.3% being (very) satisfied with the course content, net promoter score +62.7 (range from -100 to +100) and an overall course rating of 4.54 out of 5

- **Demographics**

- Average age: 37.3 years
- 92 countries, top 3 India (26.5%), Germany (15.0%) and United States (9.2%).
- Gender: 73.4% male, 24.2% female
- Job levels: employees (35.66%), middle managers (18.32%), trainees (12.39%), lower level managers (11.86%), top-level managers (7.61%), other (5.92%), associates (5.84%) and unemployed (2.39%)

# Selected results

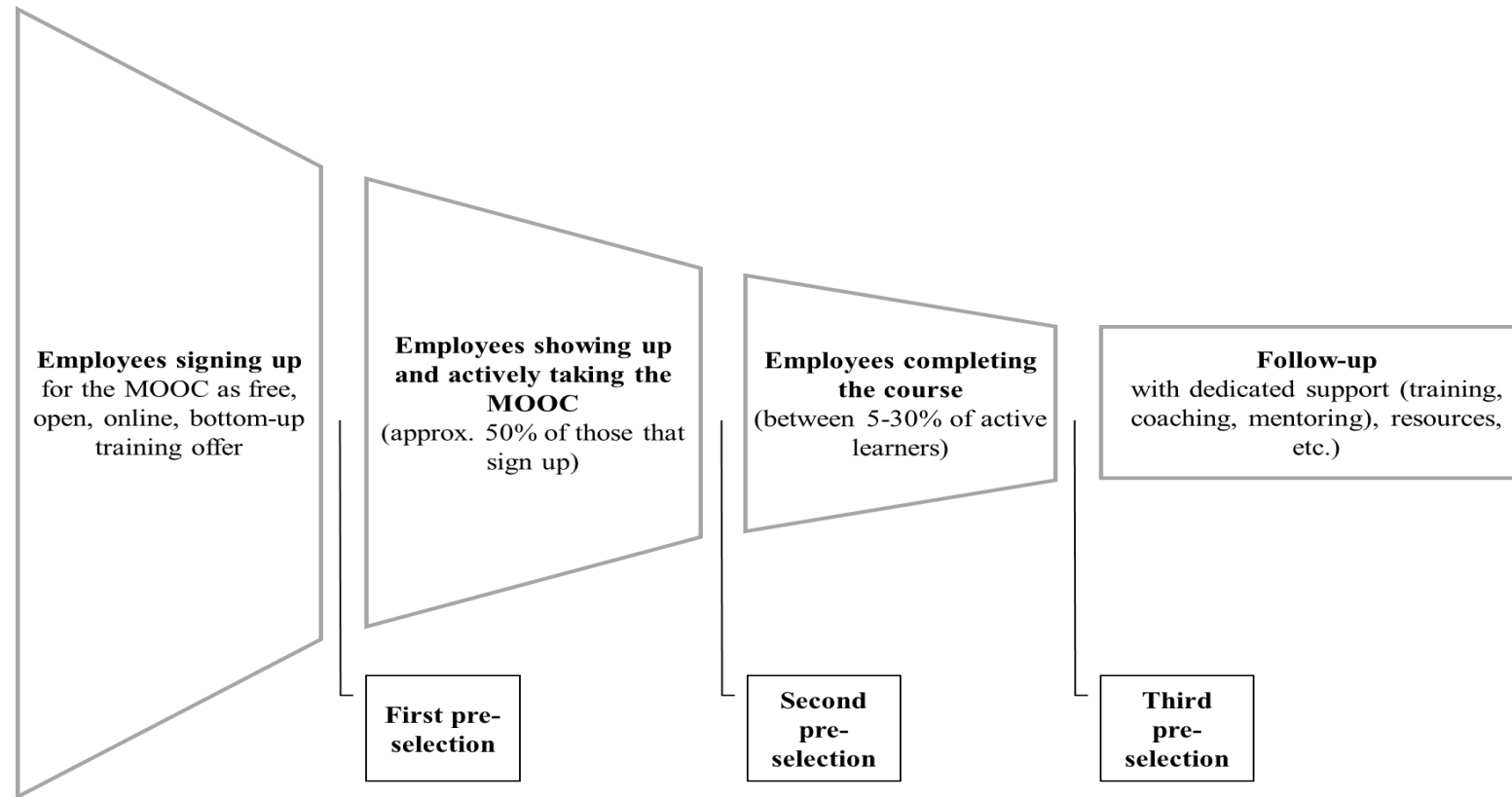
- Largest increase in *perceived behavioral control* (+ 28%), especially knowledge-related items (H4 accepted) > more than edutainment?
- Increases in *intentions* and *attitude*, although high at course start and perceived to be more stable (H1 & H2 accepted) > MOOC also a massive *pre-selection instrument*?
- Non-significant changes in *subjective norms* (H3 rejected), despite co-workers and other departments > changed *perception* and *benefit of interaction*?
- Controlled for prior experience, initial levels at course start (autoregressive paths), reciprocal causations only for perceived behavioural control



**Limitations:** single case study, control group, common method bias

**Further research:** other courses and formats, MicroCredentials, longitudinal analysis

# MOOCs as massive pre-selection instrument?



**Figure 4:** Proposed integrative, massive self-selection and promotion funnel with MOOCs for the self-identification, self-selection and subsequent nurturing of potential intrapreneurs.

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