

Entrepreneurship education for everyone? Nudging entrepreneurial career aspirations among students of all genders

Principal Topic

The underlying mission of entrepreneurship education (EE) at higher education institutions (HEIs) is to provide every student with an equal opportunity to aspire an entrepreneurial career (Aggestam & Wigren-Kristoferson, 2021). Despite this ambition, entrepreneurial careers are pursued by relatively few women after graduation. Only one in five startups is founded by a woman entrepreneur worldwide (Crunchbase, 2022). Thus, the startup landscape lacks heterogeneous perspectives on contemporary challenges, which has left significant innovation potential for societal advancement and economic development untapped (Bullough et al., 2022).

Research has shown that gender role stereotyping of entrepreneurship as a primarily masculine career pursued by white, middle-aged Western men creates multiple barriers for aspiring women entrepreneurs, while entrepreneurship educators are rarely aware of how common EE practices reproduce the masculinisation of entrepreneurial careers (Aggestam & Wigren-Kristoferson, 2021; Ahl, 2007). These findings have sparked discussions about how well contemporary EE reaches women students (van Ewijk & Belghiti-Mahut, 2019; Westhead & Solesvik, 2016). Educational responses have come to a crossroads. Some researchers call for targeted education programs for women only assuming gender differences in motivations and skill needs that require gender-specific education and training (Kickul et al., 2008; Orser & Riding, 2006; Westhead & Solesvik, 2016; Wilson et al., 2007). Other scholars argue for mandatory gender and diversity education among management students to prepare them for diverse working environments (Arevalo, 2020; Bell et al., 2009; Sipe et al., 2009). However, clear guidance for entrepreneurship educators on effectively addressing gender role stereotypes in (regular) mixed-gender classroom settings is rare and too many courses remain gender-blind (Aggestam & Wigren-Kristoferson, 2021).

Only recently, EE research has introduced the concept of pedagogical nudging (Weijers et al., 2021) to trigger students' reflection on their attitudes and assumptions about an entrepreneurial career, thereby stimulating transformative learning (Neergaard et al., 2020). Based on nudging theory and transformative learning theory, we explore how entrepreneurship educators can strategically mobilize a variety of educational interventions that are easy to implement and suitable to counter gender role stereotypes. Because our understanding of whether different EE settings require different nudging interventions (Neergaard et al., 2020) and how potential resistance to gender issues in HEIs can be overcome (Verge et al. 2018) is limited, we pose the following research questions: What pedagogical nudges are suitable to transform gender role stereotypes associated with entrepreneurial careers? What factors facilitate and impede their successful implementation in EE?

Method

Given the exploratory character of our research interest (Edmondson & McManus, 2007), we applied an iterative, qualitative research design. Our data collection was initiated

with comprehensive desktop research to detect EE activities addressing gender role stereotypes in HEIs. By identifying EE courses covering gender diversity among the top 40 global business schools, we gained an overview of state-of-the-art content and pedagogies addressing gender role stereotypes in EE. In addition, we conducted focus groups with experienced international entrepreneurship lecturers and researchers (n=8) and entrepreneurship students (n=12) to gather detailed insights into the prominence and applicability of targeted educational interventions and test the relevance of the research topic.

To gain an in-depth understanding of the factors that enable or prevent the successful implementation of pedagogical nudges to counter gender role stereotyping in EE, we started a third major phase of data collection comprising semi-structured interviews with entrepreneurship educators and gender diversity experts (n=28; male=13; female=15). Understanding their perspectives is particularly valuable since educators are “key players in addressing inequities by developing mental models of learners and leaders to enable them to disrupt, if not discontinue, the status quo within their workplace and society” (Edmondson et al., 2020, p. 261). We aimed to explore the scope of action HEI educators who design and develop EE curricula have in a context where masculinity orientation is high (Hofstede, 2001) and gender stereotypes are prevalent (AllBright, 2018). Given our familiarity with German HEIs, we thus focused on the DACH region (comprising Germany, Austria, and Switzerland). We used purposive sampling (Daniel, 2011) and approached entrepreneurship professors listed by the Association for Entrepreneurship Research in Germany, lecturers from our personal network and, in addition, followed the snowball sampling technique to invite entrepreneurship faculty and gender diversity experts via email (Patton, 2014).

The interviews and focus group discussions lasted an average of 50 minutes and were recorded and transcribed verbatim. We iteratively analysed the volume of qualitative data following the Gioia methodology, designed to conduct inductive research rigorously (Gioia et al., 2013).

Results and Implications

Our qualitative study results in a holistic set of pedagogical nudging techniques that entrepreneurship educators can use to combat gender role stereotyping, including contextual factors that will affect their implementation. First, general recommendations on how to prepare and advertise EE courses from a gender-sensitive perspective are outlined. Second, specific nudging techniques tailored to EE’s three main teaching archetypes (education *about*, *for*, *through* entrepreneurship) are presented. Our data suggests that such a categorization facilitates educators’ decision-making in designing EE curricula according to the teaching model deployed. An example of a pedagogical nudge in education *about* entrepreneurship is showing students a picture of a successful male and female or non-stereotypical entrepreneur (e.g., Steve Jobs vs. Anita Roddick or Muhammad Yunus) and asking who knows the respective entrepreneur, then opening up the discussion about why some entrepreneurs seem to be more known than others and how this exemplifies gender role stereotypes. Similar techniques can provoke surprise and a feeling of being caught in stereotypical thinking among students, triggering a transformative learning process. Third, we identified several factors that enable or impede the successful implementation of pedagogical nudging techniques in EE, such as

personal awareness, access to educational resources, or national debates on gender diversity reflected in the university culture.

Our findings contribute to extant management education literature in multiple ways. First, we bridge the gap between gender-sensitive EE and pedagogical nudging to advance a gender-mainstreaming strategy in EE that overcomes the crossroads between women-only and mandatory diversity education. Specifically, we further develop the categorization framework for nudging in education proposed by Weijers et al. (2021) by providing a comprehensive repertory of educational interventions against gender role stereotypes that entrepreneurship educators can apply regardless of their expertise in gender diversity. This repertory of pedagogical nudges serves as a proposition for future research to test their individual impact. Second, we explore individual, organizational, and institutional barriers and enablers that must be considered when implementing pedagogical nudges. These findings shed light on the importance of the context in which EE is embedded. Third, we suggest evidence-based recommendations on how the barriers identified can be overcome to leverage the potential of pedagogical nudging. Given that changing social norms requires joint efforts and perseverance but may have the most valuable long-term impact on promoting gender balance in entrepreneurship (Hechavarría & Ingram, 2019; Reynolds, 2012), it is critical to explore how EE can contribute to this endeavour.