Affiliation-based hiring in startups and the origins of organizational diversity

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Abstract
Multiple imperatives call for more diversity in organizations, yet we know surprisingly little about why some organizations become more diverse than others. We focus on the early stages of organizations—the composition of founding teams (FTs) and the evolution of subsequent hiring practices, namely the prominence of finding new employees via founders’ prior employer and educational affiliations. Drawing upon theories of entrepreneurial resource mobilization and attraction–selection–attrition (ASA), we argue that FTs with common professional ties imprint post-founding hiring routines by making affiliation-based hiring (ABH) a more prominent practice to select new personnel. We posit that, although ABH fades quickly after founding, using this hiring strategy in the early stages of an organization shapes its trajectory for diversity and contributes to workforce homogenization in several dimensions as new firms mature. Using a mixed-methods approach combining large-scale employer–employee linked data from Denmark and in-depth surveys with founders from the US and UK, we find robust support for our theory and provide novel insights to the hiring processes in entrepreneurial firms. Our work advances our understanding of the enigmatic origins of organizational diversity.
of within-organization homogeneity progression and offers important contributions to both theory and practice.

**KEYWORDS**
affiliation-based hiring, diversity, founding team ties

## 1 | INTRODUCTION

Why are some organizations more diverse than others? Diversity and inclusion targets have become as essential to organizations as profitability and growth. Research on the impacts of diversity has thus flourished across multiple areas of knowledge, from human resources and organizational psychology to strategic management and international business (e.g., Boone et al., 2019; Flory et al., 2021; Pelled et al., 1999; Stahl et al., 2016; Schneider & Bartram, 2017; Thomas, 2005). However, most organizations seem to become less, not more diverse over time (Oh et al., 2018) and many accrue a "diversity debt" from early stages (Engel et al., 2022). Surprisingly though, prior work has offered limited evidence on the origins of diversity, that is, how some organizations might emerge as more or less diverse as they mature.

In this study, we draw from Schneider’s (1987: 443) seminal observation that organizations "emerge initially from the kind of person or persons who establish (found) the organization"; therefore, as organizations mature, the people in them—who are key to understand individual differences within an organization as well as differences between organizations (Oh et al., 2018; Schneider et al., 1998)—"are ultimately traceable to the founder" (p. 443). However, founding teams (FTs) vary substantially in composition (e.g., Honoré, 2022; Howell et al., 2022; Klotz et al., 2014; Lévesque & Stephan, 2020; West, 2007), and understanding how differences in FT formation trigger subsequent additions to the team (e.g., Beckman & Burton, 2008; Honoré & Ganco, 2023; Ucbasaran et al., 2003) provides a much needed longitudinal perspective (DeSantola & Gulati, 2017; Lazar et al., 2020) that can shed light on why organizations follow distinct trajectories and become more or less diverse as they scale.

We focus on founders’ hiring practices in the early stages of their organizations as a potential channel through which they imprint the evolution of diversity (or lack of thereof) within the firm. In particular, we provide new theory and evidence on the antecedents of affiliation-based hiring (ABH), that is, the founders’ tendency to rely on their prior organizational memberships (employment and education affiliations) to search for and select their first employees. Anecdotal evidence of ABH includes the first hires of Google and Twitter—Craig Silverstein, Google’s first hire, was a Stanford graduate just like Google’s co-founders, Sergey Brin, and Larry Page; and Blaine Cook, Twitter’s first CTO, was a former co-worker of the company’s founders, all of whom used to work at Odeo. Interestingly, in both cases, the FTs and early hires were all White men. We argue that this ABH practice may help explain within-organization homogeneity progression found in recent studies (e.g., Oh et al., 2018).

Building on and integrating perspectives from applied psychology (e.g., Schneider, 1987; Schneider et al., 1998), human resources (e.g., Ployhart et al., 2017; Ployhart, 2006), and entrepreneurship (e.g., Aldrich & Kim, 2007; Lazar et al., 2020, 2022), we theorize how founders’ reliance on affiliation-based (vs. nonaffiliated) hiring depends on how they first coalesce with cofounders with whom they already share professional ties. This hiring practice also varies with the new venture’s age. Both aspects affect founders’ disposition for growing their team via ABH (Kehoe et al., 2023), which can set a strong homophilic culture in the early stages of the firm that may persist over time. Whereas hiring by affiliation may become less prevalent and increasingly replaced by nonaffiliated hiring as firms mature, we argue that those early stints of affiliation-based team formation can generate diversity debts in the initial stages of the firm (Engel et al., 2022) and suppress future diversity in the organization. Thus, while forming new ventures based on shared affiliations can have performance benefits (e.g., Beckman, 2006), it has a cost of imprinting the firm with practices and routines that support homophily – and a lack of diversity. Consequently, understanding how early growth practices are
seeded by different FTs and vary over time may explain where diversity debts in young organizations come from and provide new insights to the genesis of the diversity differences across organizations.

We adopt a mixed-methods approach to test our theory and conduct two complementary studies. The first study leverages detailed employer–employee linked data from Denmark and tracks 7377 startup firms within manufacturing, general services, and professional services up to 12 years after their founding. We trace the past trajectories (including the employment and education affiliations) of 10,544 founders and 107,064 new hires joining those firms to test our predictions of when ABH is most likely to occur in young organizations and how it associates with different measures of workforce homogeneity in the long run. The second study surveys 303 founders in the United States and the United Kingdom through the Prolific platform (Palan & Schitter, 2018) to directly examine their perceptions of ABH practices – benefits, costs, and potential effects on diversity – and what other search and selection practices they use. Our collective findings identify one important channel through which FTs can shape the evolution of diversity within an organization – their heterogeneous reliance on familiar affiliations to hire their first employees. We show that affiliation similarity at founding propagates via subsequent hiring and can, perhaps inadvertently, generate homophilic preferences in personnel selection that extends within-organization homogenization in various dimensions.

Our work offers two main contributions. First, we contribute to understanding demographic diversity (or lack of thereof) in nascent firms (e.g., Engel et al., 2022) by considering their founding and early hiring practices. We demonstrate that FTs often engage in complex hiring dynamics based on founders’ shared history at former organizations, which activates different preferences for whom they hire soon after founding. Our work extends both seminal and recent work on the fundamental role that founders play in the evolution of the firm (Schneider, 1987; Schneider et al., 1995; Lazar et al., 2020, 2022) by explaining organizational differences in one particular personnel selection tactic (Oh & Kim, 2022) – ABH – and how it can generate long-lasting between-firm differences in organizational diversity as firms grow (Lévesque & Stephan, 2020; Oh et al., 2018).

Second, we answer multiple calls for longitudinal and mixed-methods approaches to studying how entrepreneurial firms assemble teams and accumulate human resources post-founding (Agarwal, 2019; Clough et al., 2019; Honoré & Ganco, 2023; Lazar et al., 2020), while expanding our understanding of the antecedents and outcomes of ABH (Kehoe et al., 2023). By showing that diversity trajectories begin with FT ties and subsequent hiring routines, our work is among the first demonstrating the implications of human resource management tactics in entrepreneurial firms.

2 | THEORY AND HYPOTHESES

2.1 | The diversity imperative and the role of founders

Diversity is a central consideration for leadership in today’s organizations. The imperative to have a diverse workforce stems from at least three major logics – legal, normative, and performance-based (Hellerstedt et al., 2023). Organizations are subject to legal standards and pressures such as affirmative action and power activism to ensure that minorities have equal opportunities to join and advance their careers (e.g., Dezső et al., 2016; Smale & Miller, 2015). Partially supplanting the legal imperative over recent years has been a more normative reasoning, the spreading priority to consider the societal and equitable outcomes of hiring more diverse workforces, given the stakeholder scrutiny, legitimacy judgements, and corporate responsibility demands to which organizations are increasingly exposed (e.g., Chang et al., 2019; Chiu & Sharfman, 2011; Dobbin et al., 2015; Kelly & Dobbin, 1998).

Most scholarly attention has, however, been devoted to the third imperative – the business case for diversity (Ely & Thomas, 2020; Richard, 2000; Robinson & Dechant, 1997). Scholars across various disciplines have strived to assess whether more diverse teams or organizations (e.g., Kearney et al., 2009; Ponomareva et al., 2022; Roberston et al., 2017; Schneider & Bartram, 2017) perform better, but this stream of work has not yet settled on the net benefits of diversity (Hellerstedt et al., 2023); while it can affect learning routines and organizational capabilities
Hiring in startup firms

One of the longest research traditions in organizational studies centers on the “supreme problem”: firm practices in recruiting, selecting, and hiring employees (Hall, 1917; Ployhart et al., 2017). Finding where “firms should go [to find] the right employee[s] in the first place” (Oyer and Schaefer, 2011: 1770) is vital given the burden associated with hiring, which stems from “its psychological, its economic, [and] its social aspects” (Hall, 1917: 6). Scholars have sought to study common and best practices to hire and the post-hiring behaviors of employees (e.g., Bidwell, 2011; Ho, 2009; Ployhart, 2006; Lazear & Oyer, 2004; Rivera, 2016; Schmidt & Hunter, 1998). Still, there is a significant shortage of research on organizational differences in personnel selection (Oh & Kim, 2022).

Hiring the right employees at the right time is even more critical for nascent firms. Their liability of newness and poor resources prevent them from having stable HR processes (Kor & Misangyi, 2008; Leung et al., 2013), especially when they operate in unconventional market spaces (see DeSantola et al., 2023). The high failure rates and low wages characterizing most startup firms (Burton et al., 2018), further constraining the pool of candidates they attract, who may foresee the high risk of job loss and its subsequent career damage (Sorenson et al., 2021). Moreover, most new hires must be “Jacks-of-All-Trades” (Lazear, 2004), who enjoy a dynamic work environment and are willing to sacrifice job security (Sauermann, 2018). Naturally, these conditions attract only a limited portion of the labor market.

Because of these hurdles, startup founders face a dilemma when hiring their first employees: to recruit from a wide, diverse labor pool that may contain a more ideal match or to conduct local search, hiring from familiar but smaller labor pools such as those sharing their former affiliations (Rocha et al., 2018; Stewart & Hoell, 2016; Wasserman, 2012). Because labor markets are wrought with high search costs and bilateral information asymmetries (e.g., match quality uncertainty for both the employee and the employer), founders often leverage their connections as channels for obtaining higher-quality information at lower costs (Aldrich & Kim, 2007). For example, research on referral hiring suggests that social ties may create matching efficiencies (Galenianos, 2014), reduce transaction costs, and increase the productivity of referred workers (Burks et al., 2015; Fernandez et al., 2000). A stream of studies has further shown that social and human capital ties between hired and incumbent employees activate skill complementarities and enhance socialization into the firm, echoing the benefits of familiarity in labor markets (Campbell et al., 2014, 2021; Eckardt et al., 2018; Marx & Timmermans, 2017).
Startups may, therefore, use the past affiliations or organizational memberships of their founders as screening tools to identify prospective employees, which we refer to as affiliation-based hiring (see Kehoe et al., 2023). Yet FTs are highly heterogeneous (Clough & Vissa, 2021; Howell et al., 2022) and these heterogeneities may drive intermediate practices such as the strategies used for mobilizing human resources, as well as the timing of those practices in a venture lifecycle (Agarwal et al., 2016; Rocha et al., 2018). We, thus, turn our attention to how differently startup firms use ABH depending on their FT composition and the stage of the firm, to then reflect on how this tendency may have implications for its workforce diversity in the long run.

2.3 Antecedents of affiliation-based hiring in startup firms

Given the limited pool of candidates who both fit the needs of a new venture and who are willing to accept its work conditions (Burton et al., 2018), many founders extend their search for personnel to the broad labor market. A more distant, market-based, search increases the chance to find a candidate with different and complementary background to the founder(s). Recent scholarship on entrepreneurial team formation tends to associate such distant search with resource-seeking strategies rather than interpersonal chemistry priorities (e.g., Clough & Vissa, 2021; Lazar et al., 2020, 2022), and evidence from established firms has found benefits in hiring from a wide, more diverse candidate pool (e.g., Combs et al., 2006; Richard, 2000). However, hiring from the wide market also presents greater search costs and information asymmetries, and therefore a higher risk of adverse selection (i.e., employees misrepresenting their qualifications), rendering the process time-consuming and uncertain (Brymer et al., 2014, 2019). Resource-constrained young firms may not be able to afford this approach (Wasserman, 2012). Alternatively, these firms can narrow labor market search to individuals from the same affiliation as incumbent members, namely their founders (e.g., Rocha et al., 2018). Because the stakes are high for new firms’ early hires, such ABH tactics can be particularly expedient by mitigating information asymmetries about the candidate’s task competence and the effectiveness in collaborating with those already at the firm (Barney, 1986; Beckman & Burton, 2008; Chadwick & Dabu, 2009).

We posit that founders’ reliance on this hiring tactic will vary with the composition of their FT. Entrepreneurship is a socially embedded phenomenon in which founders’ prior ties act as a locus for discovering opportunities and mobilizing resources (Aldrich & Kim, 2007; Beckman & Burton, 2008; Clough et al., 2019). As such, some founders seek familiar (and similar) cofounders based on interpersonal attraction and complementary individual resources (Gompers et al., 2017; Lazar et al., 2020, 2022; Ruef et al., 2003), whereas others prefer to form ties with strangers depending on how much they value competences over chemistry (Clough & Vissa, 2021; Vissa, 2011). Some founders even prefer to found alone and leverage co-creators to avoid conflicts with cofounders (Howell et al., 2022).

Generally, research finds benefits in team familiarity such as shared experience at former organizations (e.g., Agarwal et al., 2016; Kor, 2003; Rocha et al., 2018). However, shared ties within teams may also encourage exploitation instead of exploration (e.g., Beckman, 2006; Tandon et al., 2020), which in the context of FTs may extend to hiring based on those same shared affiliations. We, thus, posit that teams of founders who already share affiliations with each other – thereby exhibiting greater internal social tie depth at founding – will be more prone to repeat this behavior post-founding by selecting new team members who share those same ties. Returning to the examples of ABH at Google and Twitter, we suggest that both Craig and Blaine had a substantially higher chance of having affiliations in common with the founders they joined than if those firms had been founded by solo founders or FTs with no prior affiliations in common. The reason is two-fold.

First, schools and workplaces are central foci for developing industry knowledge, job-specific human capital, and social capital. Both educational and employment organizations train individuals such that their cognitive structures, values, and routines are primed for integration in particular organizations, reducing the integration costs when they join those organizations as new hires (Brymer et al., 2014; Gardner, 2005). These recruitment, selection, and integration efficiencies increase as the incumbent members share affiliations with one another, creating knowledge and skill complementarities with targeted external employees who also share those affiliations (Adegbesan, 2009; Oyer & Schaefer, 2016).
Second, while the specific human capital developed at prior affiliations can provide signals of quality (Bidwell et al., 2015; Ho, 2009; Rivera, 2016), the social capital, values, and mental models built at former organizations may also strengthen individuals’ aspirations for interpersonal attraction and social similarity (Kuwabara et al., 2023; Lazar et al., 2020; Vissa, 2011). Firms that have coalesced partially on common memberships may have developed preferences for working with others affiliated with the same professional organizations – for example, based on their values, attitudes, or personalities – and predispose their firm to a culture that prioritizes tie homophily. As these teams search for and select their first employees, they may consider ABH both economizing and socially condoned. Likewise, some (especially younger, less experienced) job candidates may use founders’ prior affiliations as quality signals and feel more attracted to the organization (e.g., Chung & Parker, 2022) despite the risks of working for a startup firm. Having multiple founders sharing affiliations among themselves may affect candidates’ perceptions of venture legitimacy and identity (Chiu & Sharfman, 2011; Moser et al., 2017; Williamson, 2000), and increase their willingness to work for the organization, especially if they also share the same organizational memberships as those founders.

We, therefore, suggest that ABH in entrepreneurial firms is an early path-dependent result of shared affiliations within a FT, which can activate both attraction and selection processes. We expect firms in which founders share organizational affiliations with each other to be more predisposed for such continued affiliation-based recruiting. Formally,

**Hypothesis 1:** Firms founded by teams of founders who share prior professional affiliations are more likely to use ABH for their early employees than firms with other founding team compositions (i.e., founding teams without prior ties or solo founders).

Given our Hypothesis 1, we could infer that firms would continuously use ABH tactics over their lifecycle. As firms become more routinized over time (Ployhart et al., 2006; Schneider, 1987), the attraction and selection of individuals with the same affiliations as the founders could become imprinted in the HR processes of the firm (Leung et al., 2013) and perpetuate subsequent hiring practices even when the firm matures due to inertia in organizational networks (e.g., Rider, 2012). Indeed, homophily preferences associated with affiliation similarity could become entrenched as the firm staffs their top management (Beckman & Burton, 2008) as well as other functions (DeSantola & Gulati, 2017).

Yet there are also reasons to believe that ABH may erode with firm age. First, hiring the first employee(s) is a major milestone for most startup firms (Fairlie & Miranda, 2017), and tapping founders’ ties may lessen the hiring hurdles that these firms face and, thereby, accelerate the mobilization of human resources (Aldrich & Kim, 2007; Clough et al., 2019) necessary to compete with both entrants and incumbent firms already in the market. As firms secure their first hires and some revenue streams, their liabilities of newness and smallness (Kor & Misangyi, 2008; Wasserman, 2012) dissipate, and they accumulate resources for wider, more distant searches in the labor market.

Second, as firms mature and scale up, they need both larger numbers of employees and more specialized skill sets. Because firms face increasing pressures to fill specific positions, restricting their search to pools of candidates who share affiliation ties with one or more founders may limit the quality of the match (DeSantola et al., 2023). Relatively, as founders poach employees from firms they have left, those legacy firms might retaliate (Gardner, 2005) or employee guard (Gardner et al., 2018) to prevent new firms from hiring more of their workers over time, which can hurt their own performance (Campbell et al., 2012). These issues are less prevalent when hiring from founders’ educational affiliations because new streams of graduates emerge each year and given the collaborative nature of educational institutions and their desire to find placement for graduates soon in the labor market (Josefy et al., 2023).

Third, as the firm starts hiring employees with no affiliations in common with their founders, they naturally expand the organizational networks of the firm (Rider, 2012) and create opportunities for replacing founder-specific ABH with other search and selection tactics such as referral hiring over the firm lifecycle (Galienanos, 2014). Finally, as the firm grows and becomes more professionalized (DeSantola & Gulati, 2017; DeSantola et al., 2023), founders become less involved in the hiring processes and alleviate their imprinting effect on the HR processes of the venture (Leung et al., 2013). In sum, we expect lower rates of ABH over time.
Hypothesis 2: The use of affiliation-based hiring in entrepreneurial firms erodes with firm age.

As a corollary of both Hypotheses 1 and 2, we expect a more frequent use of nonaffiliated hiring by firms lacking internal affiliation ties at entry, that is, firms launched by solo founders or FTs who do not have any prior professional affiliations in common, and especially as the firm matures.

2.4 Early-stage affiliation-based hiring and organizations’ diversity trajectory

As ABH dissipates with time and young firms survive the so-called valley of death, do their workforces become more diverse? ABH tactics can facilitate early employee mobilization and help firms secure the minimum resources necessary to start operating and competing with others. However, attracting, selecting, and eventually retaining early joiners with shared backgrounds and experiences may come at a cost in the long run.

Homophilic forces often compound. Individuals gravitate towards those more similar to themselves within organizations, creating informal ties by race, gender, ethnicity, and other characteristics (McPherson et al., 2001). Education and employment affiliations are, to some extent, “social sorting machines” (Domina et al., 2017: 311; Rivera, 2016) that already cluster individuals based on their ascriptive, socio-economic, psychological, and/or cultural characteristics. For example, Josefy et al. (2023) found that firms that use elite universities as hiring pipelines are more likely to poach employees from each other, presumably because they share similar matching logics with college recruiting (Kehoe et al., 2023). Schneider and Schneider (1994) also conceded that similarities in life experiences sort individuals into professions, while personality characteristics sort individuals into firms, which helps explain within-organization homogeneity progression in personality traits (Oh et al., 2018). Over time, these sorting mechanisms create organizations of higher similarity on multiple dimensions, rendering ABH practices as means to continue homogenization of worker types, particularly in organizations that typically lack formal diversity initiatives like startup firms. Indeed, prior work has shown that when individuals use their personal networks to hire, they are more likely to hire those who share the same gender (Campbell, 1988; Ensel, 1979); therefore, male founders hiring through ABH are disposed to hire men. Homophilic selection is more likely when using close network ties than when hiring strangers (Aldrich, 1999). Therefore, when founders turn to their past affiliations to hire, they are likely to bring in individuals that are similar to themselves in demographic, psychological, and/or other characteristics. Although ABH dissipates as firms grow, which could diminish the similarity between new hires and founding members and create opportunities for shifting the organization’s trajectory towards more diversity, we posit that early-stage ABH tactics may imprint nascent firms and propagate homophily preferences.

When firms grow and other selection tactics may replace ABH, incumbent members do not necessarily mute their preferences for similar others, particularly given the precedent for homophily and the uncertainty inherent in both hiring and in new ventures (Rao et al., 2001). Practices of selecting based on affiliation may shift to other dimensions, preserving a culture for homophilic preferences that only differ in foci or criteria. This culture may discourage dissimilar candidates to join the firm (see Engel et al., 2022), even when the risk of working for a startup turns into a potential earning premium if the firm reaches enough scale (Sorenson et al., 2021). ABH may, thus, be a transitional step for young firms to homogenize their team on many demographic and cognitive aspects.

We argue that ABH not only serves as a post-founding mechanism that decreases diversity itself but can also signal a transition to other future forms of homogeneity. Diversity debts in young firms may originate with the firm’s cultural imprints that emerge from FT ties – they first induce early ABH, then transition to homogenizing within the firm by attracting and selecting demographically (and psychologically) similar others from the more general labor market. We expect these to unfold sequentially, echoing Schneider’s (1987) original notion of the firm’s evolving homophilic culture and practices that cascade after founding. Formally, we predict that
Hypothesis 3: Early-stage affiliation-based hiring will imprint a firm’s trajectory for diversity, such that firms that use affiliation-based hiring to a greater extent in its nascent stages will exhibit less diverse (i.e., more homogeneous) workforces in the long run.

3 | OVERVIEW OF EMPIRICAL STUDIES

We conduct two complementary studies to test our hypotheses and to provide a deeper understanding of hiring practices in young firms. Study 1 leverages rich employer–employee linked data from Denmark Statistics (DST) to identify a large and representative sample of startup firms within general services (wholesale trade, retail trade, and restaurants), professional services (computer programming, accounting, law, and business consulting), and manufacturing industries. We have detailed information about their founders and the employees they hire over time, including their labor market trajectories prior to founding or joining the firm. With these data, we can offer empirical evidence in support of our hypotheses, but we lack information on founders’ motives or expectations when using ABH or other recruitment tactics. We, therefore, collect additional quantitative and qualitative data from a sample of entrepreneurs via a survey on Prolific. In so doing, we offer more insights to the entrepreneurs’ actual practices, namely their use of different hiring strategies (including ABH), the advantages and downsides they see in hiring from their own former affiliations, and any diversity considerations they may have while running their business and hiring new personnel. With this mixed-methods approach, we can provide both large-scale and in-depth evidence of the antecedents of ABH and its long-term potential implications for organizational homogeneity. In the following sections, we present each of these studies and their respective conclusions.

3.1 | Study 1

3.1.1 | Data and sample

We use Danish registry data, maintained and made accessible to certified researchers by DST, to identify a representative sample of new firms founded in Denmark between 2001 and 2004 across different industries. We follow these firms since their founding year until 2012 (the last year of available data) or until their exit, if earlier. Because many startups exit shortly after entry and never hire anyone beyond the founder(s), we restrict our attention to firms that hire personnel over this timeframe. We identify these startups and their founder(s) in the Entrepreneurship Database and match them with the Integrated Database for Labor Market Research (IDA), a dataset that links employees with their employers over time. We include information on each individual’s educational level, graduation dates, and the respective education institution from UDDA (Uddannelser) files. With this integrated database, we identify, for each new firm, their founders as well as the employees hired over the period observed. Moreover, we can trace the labor market history of both founders and employees, including their past employment and education affiliations, and ascertain whether founders share affiliations with their cofounders and/or new hires.

We first identify founders via the Entrepreneurship Database, which provides the serial number of the main founder (anonymized by DST to secure confidentiality) of each firm. We then integrate this information with data from IDA files on all the individuals working in that same firm at inception or later. Following Sørensen (2007), we classify an individual as a founding member if: (1) s/he is the one who registered the business (according to the Entrepreneurship Database) and actively works in the firm in the founding year (according to IDA files); (2) his/her job position in the firm is classified as employer, independent worker (self-employed), or top manager in the year of entry; (3) the focal startup has fewer than four employees in the founding year, and none of them has a job title as described in (2). If only (1) applies, DST officially identifies one single founder for that respective firm. This is the case whenever a
firm is established in year \( t \) and only hires the first employee(s) 1 or more years later, or whenever a firm hires four or more employees in the very first year of activity but none of them features in the top management of the firm (all of them are listed as employees). With these criteria, we obtain a sample of 10,544 founders and 7377 new firms with no missing data. The number of founders per firm ranges from one to six, similar to prior studies (e.g., Eisenhardt and Schoonhoven, 1990). Most firms have one founder, but 2613 firms (about a third of the sample) were founded by two or more founders. We identify 107,064 employees with nonmissing information joining those startups over the sample window.\(^3\)

3.1.2 Variables and methods

**Dependent variables.** A crucial part of our analysis concerns the measurement of ABH, the practice of hiring employees who have organizational affiliations (former workplaces, schools, or universities) in common with one or more founders. This is the dependent variable of interest in our H1 and H2. We track the employment and education history of each founder and new hire in our sample for up to 10 years (or the longest period they were active in the labor market, if shorter than that) prior to their transition into the focal firm. We measure ABH as the percentage of hires within each firm \( i \) and year \( t \) who have either employment or education affiliations in common with (at least one of) the founder(s) of that same firm. On average, of all new hires joining those firms every year, 5\% share employment affiliations with one or more founders whereas 10\% have attended the same school or university as at least one of the founders (see Table 1). Although the share of employment-affiliated hires may seem negligible at first glance, we detect important variation in the intensity of ABH over a firm’s age – consistent with H2, founders tap their prior work affiliations for sourcing their own personnel more often in the nascent stages of the firm. Indeed, at entry, nearly 30\% of the incoming employees are sourced from founders’ former workplaces, but this tactic decays quite dramatically in the following years. In contrast, the share of new hires sourced from founders’ education affiliation remains relatively stable during the firm’s first decade of activity. Naturally, “nonaffiliated hiring” (measured by the share of incoming employees with no affiliations in common with any of the founders) becomes more prevalent and replaces other forms of affiliated hiring over time (see Figure 1).

To test the validity of H3, we compute measures of workforce diversity for each firm and year. We follow Harrison and Klein (2007) and construct different dependent variables to capture diversity in four distinct dimensions. First, because gender represents different lateral positions or a social category, we use the standard deviation of “male employee,” a dummy variable distinguishing male from female employees, as a yearly measure of gender diversity within the firm (a measure of separation). Second, to quantify age diversity, we acknowledge that age may represent vertical differences between individuals and compute its coefficient of variation within each firm-year, measured by the ratio between the standard deviation of employees’ age over its mean value (a measure of disparity). Third, to measure nationality diversity, we compute a Blau index, defined as

\[
1 - \frac{\sum_{i=1}^{R} p_i^2}{R},
\]

where \( R \) denotes the number of different countries of origin represented in a firm’s workforce and \( p_i \) is the share of employees coming from that particular country (a measure of variety, varying between 0 and 1). Finally, to compute functional diversity in the workforce, we first track the functional roles in which every new hire has accumulated experience prior to joining the current firm to assess how diverse (or specialized) their functional expertise was at joining. To do so, we construct another Blau index, following the same measurement as described above for nationality diversity but, in this case, \( R \) denotes the number of different functions the employee had accumulated experience in the past, and \( p_i \) is their share of total work experience (in years) in that particular function. This variable captures variety in experience from different job roles. Having computed this index for each hire, we then take the mean value of all employees’ functional diversity to obtain a measure of functional diversity within the firm. Lower (higher) values point to a more specialized (generalist) workforce with experience in only a few (many different) roles in the past. All four measures of workforce diversity (gender, age, nationality, and functional diversity) are used as dependent variables to test H3. We pay particular attention to how these measures of workforce diversity evolve over time depending on a firm’s intensity of ABH in its early stages.
**Table 1** Descriptive statistics.

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<tr>
<td>FT with no affiliations in common</td>
<td>.140</td>
<td>.347</td>
<td>−.03</td>
<td>.02</td>
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<td></td>
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<tr>
<td>FT with shared employment affiliations</td>
<td>.176</td>
<td>.381</td>
<td>.00</td>
<td>.09</td>
<td>−.19</td>
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<tr>
<td>FT with shared education affiliations</td>
<td>.060</td>
<td>.237</td>
<td>.00</td>
<td>.15</td>
<td>−.10</td>
<td>.35</td>
<td>1.00</td>
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<tr>
<td>Founding team size</td>
<td>1.486</td>
<td>.766</td>
<td>−.02</td>
<td>.12</td>
<td>.42</td>
<td>.67</td>
<td>.40</td>
<td>1.00</td>
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<tr>
<td>Firm age</td>
<td>5.083</td>
<td>2.880</td>
<td>−.27</td>
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<td>.01</td>
<td>.04</td>
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<td>Span of control (log)</td>
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<td>−.30</td>
<td>−.16</td>
<td>−.46</td>
<td>.09</td>
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<tr>
<td>FT functional diversity</td>
<td>.430</td>
<td>.215</td>
<td>−.03</td>
<td>.00</td>
<td>.02</td>
<td>−.01</td>
<td>.02</td>
<td>.01</td>
<td>−.00</td>
<td>−.03</td>
<td>1.00</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>FT diversity of workplaces</td>
<td>4.178</td>
<td>2.163</td>
<td>−.02</td>
<td>.01</td>
<td>−.12</td>
<td>−.00</td>
<td>−.02</td>
<td>−.09</td>
<td>−.00</td>
<td>.15</td>
<td>−.12</td>
<td>−.13</td>
<td>1.00</td>
<td></td>
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<tr>
<td>FT entrepreneurial experience</td>
<td>1.452</td>
<td>2.642</td>
<td>−.07</td>
<td>−.06</td>
<td>−.08</td>
<td>−.06</td>
<td>−.12</td>
<td>−.02</td>
<td>.14</td>
<td>−.20</td>
<td>−.19</td>
<td>.17</td>
<td>1.00</td>
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<td></td>
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<tr>
<td>FT management experience</td>
<td>.394</td>
<td>1.169</td>
<td>−.04</td>
<td>−.03</td>
<td>−.01</td>
<td>−.03</td>
<td>−.03</td>
<td>.00</td>
<td>.13</td>
<td>.04</td>
<td>−.11</td>
<td>.06</td>
<td>−.12</td>
<td>1.00</td>
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<tr>
<td>FT average age</td>
<td>37.898</td>
<td>9.179</td>
<td>−.14</td>
<td>−.07</td>
<td>−.03</td>
<td>−.14</td>
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<td>−.02</td>
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<td>−.26</td>
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<td>1.00</td>
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<tr>
<td>Founders with university education (%)</td>
<td>.057</td>
<td>.218</td>
<td>.03</td>
<td>.06</td>
<td>−.04</td>
<td>−.01</td>
<td>.04</td>
<td>−.02</td>
<td>.02</td>
<td>.08</td>
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<td>.05</td>
<td>.10</td>
<td>1.00</td>
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<tr>
<td>Founders with vocation education (%)</td>
<td>.488</td>
<td>.460</td>
<td>.04</td>
<td>−.01</td>
<td>−.09</td>
<td>−.03</td>
<td>−.02</td>
<td>−.09</td>
<td>−.01</td>
<td>.08</td>
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<td>.12</td>
<td>.09</td>
<td>.28</td>
<td>−.25</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male founders (%)</td>
<td>.708</td>
<td>.420</td>
<td>.04</td>
<td>.00</td>
<td>−.15</td>
<td>−.04</td>
<td>−.01</td>
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<tr>
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<td>4.214</td>
<td>11.448</td>
<td>−.03</td>
<td>−.02</td>
<td>−.00</td>
<td>−.01</td>
<td>−.01</td>
<td>−.03</td>
<td>.37</td>
<td>.02</td>
<td>.03</td>
<td>.01</td>
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<td>−.01</td>
<td>.02</td>
<td>−.01</td>
<td>.03</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note: Statistics based on 34,982 firm-year observations, conditional on hiring in the reference year; 7377 unique firms included.

Abbreviation: SD, standard deviation.
Independent variables. After having tracked the histories of every individual in each firm, we are able to identify shared affiliations within FTs. Our focus is to identify FTs that have at least two founders with affiliations (employment or education) in common, which we expect to strongly predict the intensity of ABH (H1). To identify those types of FTs, we compute two dummy variables: FT with shared employment affiliations and FT with shared education affiliations. Based on the statistics in Table 1, it is more common to share employment than education affiliations within a FT. About 18% of the firms in our data were founded by teams in which at least two founders have worked in the same organization in the past, whereas only 6% of the firms have two or more founders who attended the same school or university. Although we do not theorize about the eventual differences between solo founders and teams with no shared affiliations in their propensity to hire from affiliations, we tease them apart empirically by computing another dummy variable for FTs whose members have never worked or studied in the same place, even if at different points in time (FT without shared affiliations). These FTs lead 14% of the firms in our sample. When testing the validity of H1, we thus use “solo founders” as the reference group, so the hiring tactics of each of FT types can be directly compared with those of solo founders.

To test H2, we compute the variable firm age, the years elapsed since the focal firm was founded, to estimate how often firms use ABH as they mature. Finally, H3 establishes an association between the composition of the incoming hires during the early stages of the firm and measures of within-firm diversity. We consider all new hires joining the firm during its first 3 years of activity to compute the proportion of early-stage employees hired from founders’ employment or education affiliations. Higher shares of early-stage affiliated hires naturally mean lower shares of early-stage nonaffiliated hires, so we assess the trade-off between hiring employees who do and do not share affiliations with founders.

Control variables. All our models control for several characteristics of the founders and their firm. We control for span of control, the logged number of employees per founder; FT size, the number of founders of the firm; FT diversity of workplaces, the (average) number of different firms in which the founder(s) worked prior to founding the current venture; FT industry experience, the (average) number of years of experience in the same three-digit (NACE) industry as the focal firm; FT entrepreneurial/management experience, the (average) number of years of experience in employer or self-employment job roles/management positions (not in their own firms); and FT functional diversity, the mean value of founders’ Blau index, computed the same way as described above for each employee. Additionally, we control for founders’ average age, the share of male founders, and the share of founders with a university degree or a vocational (post-secondary) education (using the share of founders with less than secondary education as a reference group). To capture other firm characteristics that may affect both ABH and the evolution of workforce diversity, we add dummy variables for firm industry (manufacturing as well as each of the professional and general talent services) and the total number of hires joining each firm and year. Table 1 provides descriptive statistics and pairwise correlations for those control variables.
Methods. Our analysis is organized in two main parts. First, we investigate how ABH and non-ABH in entrepreneurial firms vary with the existence of prior affiliation ties within FTs and throughout firm age (H1 and H2). We estimate regression models predicting the share of either type of affiliated hires joining the firm in each year. To understand what may predict nonaffiliated hiring, we also run a model using the share of hires with no affiliations in common with the founder(s) as a dependent variable. Because of the nature of these dependent variables (i.e., shares ranging between 0 and 1), we use fractional regression models, which can be formally described as follows:

\[
(N)\ ABH_{jt} = H(\beta_1 \cdot FT\ shared\ affiliations + \beta_2 \cdot Firm\ age + X_j \alpha + Y_t \lambda + \lambda \cdot IMR + u_j)
\]

where \(ABH_{jt}\) is the share of hires having employment or education affiliations in common with the founder(s) – and \(NABH_{jt}\) instead denotes the share of nonaffiliated hires in each firm-year; \(X_j\) is a vector of characteristics of founders and their firms; \(Y_t\) is a set of year dummies; \(u_j\) denotes the error term; and \(H(.)\) is the logistic function. We cluster the standard errors at the firm level.

It is worth noting, however, that those dependent variables can be observed only for firms that hire personnel in the respective year, yet hiring may be nonrandom and, instead, driven by unobservable factors that affect both the chances of hiring every year and the tactics used to do so. To account for this potential selection bias, we repeat the estimation of model (1) including an additional explanatory variable – the inverse Mills ratio \((IMR)\) obtained from a first-stage probit model predicting the probability that each firm \(j\) hires in year \(t\). We report both sets of models to demonstrate that the support for our hypotheses holds also when considering that some firms hire more often than others.

To test H3, we turn our attention to the multiple measures of workforce diversity described above. Formally, we estimate linear regression models of the following type:

\[
Workforce\ Diversity_{jt} = \beta_0 + \beta_1 \cdot EarlyABH_j + X_j \alpha + Y_t \lambda + u_j
\]

where the dependent variable is the workforce diversity of firm \(j\) in year \(t\) in gender, age, country of origin, or functional expertise, and \(EarlyABH_j\) is the share of employees hired from founders’ affiliations within the first 3 years of a firm’s lifespan. Higher shares of affiliated hires in those formative years imply lower shares of nonaffiliated hires, so \(\beta_1\) captures the diversity trade-off between affiliation-based and non-ABH. Given our focus on the persistent effect that ABH may have on within-firm diversity, we measure \(Workforce\ Diversity_j\) 3, 5, and 7 years after the firm was founded. As before, \(X_j\) are control variables capturing FT characteristics, including the presence or absence of affiliation ties within the FT; \(Y_t\) are founding year fixed effects and \(u_j\) is the error term.

3.1.3 Results

ABH in entrepreneurial firms. We theorize that firms are more likely to use ABH when they are launched by teams of founders who already have past employment or education affiliation ties (H1). We also anticipate that ABH decays with time, making nonaffiliated hiring more likely as the entrepreneurial firms ages (H2). We conduct formal tests for those predictions in Table 2, where we report models predicting the share of employment and education-affiliated hiring (models 1.1–2.2) as well as the share of nonaffiliated hiring (models 3.1 and 3.2), keeping other founder and firm characteristics constant. For each of those dependent variables, we report models restricted to the sample of firms that hire personnel in a certain year as well as models correcting for any selection bias associated with hiring.

In line with H1, we find that ABH is more common in firms founded by entrepreneurs that already share affiliations among themselves. The first two models of Table 2 show that sourcing new personnel from founders’ former workplaces is more common in firms that were launched by teams of entrepreneurs that either worked at the same organization \((p = .018\) in model 1.1; \(p = .034\) in model 1.2) or attended the same education institution in the past.
TABLE 2  Founding team characteristics and affiliation-based hiring in young firms.

<table>
<thead>
<tr>
<th>Model 1.1</th>
<th>Model 1.2</th>
<th>Model 2.1</th>
<th>Model 2.2</th>
<th>Model 3.1</th>
<th>Model 3.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT without shared affiliations</td>
<td>.023</td>
<td>-.019</td>
<td>.081</td>
<td>.092</td>
<td>-.010</td>
</tr>
<tr>
<td>FT size</td>
<td>-.047</td>
<td>-.058</td>
<td>.169</td>
<td>.174</td>
<td>-.098</td>
</tr>
<tr>
<td>Firm age</td>
<td>-.722**</td>
<td>-.716**</td>
<td>-.099</td>
<td>-.099**</td>
<td>.225**</td>
</tr>
<tr>
<td>Span of control (log)</td>
<td>-.140**</td>
<td>-.262**</td>
<td>-.095*</td>
<td>-.062</td>
<td>.165**</td>
</tr>
<tr>
<td>FT functional diversity</td>
<td>-.155</td>
<td>-.201*</td>
<td>-.349**</td>
<td>-.339**</td>
<td>.259**</td>
</tr>
<tr>
<td>FT diversity of workplaces</td>
<td>-.014</td>
<td>-.018</td>
<td>-.005</td>
<td>-.004</td>
<td>.015*</td>
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<tr>
<td>FT industry experience</td>
<td>.049**</td>
<td>.050**</td>
<td>.022</td>
<td>.022</td>
<td>-.035</td>
</tr>
<tr>
<td>FT entrepreneurial experience</td>
<td>.004</td>
<td>.008</td>
<td>-.040**</td>
<td>-.042**</td>
<td>.007</td>
</tr>
<tr>
<td>FT management experience</td>
<td>.014</td>
<td>.024</td>
<td>-.034</td>
<td>-.036</td>
<td>.012</td>
</tr>
<tr>
<td>FT average age</td>
<td>.006*</td>
<td>.004**</td>
<td>-.057**</td>
<td>-.057**</td>
<td>.030**</td>
</tr>
<tr>
<td>Founders with university education (%)</td>
<td>.405**</td>
<td>.447**</td>
<td>.936**</td>
<td>.927**</td>
<td>-.656**</td>
</tr>
<tr>
<td>Founders with vocation education (%)</td>
<td>.160**</td>
<td>.174**</td>
<td>.359**</td>
<td>.356**</td>
<td>-.154**</td>
</tr>
<tr>
<td>Male founders (%)</td>
<td>.220**</td>
<td>.240**</td>
<td>.053</td>
<td>.048</td>
<td>-.160**</td>
</tr>
<tr>
<td>Number of new hires</td>
<td>.006**</td>
<td>.007**</td>
<td>-.022**</td>
<td>-.024**</td>
<td>-.002**</td>
</tr>
<tr>
<td>IMR</td>
<td>-.199*</td>
<td>.042</td>
<td>.146*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Continues)
(p = .027 in model 1.1; p = .046 in model 1.2). Models 2.1 and 2.2 instead focus on the practice of hiring employees who attended the same school or university as (some of their) founder(s) and yield similar patterns, though the differences are only significant for FTs with shared education affiliations – these are the most likely to attract and/or select employees with those same connections (p = .000 in either model). In line with our theory, these findings confirm that the existence of affiliation ties at the founding stage can either attract similar others in subsequent stages or induce a preference for selecting employees who have some history in common with those founders. Either way, nonaffiliated hiring is naturally less likely in firms founded by teams with shared ties. Indeed, models 3.1 and 3.2 confirm this pattern – FTs with a common education history seem to use nonaffiliated hiring substantially less often than other FTs or solo founders (p = .000 in either model). In conclusion, we find empirical support for H1.

To illustrate the size of the differences in ABH and non-ABH across firms with and without FTs with shared ties, we have computed the relevant marginal effects and predicted the key outcomes of interest following the estimation of those models reported in Table 2. Keeping everything else constant in model 2.2 (1.2), we estimate that, on average, 15 (6) percent of newcomers have education (employment) affiliations in common with one or more founders when members of the FT already share the same affiliations. In line with H1, in the absence of those ties, the estimated shares of education (employment) affiliated hires drops to 9 (p = .000) (5 (p = .034)) percent. It is also worth noting that solo founders and teams of founders with no shared affiliations exhibit similar hiring patterns when it comes to ABH versus non-ABH. If anything, larger FTs seem to prefer education-affiliated hires over nonaffiliated hires (based on the coefficient of FT size) and this result holds regardless of any affiliation ties that founders may have among them.

However, as theorized in H2, the reliance on ABH varies over an organization’s life, being higher in its early stages and declining as the firm grows older. We find strong support for this hypothesis in all models of Table 2. Hiring from founders’ former workplaces is a frequent tactic soon after entry but much less so in later stages. Model 1.2 predicts that more than a third of all new hires joining firms in their first year of activity have worked in the same organization as one or more founders; this share drops to 15 and 5% by the third and fifth year of activity, respectively (p = .000). This decay is also observed in firms launched by teams of founders with common past employers: their predicted shares of employment-affiliated hires are, respectively, 38, 17 and 6%, keeping everything else constant (p = .000). This decay is visible, yet smaller in magnitude, in education-affiliated hiring: our predictions from model 2.2 indicate that education-affiliated hires represent about 14, 12, and 10% of the influx of new personnel by the first, third, and fifth year of a firm’s activity (21, 18, and 15%, respectively, in firms whose FTs already shared education ties) (p = .000). As a corollary of this result, we observe that non-ABH becomes more prevalent as the firm matures, especially in firms with no shared ties among their founders (model 3.2; p = .000).

### Table 2 (Continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1.1 Model 1.2</td>
<td>Model 2.1 Model 2.2</td>
<td>Model 3.1 Model 3.2</td>
</tr>
<tr>
<td>Number of observations</td>
<td>34,982 34,982</td>
<td>34,982 34,982</td>
<td>34,982 34,982</td>
</tr>
<tr>
<td>R2</td>
<td>.192 .193</td>
<td>.062 .062</td>
<td>.058 .058</td>
</tr>
</tbody>
</table>

Note: Values in parentheses are standard errors clustered at the firm level. Models 1.1, 2.1, and 3.1 are fractional regression models applied to firms that have hired at least one new employee in year t. Models 1.2, 2.2, and 3.2 repeat those models but correct the estimation by considering any potential selection bias driven by unobservable factors making some firms more or less likely to hire personnel in t; these models include the IMR (inverse Mills ratio) obtained from a first stage regression, which estimates the firm’s probability of hiring in year t. This first stage regression is similar to the one presented in Table A.1 (first model), but it includes the exclusion restriction described in footnote 3 (which is positively correlated with a firm’s propensity to hire personnel) to improve identification.

+p < .10;  p < .05;  p < .01.
TABLE 3 Differences between new hires and founders based on their affiliation ties.

<table>
<thead>
<tr>
<th></th>
<th>(1) Employment-affiliated hires</th>
<th>(2) Education-affiliated hires</th>
<th>(3) Nonaffiliated hires</th>
<th>Difference (3) – (1)</th>
<th>Difference (3) – (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different gender than founders(s)</td>
<td>.362</td>
<td>.339</td>
<td>.419</td>
<td>.058 **</td>
<td>.080 **</td>
</tr>
<tr>
<td>Different country of origin than founder(s)</td>
<td>.082</td>
<td>.054</td>
<td>.145</td>
<td>.063 **</td>
<td>.091 **</td>
</tr>
<tr>
<td>Absolute age difference compared to founder(s)</td>
<td>12.675</td>
<td>9.222</td>
<td>13.564</td>
<td>.889 **</td>
<td>4.342 **</td>
</tr>
<tr>
<td>Functional diversity of the new hire</td>
<td>.272</td>
<td>.289</td>
<td>.283</td>
<td>.011 **</td>
<td>-.007 *</td>
</tr>
</tbody>
</table>

The tests reported refer to two-sided t-tests. *p < .05; ** p < .01.

The control variables included in all those models offer additional nuance to our understanding of ABH and non-ABH in entrepreneurial firms. For example, founders with industry experience and higher levels of education rely more on either type of ABH than on non-ABH. In contrast, hiring from founders’ education affiliations seems to be more prevalent among younger founders with no entrepreneurial experience and more specialized functional experience.5

As an alternative to our firm-level analyses, we have also conducted employee-level analysis using a multinomial logit model, which predict, for each new hire joining each firm in a particular year, their probability of being an affiliated versus nonaffiliated hire (see Table A.3 in the Online Supplements). We find the same results: new hires are more likely to share employment or education affiliations with one or more founders when the firm they join had been established by a team of founders that already had that same type of affiliations in common. Further, both types of affiliated hires are more prevalent in the earlier stages of the firm. In those analyses, we are also able to consider the type of role each new hire is recruited for. Interestingly, we find that affiliated hires are more often allocated to positions that require high or medium levels of skills (i.e., professional or technical job roles) but also to craftsmanship jobs, which may be essential to the core activities of the firm. In a nutshell, these post hoc findings reveal that ABH is often used by entrepreneurs to fill important positions in the firm.6

ABH and the evolution of diversity in entrepreneurial firms. Before formally testing H3, we first compare affiliated and nonaffiliated hires with the founders they join. Table 3 compares the demographics and functional diversity of each group of hires relative to the founders hiring them. We observe that affiliated hires resemble the founders of the firm more often than other hires: only about a third of them are of different gender and <10% have a different country of origin. Nonaffiliated hires add more diversity to the team by diverging from founders in both characteristics more often than affiliated hires, as two-sided t-tests confirm. We additionally look at the absolute age gap between founders and each group of new hires. Although founders tend to hire employees who are, on average, younger than themselves, their absolute age disparity is, again, smaller for affiliated hires compared to other employees. Finally, both groups of affiliated hires exhibit less variety in their past functional experience than nonaffiliated hires, suggesting that they tend to have more specialized experience than other employees. Altogether, these statistics provide a first indication that a frequent use of ABH may prevent organizations from exhibiting very diverse workforces.

In Table 4, we formally test the association between ABH practices in the early stages of the firm and the demographic and functional diversity of its personnel measured 3, 5, and 7 years after inception. We focus on the use of ABH within the first 3 years of a firm’s activity because, as demonstrated above, the practice of hiring from founders’ affiliations (especially employment affiliations) decays significantly with firm age. Our independent variable of interest is the proportion of new personnel who had employment or education affiliations in common with any of the founders in the firm. Measuring ABH via the ratio between the total number of new hires sharing affiliations with one or more founders and the total influx of personnel during the same period allows us to have non-ABH as a benchmark (i.e., the share of non-ABH hired in the first 3 years is our reference category). Because these are cross-sectional
**Table 4** Early-stage affiliation-based hiring (vs. nonaffiliated hiring) and workforce diversity in the long run (cross-sectional OLS regressions).

<table>
<thead>
<tr>
<th>Gender diversity in the workforce (standard deviation of &quot;male&quot;)</th>
<th>At firm age = 3</th>
<th>At firm age = 5</th>
<th>At firm age = 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Employment affiliated hires (years 1–3)</td>
<td>−.033*</td>
<td>−.032*</td>
<td>−.031</td>
</tr>
<tr>
<td></td>
<td>(.019)</td>
<td>(.018)</td>
<td>(.020)</td>
</tr>
<tr>
<td>% Education affiliated hires (years 1–3)</td>
<td>−.034*</td>
<td>−.071**</td>
<td>−.028</td>
</tr>
<tr>
<td></td>
<td>(.021)</td>
<td>(.019)</td>
<td>(.020)</td>
</tr>
<tr>
<td>All other controls</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Number of observations</td>
<td>4423</td>
<td>3764</td>
<td>3061</td>
</tr>
<tr>
<td>R2</td>
<td>.070</td>
<td>.073</td>
<td>.060</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age diversity in the workforce (Coefficient of Variation of &quot;age&quot;)</th>
<th>At firm age = 3</th>
<th>At firm age = 5</th>
<th>At firm age = 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Employment affiliated hires (years 1–3)</td>
<td>−.044**</td>
<td>−.040**</td>
<td>−.033*</td>
</tr>
<tr>
<td></td>
<td>(.012)</td>
<td>(.012)</td>
<td>(.013)</td>
</tr>
<tr>
<td>% Education affiliated hires (years 1–3)</td>
<td>−.005</td>
<td>−.004</td>
<td>−.010</td>
</tr>
<tr>
<td></td>
<td>(.013)</td>
<td>(.012)</td>
<td>(.013)</td>
</tr>
<tr>
<td>All other controls</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Number of observations</td>
<td>4423</td>
<td>3764</td>
<td>3061</td>
</tr>
<tr>
<td>R2</td>
<td>.069</td>
<td>.062</td>
<td>.060</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diversity in workers’ country of origin (Blau index)</th>
<th>At firm age = 3</th>
<th>At firm age = 5</th>
<th>At firm age = 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Employment affiliated hires (years 1–3)</td>
<td>−.030**</td>
<td>−.030*</td>
<td>−.017</td>
</tr>
<tr>
<td></td>
<td>(.010)</td>
<td>(.011)</td>
<td>(.013)</td>
</tr>
<tr>
<td>% Education affiliated hires (years 1–3)</td>
<td>−.060**</td>
<td>−.038**</td>
<td>−.048**</td>
</tr>
<tr>
<td></td>
<td>(.010)</td>
<td>(.011)</td>
<td>(.013)</td>
</tr>
<tr>
<td>All other controls</td>
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<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Number of observations</td>
<td>4423</td>
<td>3764</td>
<td>3061</td>
</tr>
<tr>
<td>R2</td>
<td>.090</td>
<td>.073</td>
<td>.097</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Diversity in workers’ functional experience (Blau index)</th>
<th>At firm age = 3</th>
<th>At firm age = 5</th>
<th>At firm age = 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Employment affiliated hires (years 1–3)</td>
<td>−.037**</td>
<td>−.019*</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>(.011)</td>
<td>(.011)</td>
<td>(.012)</td>
</tr>
<tr>
<td>% Education affiliated hires (years 1–3)</td>
<td>−.034**</td>
<td>−.038**</td>
<td>−.008</td>
</tr>
<tr>
<td></td>
<td>(.011)</td>
<td>(.011)</td>
<td>(.012)</td>
</tr>
<tr>
<td>All other controls</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Number of observations</td>
<td>4423</td>
<td>3764</td>
<td>3061</td>
</tr>
<tr>
<td>R2</td>
<td>.050</td>
<td>.050</td>
<td>.044</td>
</tr>
</tbody>
</table>

Note: Values in parentheses are standard errors clustered at the firm level. Coefficients of control variables omitted to save space, but available upon request. 
+p < .10; *p < .05; **p < .01.
analyses conducted at three specific points in time – 3, 5, and 7 years after inception – our estimations are necessarily restricted to firms that survive up to those stages. To alleviate omitted variable bias, we include the same control variables as in Table 2 in all models.

The first panel of Table 4 focuses on gender diversity in the workforce. We obtain negative coefficients for the shares of both groups of affiliated hires in the firm, which implies that the more firms use ABH (instead of non-ABH) to hire their first employees, the lower the gender diversity of their workforce in the long run. Comparing the results across the three columns of Table 4, we conclude that this diversity debt persists for several years but becomes weaker as the firm matures. To illustrate this trend more clearly, we estimate models for workforce diversity covering the full period of observation and assess how differently workforce diversity evolves for firms using ABH to a high extent in early stages (i.e., their shares of affiliated hires were above the sample average). Figure 2a,b illustrates the difference in gender diversity between these and other entrepreneurial firms in the sample over the first decade of activity. In line with Table 4, we see that firms with frequent ABH in early stages exhibit a gender diversity debt that lasts for several years but eventually vanishes if the firm survives long enough (i.e., the relevant coefficient is negative but its confidence interval eventually crosses the horizontal axis).

The second and third panels of Table 4 assess workforce diversity in terms of age and country of origin. We find, again, negative associations between higher rates of ABH in early stages and workforce diversity in the long run, some of them being quite persistent. Effect sizes are non-negligible – for example, a one-standard-deviation increase in the share of education (employment) ABH in early stages is associated with 13 (three) percent lower nationality (age) diversity 7 years after founding. The persistence of those gaps in diversity is also visible in Figures 3a and 4a,b.

Finally, the bottom panel of Table 4 assesses diversity in functional experience and leads to similar conclusions – firms that hire more often from founders’ affiliations in early stages assemble workforces that are more often composed of employees with rather specialized work experience, which is in contrast with the expectation that startup firms prioritize those with a generalist profile (Lazear, 2004). Affiliated hires may thus bring in particular expertise in some functions and fulfill founders’ resource-seeking needs or goals (Lazar et al., 2020). However, 6–8 years after founding, the differences between firms with high and low rates of ABH seem to vanish (see Figure 5a,b).

These collective findings offer general support for H3, especially for demographic diversity. Given the tension between normative practices of diversity hiring and the tendency towards ABH, this finding is important because it connects affiliation homophily with several dimensions of workforce diversity and suggests that they are inversely related. More importantly, these findings indicate that homophily tendencies and limited workforce diversity start at
FIGURE 3  Evolution of age diversity debt of firms with high ABH (Study 1). (a) Marginal effect of “high employment ABH (in years 1–3)” on age diversity over firm’s life cycle (with 95% confidence intervals), (b) marginal effect of “high education ABH (in years 1–3)” on age diversity over firm’s life cycle (with 95% confidence intervals).

FIGURE 4  Evolution of nationality diversity debt of firms with high ABH (Study 1). (a) Marginal effect of “high employment ABH (in years 1–3)” on nationality diversity over firm’s life cycle (with 95% confidence intervals), (b) marginal effect of “high education ABH (in years 1–3)” on nationality diversity over firm’s life cycle (with 95% confidence intervals).

FIGURE 5  Evolution of functional diversity debt of firms with high ABH (Study 1). (a) Marginal effect of “high employment ABH (in years 1–3)” on functional diversity over firm’s life cycle (with 95% confidence intervals), (b) Marginal effect of “high education ABH (in years 1–3)” on functional diversity over firm’s life cycle (with 95% confidence intervals).
the very early stages of an organization and especially within FTs with shared affiliations. These findings offer new evidence of path-dependency for diversity in firms through channels not uncovered before, namely the use of ABH.

3.2 | Study 2

3.2.1 | Data and sample

To complement Study 1, we conducted a survey via the Prolific platform targeted at entrepreneurs of small and young firms to inform us of other tactics that founders (consider to) use when hiring their first employees and of the (dis)advantages they may see in ABH practices. We collected information about founders (e.g., experience and shared ties with other cofounders, if any) and their ventures (e.g., firm age, size, sector, past hiring), their reliance on ABH and other hiring tactics, their perceptions of the main pros and cons of ABH, and their standing regarding diversity imperatives. We pretested and implemented the survey in January 2023 and obtained 303 complete responses from founders of small and young firms based in the United States (36% of the respondents) and the United Kingdom (64% of the respondents). The median respondent is a founder of a firm that has been active for 6 years and currently has seven employees. Sixty percent of this sample identifies as male, 85% declares to be “White” in terms of race, and the median respondent is 40 years old. Similar to the data of Study 1, solo founders are more prevalent (about 70%) than FTs, but the latter have more prior affiliations in common (39% of FTs had shared employment affiliations and 14% had education-related ties). Importantly, ABH practices are nontrivial in this sample: 46% of the respondents had already hired one or more employees who previously worked at the same firm and/or attended the same school as a founder.

Two additional aspects are worth noting. First, firms that had used ABH were more often launched by FTs with shared affiliation ties than firms with no prior ties (20 vs. 9.8%, \( p = .012 \)). Second, firms with ABH practices hired much faster than other firms: 46% had hired their first employee(s) within 6 months after founding and 24% took 6–12 months to do so; the proportion of firms hiring within those timeframes was much lower if they had no ABH experience (19.6% \( p = .000 \)) and 13.5% \( p = .016 \), respectively). Although we do not know when ABH occurred, it is fair to assume that the use of ABH may have accelerated the pace of hiring in this sample, given the findings of Study 1 supporting H2.

Altogether, this sample of entrepreneurs – although distant from the sample of Study 1 in geography and time of data collection – displays comparable patterns regarding founders’ demographic characteristics, the prevalence of ABH in the early stages of the firm lifecycle and its correlation with teams of founders having prior affiliation ties. This gives us confidence about the representativeness of the sample used in Study 2.

3.2.2 | Results

Search and selection tactics used by founders. Figure 6 compares founders who rated diversity (in gender, ethnicity, age, or other dimensions) as extremely/very important for hiring at their venture (30% of the sample) with those valuing diversity less in their answers to the question “When you hired your first employees, how much did you rely on the following to find them?”. In our online supplemental material (Figure A.1), we report additional statistics for founders’ different selection practices.

We observe that hiring by affiliation is one of the most common search practices used by founders, together with referrals – about a third of our respondents declare to use either of those tactics to hire most or all employees. Although comparable across founders of different genders, these patterns are even more notorious among older (and likely more experienced) founders (unreported statistics available upon request). Web-posting and social media are used as search channels to some extent, whereas job fairs and external head-hunters are rather rare; however, supplemental analyses reveal that female founders leverage the latter tactics more often than male founders do. Younger
founders use social media and web-based job posting more often, and industry or professional groups less often than older founders. Importantly, we do not find any significant differences in the use of those search tactics between founders that value diversity to higher or lower extents, even within subsamples of founders of the same gender or similar age. Figure A.1 (Online Supplement) further shows that most founders select their employees based on interviews, task and nontask testing, and/or candidates’ experience, regardless of the value assigned to diversity. However, we find differences in their use of reference checks and in their reliance on candidates’ prior (work or education) affiliations: founders that care about diversity use these selection tactics more often. We find the same patterns also when splitting the sample by founder gender or age (above or below the median). Hence, checking candidates’ prior affiliations and other sources of information about their quality or commitment (e.g., reference checks or GPA) are important selection criteria for founders that value diversity. This suggests that the downsides that ABH may have on the diversity trajectories of the organization (cf. Study 1) are likely unintentional.

**Advantages and disadvantages of ABH.** We asked founders with ABH experience about the advantages and disadvantages of this practice. Figure 7a summarizes founders’ responses regarding the benefits (based on a list from which they could select multiple options) of ABH. We report comparisons, once again, across founders who consider diversity more or less important (vertical bars). Furthermore, we include the perceptions of those founders who report ABH as the preferred option to hire someone for (a) a managerial/leadership position and (b) an entry-level position in their firm (illustrated by the ● and ♦ markers, respectively). In Figure 7b, we perform the same comparisons but focus on the disadvantages of ABH instead.

Most founders find ABH highly beneficial to improve trust and reduce search costs, especially when hiring for specific positions (either managerial or entry-level roles), regardless of how much they value diversity. In unreported statistics, we find that trust-based considerations are particularly salient among older and male founders in the sample. The majority (51%) also finds ABH valuable for improving communication about work routines and goals and for finding better fits, namely employees with superior knowledge, skills, and abilities that ultimately fit better with the organization (42%). About a third of the sample believes that affiliated hires may be more committed than other hires, and this seems especially true when using ABH to fill entry-level positions. These responses point to benefits associated with improved selection. Additional qualitative evidence collected in open questions confirm these selection benefits: founders who rated ABH as their preferred hiring tactic repeatedly explained this choice by mentioning...
information advantages regarding the employees’ “work quality and ethic,” “strengths and weaknesses,” “ability to perform” and to “work together,” “fit with the company,” and their overall “trustworthiness,” which often makes them “the best person for the job.” Improved attraction seems relatively less important, given how rarely founders indicate that ABH makes it “easier to convince employees to join” – especially founders who value diversity. Benefits of “longer retention” are also noted, but relatively less often than selection benefits. Interestingly, although ABH may reduce some hiring costs (e.g., search and integration costs), it does not seem to be a hiring tactic that founders use to save wage costs.

Turning our attention to the disadvantages of ABH (Figure 7b), the most common downside noted by founders was the difficulty to fire affiliated employees in case of underperformance, especially when they use their prior affiliations
to fill specific roles in the firm. This concern also emerged in qualitative answers supplied by founders who rated ABH as the least preferred hiring tactic: they often mentioned the risk of “ruining the personal relationship,” “unprofessional behavior,” “nepotism,” “impartiality,” “resentment,” and considered “mixing business with friendship... a recipe for disaster.” Several founders also consider that hiring via their own affiliations may limit the choice and quality of the hires, despite the many selection benefits discussed above. Importantly, some founders recognize that ABH may result in knowledge redundancy because new hires may be “too similar in skills with those already in the venture” – and this is more often a concern for founders who value diversity. However, these founders do not seem equally concerned with the fact that ABH may promote homogeneity in personalities and demographic characteristics, which is an intriguing contrast with our findings from Study 1. Again, although some founders may be aware of the risk of reduced diversity (in knowledge or skills) when using ABH, this is not the key downside they recognize in this practice. This provides further evidence that the potential diversity debt resulting from ABH may be unintended.

**Distinctive factors attracting candidates.** Finally, to infer which factors make entrepreneurial firms distinct and appealing to job candidates, we asked founders to select aspects that made their venture unique from other organizations and that they consider important to attract talent. Online Supplemental Figure A.2 summarizes the responses and portrays two relevant comparisons: founders that did and did not hire from their own affiliations (gray lines) and founders that value diversity more or less (dark lines).

The take-aways from this final set of results are three-fold. First, founders rarely believe that their own expertise and experience, or personal connections with themselves, are the main factor that attracts talent to their firms. This suggests that, although ABH may provide major advantages to founders in the selection stage, this tactic may be less advantageous in the attraction stage. Second and related, most founders report aspects associated with the company (its vision, mission, and culture) or the potential growth opportunities for incoming employees as the most attractive aspects to potential candidates. High salary is, by far, the least likely aspect that attracts talent, even among founders with ABH experience. These findings substantiate that ABH tactics are unlikely to be primarily driven by candidates preferring to join firms in which they have connections with founders, but rather by founders preferring to hire candidates they trust more and know better. Finally, founders that assign high importance to diversity also attribute a disproportionate value to the company mission and vision as the key factor that attracts talent. This infers that a company mission and vision may be intertwined with the diversity of its workforce. Employees may choose between companies based on their mission, vision, and culture, but these are likely correlated with the diversity (or lack of thereof) within the organization. Entrepreneurs must, therefore, be mindful of the potential dual role that ABH tactics may have in the culture and overall vision of their organization – although affiliated hires may shape a company culture and mission by affecting person-organization fit, trust, and the overall team dynamics, they may also have major implications for the evolution of specific dimensions of diversity and the attractiveness of the company to future employees.

### 4 DISCUSSION

ASA processes take years to unfold, and to date, we have little evidence of how organizational diversity develops for new firms over time (Bradley-Geist & Landis, 2012; Oh et al., 2018). Founding conditions of ephemeral new ventures imprint early firm processes, making new ventures’ hiring practices salient to the evolution of firms’ diversity. Indeed, Schneider et al. (1995: 762) noted:

“...the ideal research design would be one in which organizations that are about to be founded, or newly founded organizations, were located...[and] the evolving structure, process and culture of their organizations were tracked.”

Our work emulates the spirit of this idea as we follow 7377 Danish startup firms, their use of ABH through founders’ affiliations, and subsequent diversity outcomes for up to 12 years of their early existence. We complement this archival work with a survey of 303 founders to gain insights to their hiring practices, motivations for ABH, and opinions about diversity. Our primary findings are that FTs that share prior affiliations are more likely to engage in ABH than solo...
founders and FTs without those ties, especially in the early stages of the firm. However, despite ABH practices decaying over time, those early stints of ABH predict lower diversity within the firm in the future. Importantly, our survey findings suggest that founders are generally unaware that ABH tactics lead to less diverse hiring outcomes. In combination, these results provide insights to how some firms become more or less diverse than others. When founders have preferences to select cofounders and early employees via affiliation ties, they are likely to also unintentionally create conditions for stronger homophilic patterns in growing organizations that can persist.

4.1 Theoretical, empirical, and practical contributions

Our work follows recent advances in ABH that describe how such practices may alter the diversity of hiring firms (Kehoe et al., 2023). We bring detail to Kehoe et al.’s concept of matching logics as they apply to new ventures, describing how using ABH in itself is a matching logic among certain sets of founders that can predict future diversity debts of the firm (Engel et al., 2022).

By contrast, ASA theory has a long history of being applied to established organizations and the maintenance of hiring and retention patterns of current employees (e.g., Oh et al., 2018; Schneider et al., 1998). Our theorizing extends ASA theory by considering a key aspect at the genesis of a new firm – founders’ tendency to find and select new joiners based on common membership to former employment or education affiliations. This extension allows us to see that the founding conditions that set an organization on a trajectory for more or less diversity are not random and may actually emerge more strongly within particular types of FTs. We also extend the ASA logic to consider transitive effects of homogenizing across multiple dimensions of similarity. Studies testing ASA theory have to date primarily centered on how people get attracted to, selected by, and retained in organizations based on their personality types (e.g., Ployhart et al., 2006; Oh et al., 2018; Schneider & Bartram, 2017), but the ASA foundation includes several psychological dimensions such as values and interests (Schneider et al., 1995). We argue that as firms form in their nascent stages, the extent to which founders value human resource mobilization through their prior affiliations has implications for many other dimensions of future homophily. Close network connections and informal hiring practices are the hallmark of new firms (e.g., Aldrich, 1999; Aldrich & Kim, 2007; Vissa, 2011), but as firms scale, they necessarily expand to HR best practices of wider search (i.e., non-ABH). Our theory describes this new firm evolution and transitivity – from homogenizing on prior ties to homogenizing on other diversity dimensions – which occurs even when firms no longer make great use of founders’ prior affiliations to mobilize new personnel.

Our study also contributes to entrepreneurship scholarship by extending recent theoretical advances on FT formation strategies. Lazar et al. (2020, 2022) describe that most founders coalesce in teams based on either interpersonal attraction or resource-seeking objectives. The multiplicity of objectives underlying entrepreneurial team formation had also been noted by Vissa (2011) and echoed, more recently, in Clough and Vissa (2021). Our Study 2 reveals multiple advantages associated with ABH, from greater trust to improved knowledge and skills, which seem to fulfill both interpersonal attraction and resource-seeking goals. If ABH indeed helps entrepreneurs fulfill both types of goals, our study points to this tactic as a possible “dual” hiring strategy available to founders (Lazar et al., 2022). Further, our study adds to the stream of entrepreneurship research documenting an imprinting effect of founders in their ventures (e.g., Agarwal et al., 2016; DeSantola & Gulati, 2017; Honoré, 2022; Leung et al., 2013). We uncover one important channel through which founders can imprint the future trajectories of their firms – their hiring strategies in the nascent stages of the firm.

Empirically, we answer several calls for better insights on how differently entrepreneurs mobilize personnel and why it matters for the evolution of the organization (Agarwal, 2019; Clough et al., 2019; DeSantola & Gulati, 2017; Honoré & Ganco, 2023; Lazar et al., 2020, 2022). Our Study 1 provides a longitudinal look at new firms’ hiring practices and a powerful lens into the genesis of firms across many industries. These data also provide a detailed perspective on the evolution of diversity within firms, enabling us to examine nationality, gender, age, and functional background diversity in a large set of new firms over time. We complement these archival data with rich survey data from two
other countries (Study 2), showing that the prevalence across these and the Danish context has many similarities (e.g., how ABH varies across different types of FTs), and offering founders’ perspectives on the pros and cons of ABH, their search and selection practices, and how they value diversity.

Valuing diversity is on the minds of many founders and managers. While the founders surveyed in Study 2 articulated many advantages of ABH such as lower search costs, better information about others’ quality, trust, and loyalty to the mission of the venture, they also noted some downsides associated with this practice, such as the difficulty to fire in case of underperformance. Intriguingly though, limited diversity was rarely listed by founders as a disadvantage of ABH, which suggests that the within-firm homogenization progression associated with this hiring practice may be an unintended consequence.

One implication from these findings is that founders should consider the potential long-reaching consequences of early ABH. The effect sizes we find for ABH and its diversity implications were noticeable but not particularly strong when considering individual hire’s potential impacts – for example, subtle preferences for homophily that may only amount to “tie-breakers” between two close candidates. However, the accumulation of these effects over time could markedly shift a firm’s diversity trajectories. Therefore, entrepreneurs should be cognizant of ABH tradeoffs and purposefully select for diversity if they also use ABH early. Our results show that firms that practice early ABH to greater extents may create a self-reinforcing limitation, making the firm less attractive to dissimilar others and strengthening internal homophilic preferences for selection (see Engel et al., 2022). Founders could be more aware of long-term imprinting that initial selection practices can have, and either use ABH sparingly or balance ABH with sufficiently diverse hiring to counterbalance its effects. We recognize that this may be difficult for founders given resource constraints, but the cost of a firm predisposed against diversity in the long run is steep.

Our results suggest that managers of established firms can accept that homogenization progression within firms may be deep-seeded and trace back to the founders of the firm. Long-standing norms and routines embedded in attracting and selecting new workers are difficult to change. Indeed, recent evidence suggests that interventions such as tweaking the language in job postings to attract more female candidates may not be effective (e.g., Castilla & Rho, 2023). Managers may need to think of new interventions that can counteract the inertia in organizational networks created by early hiring routines.

4.2 Limitations and future research

We concede some limitations in the inferences we can draw from our archival Danish data. Though we complemented this study with survey data from current founders, we can only infer founders’ preferences, values, and interests in hiring others based on their former affiliations, but we lack information about the role of applicants. Early hires must be attracted to new ventures and understanding how and why they are attracted to firms who engage in ABH would add major value to our understanding of early firm growth. Qualitative and experimental methods (e.g., Chung & Parker, 2022; Engel et al. 2022) could be particularly powerful in this regard. Given this limitation, we are also unable to decompose the within-firm homogenization progression into different ASA processes (i.e., attraction, selection, and/or attrition). Oh et al. (2018) found that selection processes matter more than attraction and attrition processes for the within-firm homogenization, and our Study 2 adds new insights to those selection processes in the context of entrepreneurial firms. Nevertheless, future research could further decompose those ASA processes in different stages of a firm lifecycle and use Oh et al. (2018) as a good template. Future research could also explore how founders’ psychological dimensions (e.g., personality traits) impact their decisions through a firm’s early lifecycle, as our data suggest that hiring practices and the diversity they beget might shift considerably in the first few years of a firm’s life.

Though Study 2 complemented our Danish archival study, it also has limitations. The Prolific platform provides generalizable findings due to the relatively easy sampling across firms, industries, and countries. However, our study is cross-sectional and reliant on the respondent to characterize the behaviors and motivations associated with ABH.
Further, entrepreneurs that earn money through Prolific may differ from those that are not on the platform. Future research could consider following several firms as they start in one industry, tracking when they hire and the motivations of the hiring managers closer to decisions points for hiring. Such research would provide fascinating insights to the unfolding internal processes that create climates for diversity over time (Hicks-Clarke & Iles, 2000).

Notably, our studies considered only a few dimensions of diversity – gender, age, national origin, and functional expertise. Though we suspect that similar patterns of ABH and diversity trajectories might apply for other dimensions of diversity that scholars are keenly interested in, such as race, sexual orientation, and religion, there may be distinct ways these forms of diversity may evolve in startups that future research could explore.

5 | CONCLUSION

ABH has many benefits that could help fledgling young firms. Yet, as Van Iddekinge et al. (2023: 24) note, “although much progress has been made about how to make effective and fair selection decisions, vexing issues persist... [such as] how to simultaneously maximize workforce performance and diversity.” Our work provides a unique perspective on the origins of firm diversity that start in the composition of FTs and early practices of ABH. We hope that it encourages more research on how growing firms evolve across multiple dimensions of diversity and on what drives this evolution.

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ENDNOTES

1 Due to the nature of the registry data used in Study 1, our paper focuses on demographic diversity (gender, age, and national origin) and functional diversity (experience in different specialized job roles) within firms as a function of early hiring practices.
2 Growth rates may vary by industry; for example, the median (mean) number of total hires in our sample is 10 (23) employees in manufacturing and eight (17) employees in services. Our analyses will account for these sector differences.
3 The distribution of the new ventures (and their employees) across different types of industries is: 13% (15%) in manufacturing, 71% (73%) in general talent services, and 16% (12%) in professional services.
4 This first-stage model uses the same set of independent and control variables described above, plus one additional variable measuring how many of the employees working in the same industry as the focal firm are located nearby, in the same municipality $m$ (i.e., the ratio $E_{itm}/E_t$ with $E$ denoting total employment). This exclusion restriction captures the concentration of relevant human resources (i.e., employees with industry-specific experience) in the local labor market, which is likely to affect a firm’s tendency to hire in a particular year. However, founders’ preferences for affiliated or nonaffiliated hiring should not be directly affected by this variable; the ratio $E_{itm}/E_t$ should mostly affect the rates of ABH via its effect on the firm’s probability of hiring personnel. Estimations using alternative exclusion restrictions (e.g., average hiring rates in the same industry or average expenditures in job centers within the firm’s municipality) produce qualitatively similar results.
All respondents received payment to compensate for their time. The average response time was 9.7 min. The survey was conducted in compliance with the research ethics committee at the University of Cincinnati (IRB #2023-0125, titled “New Venture Hiring Practices”).

For entrepreneurs who had not hired yet by the time of the survey (56 respondents), we adjusted the question so that they could reflect on those options as they considered their future hiring plans. Figure 6 reports the shares of respondents who declared to use (or consider using) those tactics for “every hire” or “most hires.” This also applies to Figure A.1 in the Online Supplement.

Our findings remain robust when we consider that not all firms are equally likely to hire new personnel every year. Firms founded by teams that already have affiliations in common hire more often and larger volumes of personnel (see Online Supplemental Table A.1). Our findings hold when we adjust for this selection into hiring with conventional Heckman models (Online Supplemental Table A.2). Our findings are thus not confounded by certain types of founding teams hiring more often.

As a final robustness check, we verify whether our analyses suffer from a survivorship bias because not all firms remain active until the last year of our observation period – 52% of the firms founded between 2001 and 2004 were still active by 2012, but the remaining firms had closed down by then. In Table A.4 (Online Supplemental Material), we run the same models of Table 2 in split samples to compare the results we obtain for firms that survived until 2012 and those that exited the market before that. We find that the coefficients of interest testing the validity of H1 and H2 are not systematically different across the two samples – ABH increases if founding teams have affiliations (and especially education affiliations) in common, and it declines over time, as firms mature.

REFERENCES


