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## Recruiting Talent Through Entrepreneurs' Social Vision Communication

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**Abstract.** For-profit social ventures are proliferating. They often communicate social visions, presenting an ideal future where the ventures resolve environmental or societal issues. We study whether social vision communication helps a startup to recruit talent—a fundamental problem for growth. We argue that jobseekers are less likely to apply to ventures communicating a social vision as they perceive reduced career advancement opportunities. We conducted two complementary studies to test our theory. Study 1 enlisted data from a job board for startups to show that ventures communicating a social vision receive 46.3% fewer job applications. Study 2 replicated this finding in a field experiment that further reveals the underlying mechanism: social vision communication limits jobseekers' perceived career advancement opportunities. Both studies show that higher remuneration can compensate the negative effect of social vision communication. Our findings advance research on purpose-driven organizations, human resources, entrepreneurship, and vision communication to caution entrepreneurs against social vision communication as a recruitment strategy.

Supplemental Material: The online appendix is available at https://doi.org/10.1287/orsc.2023.1671.

Keywords: vision communication • social entrepreneurship • recruitment • startups • career advancement • resource mobilization • entrepreneurship

## Introduction

A startup's success depends on the entrepreneur's ability to recruit talented people who help grow the business (Rauch et al. 2005, Sauermann 2018). The goal of recruitment is to attract a large pool of qualified applicants. This is a critical step because the eventual selection of the right candidate(s) "will only be effective and financially defensible if a sufficient quantity of applicants applies to the organization" (Ployhart 2006, p. 870; Weller et al. 2019). Yet, in the global contest for recruiting talent (Breaugh 2013, Ployhart et al. 2017), startups are disadvantaged as they are virtually unknown to jobseekers and impose demanding work while having limited resources to offer competitive remuneration to jobseekers (Barber et al. 1999, Cardon and Stevens 2004, Burton et al. 2018). As Mollick (2020, p. 49) recently remarked: "In the beginning, a start-up is just words... You need to convince employees to join you on your journey when that journey has barely begun." Hence, vision communication-messages showcasing the substantive value of what the venture aims to become and attain

in the future (Baum and Locke 2004, van Balen et al. 2019)—is likely to play a vital role in luring potential recruits. This might be why we observe an increasing popularity of *social vision communication* in entrepreneurship practice and research (Bruton et al. 2013, Markman et al. 2016, Branzei et al. 2018, Lee and Huang 2018). Social vision communication refers to conveying an image of the future where environmental and societal issues are addressed by the venture's activities (Grant 2008, Dacin et al. 2011, Wry and York 2017). These vision communications advocate the entrepreneurial purpose of "making the world a better place." Our central question is whether and how a venture's social vision communication attracts talent.

Although entrepreneurship research has yet to scrutinize the efficacy of social vision communication in recruitment, a rich body of human resource management (HRM) research unanimously advocates socially oriented communications (Turban and Greening 1997, Backhaus et al. 2002, Bhattacharya et al. 2008, Evans and Davis 2011, Burbano 2016, Bohlmann et al. 2018). Social vision communication, in this view, should induce applicants' desire for congruence with self and organizational values—that is, *value fit* (Cable and Judge 1996, Cable and DeRue 2002, Chapman et al. 2005, Kristof-Brown et al. 2005, Edwards and Billsberry 2010). This is because most people value the well-being of others (Schwartz and Bardi 2001, De Dreu and Nauta 2009), deriving pride and meaning from work with organizations that signal care for society and the environment (Highhouse et al. 2007, Jones et al. 2014, Gartenberg et al. 2019, Gartenberg and Serafeim 2022).

Beyond mere value fit, however, recruits may seek startup employment as an opportunity to advance their careers (Bidwell and Mollick 2015). These prospects include equity and financial returns in cases of successful exits, as well autonomy and intellectual challenges that the startup environment supplies (for recent discussions, see Nyström (2021), Sauermann (2018), and Sorenson et al. (2021)). Although social vision communication certainly fosters perceptions of value-fit, it also hurts jobseekers' perceptions of career advancement opportunities. This is because a social vision communication is perceived as having a longer time horizon, lower venture growth or limited success potential. Ventures communicating a social vision might also be seen as hampering personal ambitions, because a social vision calls for rising above one's own needs in favor of those of others. This implies the unavailability of commonly expected nonpecuniary learning and growth opportunities. Accordingly, we hypothesize that a jobseeker is *less* likely to apply to a venture communicating a social vision due to a worsened perception of career advancement opportunities versus a venture not communicating a social vision.

We found empirical support for our hypotheses by merging archival data with a field experiment. First, we tracked jobs posted by 795 startups on Angel.co-a job board platform for startups. We found typical ventures communicating no social vision to receive 8.4 applications on average, whereas those communicating a social vision received 4.5 applications-46.3% fewer applications. Offering a remuneration premium dampened the negative effect of social vision communication. Next, we conducted a field experiment with 102 graduate students seeking jobs to replicate our findings and to uncover mediating mechanisms. We presented jobseekers an actual vacancy in a startup where we manipulated the vision communication. We found that a startup vacancy communicating a social vision had a 22.4% lower probability of attracting a job applicant than a startup vacancy not communicating a social vision. We also unveil the mediating mechanism for this negative effect: jobseekers' perceived career advancement opportunity—not value fit. We found jobseekers setting a premium of 221 euros on the minimum demanded gross monthly salary (nearly 14% of minimum wage) for

considering work at the venture communicating a social vision.

Our study coalesces research on human resource management, purpose-driven organizations, and (social) entrepreneurship to offer several contributions. First, we challenge the growing presumption that social vision communication benefits the overall human capital strategies of established firms (Greening and Turban 2000, Backhaus et al. 2002, Bhattacharya et al. 2008, Evans et al. 2011, Aguinis and Glavas 2012, Burbano 2016). Specifically, our study questions whether these benefits accrue in startup firms. We argue and show that social vision communication may well backfire in entrepreneurial settings. Thereby, we open up new research avenues for the growing literature on boundary conditions shaping purpose-driven organizations (Lee and Huang 2018, Burbano 2021, Ganguli et al. 2021, Abraham and Burbano 2022, Durand and Huysentruyt 2022, Gartenberg and Serafeim 2022).

Second, we contribute to human resource literature (Kristof-Brown et al. 2005, Edwards and Billsberry 2010, Van Vianen 2018) by showing that social vision communication's impact on the job application decision reaches beyond value fit, as previously assumed (Greening and Turban 2000, Backhaus et al. 2002, Evans and Davis 2011, Burbano 2016). We show that social vision communication by startup ventures impacts application decisions via jobseeker evaluation of the venture as a doorway to career advancement.

Third, although a growing body of entrepreneurship research has begun investigating prosocial motivations of entrepreneurs (Guzman et al. 2020, Ganguli et al. 2021), it has still neglected this pressing issue: the struggle to hire talent (Battilana and Dorado 2010, Smith and Besharov 2019). We build theory explaining why social vision communication limits the jobseeker perception of career advancement prospects, thereby limiting the initial applicant pool that a venture attracts. We thus join a burgeoning stream of research on the labor market for startup employment (Sauermann 2018, Nyström 2021, Sorenson et al. 2021) and respond to the call for more research on entrepreneurial resource acquisition beyond that of financial capital (Clough et al. 2019).

## Entrepreneur Vision Communication

Vision communication has been deemed a key tool for entrepreneurs in shaping stakeholder perceptions (Garud et al. 2014, van Balen et al. 2019, Mollick 2020, Wood et al. 2021). It involves conveying imagery of the future of a collective (e.g., technology, employees, customers, industries) (van Knippenberg and Stam 2014, Berson et al. 2015). Although entrepreneurs may have visions they choose not to communicate, stakeholders can make sense of a vision's content only if it is expressed (Stam et al. 2014). We thus follow prior work and limit our focus to vision communication that informs stakeholders of the substantive value of what a venture aims to become and achieve (Baum et al. 1998, Baum and Locke 2004, van Balen et al. 2019). Vision communication influences what people deem desirable or possible for the venture (Wry et al. 2011, Stam et al. 2014), and this allows entrepreneurs to distinguish their ventures from others (van Werven et al. 2015). For example, Moser et al. (2017) have shown that jobseekers consider a startup with a clear vision as more attractive. Later, van Balen et al. (2019) found that vision communication emphasizing fundamental change in markets and ways of doing business exerts substantial effects on investor decisions to fund ventures.

An increasingly popular form of vision content, one meriting large interest in entrepreneurship research, is the social vision (Dacin et al. 2011, Bruton et al. 2013, Markman et al. 2016, Branzei et al. 2018, Lee and Huang 2018). Popularized by the adage of "making the world a better place," social vision communication conveys an image of the future where issues salient to environmental and/or societal well-being are tackled by venture activities (Grant 2008, Dacin et al. 2011, Wright et al. 2012, Wry and York 2017). Whereas entrepreneurship research has thus far remained silent about the effects of social vision communication on recruitment, research on human resources has unanimously touted the benefits of socially oriented communications to lure jobseekers, if only for established organizations (Greening and Turban 2000, Backhaus et al. 2002, Bhattacharya et al. 2008, Evans and Davis 2011, Bohlmann et al. 2018). For example, Jones et al. (2014) have found that communication of a firm's community involvement and environmental practices positively influences jobseeker intentions to apply, and Burbano (2016) has shown that freelancers may accept salary discounts to jobs that communicate corporate social responsibility (CSR). Abraham and Burbano (2022) paint a more nuanced picture: organizational claims about diversity and community involvement garner interest only from female jobseekers when communicated by female leaders. These social communications boost feelings of anticipated pride, meaning, and value fit with the prospective organization (Highhouse et al. 2007, Jones et al. 2014, Gartenberg et al. 2019, Gartenberg and Serafeim 2022). Research has explained this as people often valuing the wellbeing of others (Schwartz and Bardi 2001, De Dreu and Nauta 2009) so that organizations perceived as caring about others become more attractive to jobseekers (Turban and Greening 1997, Cable and Turban 2003). Here, social vision communication is predicted to attract larger pools of applicants, and a heightened sense of value fit has been highlighted as the primary mechanism.

This argument has assumed value fit to be the primary factor affecting jobseekers' decisions to join a startup.

However, others have recognized that jobseekers are also driven by the match between their needs and the potential (non)pecuniary benefits of the job (Cable and DeRue 2002, Chapman et al. 2005, Ployhart 2006, Breaugh 2013, Ployhart et al. 2017). These benefits may include pay, holidays, pension plan plus other fringe benefits and perks, and the nonpecuniary benefits such as autonomy, involvement in key decisions, task variety, learning, and opportunities for promotion (Vroom 1966; Cable and Judge 1994, 1996). For example, Non et al. (2022) recently discovered that, compared with the promotion of CSR and sustainability, graduate students assign more value to a vacancy promoting autonomy, multidisciplinary work, high salary, and job security. Although social vision communication clearly bolsters value fit, prior research has explained only part of the startup recruitment puzzle as it has overlooked jobseeker perception of career advancement opportunities. This lack of clarity limits our understanding of entrepreneurs' ability to attract talent through vision communication.

This is a critical limitation because human capital is a key source of competitive advantage, growth, and innovation for startups (Rauch et al. 2005, Sauermann 2018). Building human capital starts with the recruitment process, and its goal is to maximize a pool of applicants with sufficient heterogeneity to optimize the odds of high-quality matches between the recruiting organization and the job applicant (Breaugh 2013, Ployhart et al. 2017, Weller et al. 2019). Building and testing theory on the relationship between social vision communication and startup recruitment therefore helps research understand how startups can use vision communications to build human capital. Toward this aim, we first discuss jobseeker motives for joining a startup. We then derive our hypotheses by explaining how social vision communication relates to jobseeker sensemaking.

## Hypothesis Development Why Do Jobseekers Join Startups?

Although recruitment is tough for any company, convincing talent to apply remains even more challenging for startups (Nyström 2021). First, the information asymmetry between startup and jobseekers is much higher (Stinchcombe 2000). Jobseekers may already have cultural knowledge and image attribution of larger organizations (e.g., "best places to work" rankings released by glassdoor.com), but such information about new ventures is scant. Second, role descriptions at startups are vague and still in development (Williamson 2000). Not only does this make the communication of realistic job previews not feasible for startups, thus hurting legitimacy, it also signals to potential employees the expectation of performing beyond their roles and usual office hours (Cardon and Stevens 2004). Third, startups lack the size and resources to offer the compensation and

benefits established firms do (Barber et al. 1999, Cardon and Stevens 2004, Burton et al. 2018, Mollick 2020).

These downsides of startup employment notwithstanding, a considerable portion of the labor market considers a startup job as a viable career (Barber et al. 1999, Ouimet and Zarutskie 2014, Sauermann 2018). Jobseekers self-select into this labor segment (Agarwal and Ohyama 2013, Van Vianen 2018) for the career advancement opportunities that startup employment may offer. Prospects include extraordinary financial returns, growth, and prestige, as well as autonomy, intellectual challenge and learning (for recent discussions, see Elfenbein et al. 2010, Roach and Sauermann 2015, Sauermann 2018, Nyström 2021, Sorenson et al. 2021). Startup employment could offer huge financial returns especially when the startup becomes an extraordinary success, which presumably offsets any early income risks. Also, recruits may strive to experience relatively lofty hierarchical levels and decision-making authority. Thereby, they can develop a broader set of abilities and experiences than in established organizations, helping them to survey potential future roles and strengthen their resumé. Startup employment allows testing their own entrepreneurial ambitions by observing what it truly means to start and run a business. The fact that startup employees tend to move on after approximately two years (Waddoups 2007, Parker 2009) demonstrates that the startup job serves as a steppingstone for career advancement (Bidwell and Briscoe 2010, Briggs et al. 2012, Bidwell and Mollick 2015).

## Social Vision Communication and Employment Decisions

Social vision communication is likely to heighten perceived value fit—the automatic, near-universal, hardwired similarity assessment between a jobseeker's and an organization's value systems (Van Vianen 2018) under the prevalence of prosocial values (Schwartz and Bardi 2001, De Dreu and Nauta 2009). However, such factors influencing jobseekers' attraction and intentions do not always materialize in actual job application decisions (Aiman-Smith et al. 2001, Cunningham 2009). This is because jobseekers also actively make sense of how an organization can facilitate their own desired career advancement ambitions (Beach 1993, Savickas 2020).

We argue that a startup's social vision communication *negatively* relates to jobseeker perceptions of the venture as an opportunity for career advancement, impairing subsequent likelihood of applying to a respective position. First, startups offer equity to their inaugural employees to offset low initial pay, job insecurity, the extra work and lack of conventional benefits. In terms of career advancement, stronger earnings trajectories and equity returns materialize when the venture proves a major success.<sup>1</sup> Here, social vision communication negatively impacts application decisions because jobseekers

perceive the venture as underperforming key financial expectations. Social aims are often linked to lower forprofit business viability for ventures (Moizer and Tracey 2010). Indeed, grand environmental and societal challenges are extremely hard to solve, requiring a longer-term perspective (Agarwal et al. 2021), thus hurting any expectations of short-term success. Social entrepreneurs appear unwilling to compromise longterm social goals in favor of short-term business wins and financial imperatives (Bacq and Lumpkin 2014), thus being characterized by greater risk aversion and inability to overcome resource limitations (Weerawardena and Mort 2006). The long-term and daunting nature of societal and environmental issues may be perceived as undermining a venture's operational and business viability. Therefore, jobseekers may perceive impaired odds for successful exit or extraordinary venture growth.

Second, startup employment also intrigues applicants with enticing avenues for long-term career achievement, power, and prestige later in life. For example, Susan Wojcicki (former chief executive officer (CEO) of You-Tube), Omid Kordestani (former executive chairman of Twitter), and Melissa Mayer (former CEO of Yahoo) have often been lauded as Google's employee number 9, 11, and 20, respectively. However, social vision communication calls for transcending one's own needs in favor of others. Jobseekers at startups may thus associate this messaging with more altruistic and compassionate motivations (Tan et al. 2005). While desirable traits, these also create a perception that a particular degree of selfsacrifice is required to achieve the venture's vision. This signals that effort and resources are largely allocated in the service of *collective* gain rather than toward the individual (Miller et al. 2012). In terms of career advancement, this focus on the collective limits perception that a venture will allow much room for personal strivings (e.g., the pursuit of ambitions, career development, and financial growth).

Third, the startup environment appeals to applicants because of the relatively high autonomy, responsibility, task variety, flexibility, and intellectual challenge it may offer. These job features are vital to startup jobseekers pursuing personal growth and learning (Roach and Sauermann 2015, Nyström 2021, Sorenson et al. 2021). Social vision communication, however, explicitly highlights that a startup's reason for existence is its aim to address grand societal challenges.<sup>2</sup> This communication signals to jobseekers that the entrepreneurs of the startup may be "committed activists" (Wright et al. 2012) unwavering in the venture's strategic direction. Solving grand societal challenges requires a long-term systemic approach, unrelenting drive, and strong tenacity from the people tackling them. A jobseeker may anticipate that the entrepreneur transfers such expectations to employees of the startup as well. These expectations damage a jobseeker's perception of autonomy and variety in daily work, responsibility for strategic direction and achievement of the venture, and overall flexibility in the work environment (Lumpkin et al. 2013). In turn, this hurts a venture's career advancement potential for jobseekers aiming to use startup employment toward enhancing their resumé, moving early into management levels, or attaining skills and know-how crucial in starting their own businesses.

Overall, we argue that social vision communication limits jobseekers' future outlooks on career advancement opportunities owing to limited returns on their employment investment and realization of personal ambitions on the one hand, and desired job characteristics on the other. Thus, a venture's social vision communication relates negatively to jobseeker decisions so that fewer jobseekers apply. As a result, we hypothesize the following.

**Hypothesis 1.** A venture communicating a social vision is likely to receive fewer applications than a venture that does not.

### Compensating Impaired Career Advancement Opportunities

Pay is one of most important factors in job application decisions (Cable and Judge 1994, Chapman et al. 2005, Burbano 2016, Non et al. 2022). Jobseekers may set premiums or discounts to the minimum remuneration demanded, which quantify the perceived match between the applicant's needs and the vacancy's ability to meet them. Even in the startup setting where initial salary may be less and its growth not guaranteed over time (Fackler et al. 2021, Sorenson et al. 2021), remuneration demands reflect the utility jobseekers perceive from the presented vacancies (Stern 2004, Larkin et al. 2012).

We argue that jobseekers in the startup context derive less utility from vacancies where a venture communicates a social vision, as reflected by our arguments in Hypothesis 1: Jobseekers perceive a mismatch between what is conventionally desired of startup employment and what the startup is expected to supply in terms of career advancement opportunities. Specifically, social vision communication negatively influences future outlooks on steep earnings trajectories, individual ambitions, and personal growth and learning.

As a result, a potential recruit is likely to impose a pay premium for working at a startup that communicates a social vision to compensate foregone opportunities. For example, higher salary requirements reflect a lower potential for extraordinary returns due to a worsened outlook on venture risk-taking and growth. Moreover, social vision communication is associated with faltering business survival due to complexity in managing both for-profit and social aims. These concerns trigger higher pay demands to compensate any perceived job insecurity. Hence, we hypothesize the following.

**Hypothesis 2.** Jobseekers demand higher pay in response to startup social vision communication.

## **Overview of the Studies**

We investigated the relationship between social vision communication and startup recruitment in two complementary studies. Study 1 used archival data from Angel-List Talent (Angel.co)—a worldwide online platform dedicated to recruitment for startups. This study empirically tested whether social vision communication relates with the number of applicants received (i.e., Hypothesis 1) and provides evidence for the relation between social vision communication and the pay level (i.e., Hypothesis 2). We next conducted a randomized field experiment with a real vacancy aimed at a cohort of job seeking business school grads. Study 2 allowed us to replicate the findings of Study 1 (Hypotheses 1 and 2) in a randomized control setting and investigate underlying mechanisms (i.e., perceived career advancement opportunities).

## Study 1: Startups and Job Applicants on Angel.co

#### Sample We collected

We collected data on job vacancies and applications from the AngelList Talent platform (https://www.angel.co): a platform for startups to post jobs and recruit talent. Angel.co is part of angellist.com<sup>3</sup> geared to help startups raise money, build their teams, and launch their products. AngelList Talent is the self-claimed largest startup community in the world, arguably a renowned player in the field where both startups and jobseekers are likely to post and search on the platform, respectively. The platform offers a wide variety of vacancy postings from full-stack programming, data science, and engineering to business development, office support, and C-level management positions. Applicants can search for and apply to vacancies directly via the platform.

We downloaded all "Startup jobs" each day over a period of 86 days (January 18, 2019–April 13, 2019). We limited our sample to North American startups employing 50 or less (United States and Canada). This yielded 7,954 startups posting vacancies within that timeframe, including those posting jobs over the entire timeframe. To facilitate a manual coding process of vision statements, we randomly selected a sample of 1,200 ventures from the entire set. Because data from the AngelList Talent platform did not have information on a venture's age, sector, or investment stage, we collected data on these variables from Crunchbase.com, which is a high-quality database of venture and funding information for both investment practice and academic research (den Besten 2020, Retterath and Braun 2020). After eliminating ventures with missing values,<sup>4</sup> our final sample comprised 795 startups.

#### **Measures**

**Dependent Variable.** Angel.co reported the *Number of applications* each week per startup, which we assigned as the dependent variable. Because startups with postings on the platform for extended periods tend to yield more applications, we averaged the number of applications over the days each venture had job postings in our timeframe.

**Independent Variables.** To measure *Social vision communication*, we coded the statements of each startup displayed on the Angel.co website. Those webpages featured three sections communicating their organizations and vacancies: why us, the product, and the technology. We used all three sections to code a venture's overall vision communication, coded by two graduate assistants blind to our hypotheses. After initial instruction meetings and resolution of disagreements during a trial set of vision statements, the assistants proceeded to code in isolation and ceased any further contact.

Social vision communication emphasizes the wellbeing of other living creatures (physical, socio-economical, or psychological), both human and animal, as well as concern for nature and the environment (Grant 2008, Dacin et al. 2011, Wright et al. 2012, Wry and York 2017, Lee and Huang 2018). Communicating a social vision also embodies an idealized future-the substantive value of what the venture aims to become and achieve in the future (Baum and Locke 2004, van Balen et al. 2019). Accordingly, coders rated venture statements (one = yes, zero otherwise) for two items: (1) "clearly expresses concern for the well-being of other living creatures, both human and animal, and/or for nature and the environment," that is, raising a social and/or environmental concern (Cohen's kappa = 0.71, p < 0.001), and (2) "paints an ideal future without the implied social problem" (Cohen's kappa = 0.52, p < 0.001).

For both items, the coders were instructed to rate a statement as social only when the venture's activities appeared central in addressing the issue. To facilitate this interpretation, we asked the coders to also rate the counterfactual: whether the venture's communication signaled social impact unrelated to its business activities, such as donating money to a good cause or allowing employees to spend time helping in the community. For example, the startup Double Gemini states, "Making the world a better place is important to us. That's why every quarter, we deliver a selection of our services pro bono to a charity chosen by one of our team. The way we see it, if there are companies out there doing good for the world, we can help them get there faster." This occurred in only nine of the statements in our sample and only twice for startups assessed as having a high social vision.

Both coders yielded good agreement across items per vision statement (mean Rwg = 0.90) and displayed

sufficient agreement and reliability in the calculated social vision communication measure (mean *ICC2k* = 0.84, *F*(1190, 1184) = 6.25, p < 0.001). Consequently, we averaged the scores of the two coders for each item. Resulting averages were then summed for a total social vision communication score per statement. For comparative interpretation, we standardized the social vision communication variable and our communication-related control variables via z-score transformation. The online appendix<sup>5</sup> features our coding instructions, tabulated examples of coded venture statements, and additional validity assessments of our measure.<sup>6</sup>

*Remuneration* is a key factor that jobseekers consider in a listed vacancy (Cable and Judge 1994, Breaugh 2013). The AngelList Talent data, unfortunately, do not include information on jobseeker pay demands featured in Hypothesis 2, only renumeration offers by prospective employers. Still, we examined the interaction between the remuneration and social vision communication variables in our model as an initial test of Hypothesis 2 implying premium pay as dampening the negative effects of social vision communication. We test this hypothesis more directly in Study 2.

Startups lack the resources to offer competitive salaries (Cardon and Stevens 2004, Burton et al. 2018). Thus, vacancies often include equity (e.g., stock options) next to salary. Jobseekers tend to evaluate both in a total remuneration package. Hence, we combine the two to create one remuneration variable. Because salary is in thousand U.S. dollars and equity is denoted in percentages, we created the *Remuneration* variable by summing the z-scores of average *Salary* and *Equity* offered across job posts per venture within the timeframe.

**Control Variables.** Based on prior literature, we identified three sets of variables that control for the traits of the *communication* of the venture's statement, the *company* itself, and its posted *vacancies*.

We controlled for Disruptive vision communication. Recent research has shown disruptive vision as raising hopes of a venture's future success (Kanze and Iyengar 2017, van Balen et al. 2019). Per prior research (van Balen et al. 2019, Piazza et al. 2023), we identified disruptive vision communication under three elements signaling (one = yes, zero otherwise) whether a vision statement: (i) "promotes drastic [or fundamental] change in the future" (Cohen's kappa = 0.77, p < 0.001), (ii) "features a future that contrasts with the status quo" (Cohen's kappa = 0.77, p < 0.001), or (iii) "includes ideas, plans or other evidence of achieving conventional market objectives in a completely different manner" (Cohen's kappa = 0.75, p < 0.001). Both coders presented adequate agreement across items per vision statement (mean Rwg =0.84) and displayed good agreement and reliability in the calculated disruptive vision communication measure (mean ICC2k = 0.92, F(1190,217) = 12.50, p < 0.001).

We averaged the scores of the two coders for each item and then summed these means to calculate a disruptive vision communication score per statement.

An important associated element of vision communication is the level of *Imagery* in the syntax. Messages high in imagery can create more vivid pictures of what is communicated (Carton et al. 2014). To isolate the effect of vision communication beyond imagery, we controlled for the average level of imagery in words that venture statements expressed. We used the Toronto Word Pool to rate words on degrees of imagery using a one-toseven scale (Friendly et al. 1982). Imagery scores were then averaged as reflecting the words in a venture's vision statement. In a few instances, ventures created a job post before providing any information about the startup. These ventures may have proven less convincing to jobseekers. Hence, we controlled for whether (one) or not (zero) they had a Missing statement during any of the days in our timeframe while posting a job on the platform.

We also included controls about the venture. Naturally, ventures with more vacancy posts have a higher chance of receiving more applications. We controlled for the average *Number of vacancies* posted per venture in the prior week. This measure was constructed by first averaging the number of vacancies the startup had posted the week *before* the specific day of recording our dependent variable. Next, this measure for each company was averaged over the timeframe.

Furthermore, we controlled for job-post timing effects regarding the venture's ability to attract talent. On one hand, some ventures may have had less time to attract talent, whereas others that posted within the timeframe may have received an initial spike in applications, as these tend to trace a long-tail distribution over time (Faberman and Kudlyak 2016). We controlled for *Started posting in* (the) *timeframe* (one = yes), denoting startups listed in our data set with one or more jobs after day 3 in our data collection timeframe.

Next, startup size and age may also affect the number of applicants attracted. Although larger, older ventures may have better resources to lure jobseekers (e.g., benefits, security, facilities), it is conceivable that recruits actively apply through Angel.co by self-selecting on their ambitions to be part of a young and small startup. We controlled for *Venture size* by assigning a dummy variable indicating a venture (zero) having 1–10 employees versus (one) that staffing 11–50. We controlled for *Venture age* in years as listed on Crunchbase.com. Average venture age for our sample is 4.64 years old (standard deviation (SD) = 3.79). Our models also controlled for *Number of Founders* as larger founding teams might tap broader networks to attract talent.

Furthermore, startups that progress rapidly through funding stages may also have better resources to attract talent. We controlled for the *Funding stage* of ventures

as of the final day of our data collection timeframe, retrieving these data from Crunchbase.com. We assigned dummy variables for Preseed (95), Seed (245), Series A plus (135), Debt financing (6), and Series unknown (27). As a baseline, 287 ventures had not yet received any funding from professional investors in our datasets. We also controlled for North American regions where a startup ran offices as disclosed by the Angel-List Talent data. Certain regions in the North America may prove more attractive than others, and a company with offices in many regions may merit favor from a wider range of applicants. Regions in our data set included Northeast (265 startups), Midwest (106), South (120), West (400), and Canada (77). Because some ventures may have listed multiple locations, companies per region total more than 795. We included dummies for these regions in our models. Likewise, different industry sectors feature different employment needs, growth trajectories, and labor markets, leading us to include Sector dummies obtained from Crunchbase. com. The online appendix provides more details on these sector dummies.

Last, we controlled for vacancy-related characteristics. First, we included dummy controls for several job types because these may draw on different sized pools of available applicants. We included a dummy variable that indicates whether (one) or not (zero) the venture had one or more *Cofounder* vacancies. Although a venture may have listed multiple jobs beyond the search for a single cofounder, we created this dummy to avoid multicollinearity with the number of vacancies variable. Furthermore, we coded job types through the R-package called LabourR (Kouretsis et al. 2020). We included dummies for the following categories: *Managers, Professionals,* and *Technicians*. Remaining job types were grouped under *Other* and served as our baseline (see online appendix for more details).

Table 1 presents descriptive statistics for the variables in our models. The online appendix includes more details and the nontruncated correlation table.

#### **Analytical Approach**

Our dependent variable is an averaged count variable that proved right-skewed (skewness = 3.33) with a kurtosis of 20.40. We determined that it most closely followed a gamma distribution using the "descdist" function from the R-package "fitdistrplus" (Delignette-Muller and Dutang 2015). We thus enlisted a generalized linear model under gamma distribution with log-link transformation to analyze our data.

#### Results

Model 1 in Table 2 applied only job-level controls. Results show that vacancies for managers ( $\beta = 0.66$ , standard error (SE) = 0.09, p < 0.001), professionals ( $\beta = 0.69$ , SE = 0.15, p < 0.001), and technicians ( $\beta = 0.45$ , SE = 0.12,

Iable I. rearson Correlations of Study 1	nnic re	T														
Variable name	Mean	Mean Standard deviation	1	2	3	4	5	6	7	8	6	10	11	12	13	14
1. Number of applications	10.04	12.07														
2. Social vision communication	0.21	0.42	-0.04													
3. Remuneration	0.00	1.37	0.07	-0.03												
4. Disruptive vision communication	1.16	1.01	0.05	0.23	0.02											
5. Imagery	0.02	0.01	0.08	0.19	-0.01	0.43										
6. Missing statement	0.00	0.06	-0.03	-0.03	0.00	-0.01	-0.07									
7. Number of vacancies	2.22	1.90	0.51	0.07	0.06	0.13	0.14	-0.02								
8. Started posting in timeframe	0.19	0.39	0.02	0.04	-0.06	-0.03	-0.05	0.08	-0.20							
9. Venture size	0.51	0.50	0.06	-0.02	-0.05	0.00	0.0	0.06	0.20	-0.07						
10. Number of founders	1.49	0.98	0.09	0.05	-0.01	0.0	0.14	-0.09	0.09	-0.13	0.01					
11. Venture age	4.64	3.79	-0.10	-0.06	-0.11	-0.03	0.08	-0.02	-0.03	-0.04	0.24	-0.16				
12. Cofounder	0.01	0.11	0.04	0.04	0.34	0.01	-0.02	-0.01	-0.03	0.00	-0.05	-0.04	-0.03			
13. Managers	0.42	0.49	0.23	0.10	-0.02	0.09	0.10	-0.01	0.34	-0.07	0.15	0.03	0.02	-0.03		
14. Professionals	0.82	0.38	0.10	-0.07	-0.03	0.06	0.03	0.03	0.25	-0.10	0.02	0.08	-0.03	-0.07	-0.42	
15. Technicians	0.15	0.36	0.20	0.11	-0.14	0.06	0.06	-0.03	0.38	-0.09	0.14	0.05	-0.03	-0.02	0.17	-0.07
Office region control				l	ncluded in full correlation	in full co	rrelation	table in	the onli	table in the online appendix	dix					
Funding stage controls																
Sector controls																ĺ

p < 0.001) drew more applications versus other job types (i.e., clerical support workers, plant and machine operators, craft and related trades workers).

Model 2 in Table 2 also controlled for venture-level variables. Model fit increased significantly between Models 1 and 2 ( $\chi^2 = 215.15$ , df = 30, p < 0.001). We observe ventures with a higher number of vacancies  $(\beta = 0.19, SE = 0.02, p < 0.001)$  that began posting within our timeframe ( $\beta = 0.42$ , SE= 0.11, p < 0.001) and those reporting more founders on the platform ( $\beta = 0.13$ , SE = 0.03, p < 0.001) had received more applications. We further note that startups with offices in Canada  $(\beta = 0.40, SE = 0.14, p = 0.01)$ , northeastern United States  $(\beta = 0.28, SE = 0.09, p < 0.01)$ , and western United States  $(\beta = 0.24, SE = 0.09, p = 0.01)$  are associated with more applications, whereas older ones ( $\beta = -0.04$ , SE = 0.01, p < 0.001) and those in Series A funding stage or higher  $(\beta = -0.40, SE = 0.11, p < 0.001)$  are associated with fewer applications.

Model 4 in Table 2 presents our test for Hypothesis 1. Including the social vision communication variable enhanced model fit significantly ( $\chi^2 = 13.08$ , df = 1, p < 0.001). Results show communication of a social vision to negatively relate to the number of applications that startups received on the platform during the timeframe  $(\beta = -0.13, SE = 0.03, p < 0.001)$ . Based on the model coefficient, a one-standard-deviation rise in social vision communication correlates with attracting 12.2% fewer applications. The post hoc calculated average marginal effect shows that a one standard deviation increase in social vision communication reduces the number of applications by 1.37 ( $\beta = -1.37$ , SE = 0.38, p < 0.001). To further investigate the effect size, we used Model 4 from Table 2 to predict the number of applications typically received. Predictions indicate that a venture communicating no social vision attracts 8.4 applications, whereas one that communicates a social vision receives only 4.5 applications-46.3% fewer applications.

The data in Study 1 feature renumeration offered by the posting employer. This information provides indirect evidence for Hypothesis 2, which proposes that social vision communication should induce applicants to set a salary premium, but thereby implies that higher remuneration should counter the negative effect of social vision communication.<sup>7</sup> Model 5 in Table 2 reports a statistically significant interaction between social vision communication and remuneration ( $\beta = 0.07$ , SE = 0.02, p < 0.01). Figure 1 visualizes this interaction on the original scale of our dependent variable, showing that social vision communication associates less negatively with the number of applications when a startup offers higher remuneration.

To facilitate interpretation of interaction terms in nonlinear models, we calculated the average marginal effect of social vision communication conditional on remuneration per the dependent variable's original scaling. We

 Table 1. Pearson Correlations of Study 1

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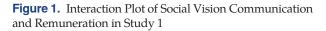
		Dependent v	ariable: Number oj	f Applications	
Variable name	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	1.31**	0.96***	0.99***	0.97***	0.99***
· • •	(0.16)	(0.17)	(0.18)	(0.17)	(0.17)
Social vision communication (SVC)				-0.13***	-0.13***
				(0.03)	(0.03)
Remuneration	0.06*	0.01	0.01	0.01	0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
$SVC \times Remuneration$					0.07**
					(0.02)
Disruptive vision communication			-0.02	0.00	0.00
			(0.04)	(0.04)	(0.04)
Imagery			0.05	0.06	0.06
			(0.04)	(0.04)	(0.04)
Missing statement			$-0.30^{+}$	-0.38*	-0.39*
			(0.16)	(0.15)	(0.15)
Number of vacancies		0.19***	0.19***	0.20***	0.20***
		(0.02)	(0.02)	(0.02)	(0.02)
Started posting in timeframe		0.42***	0.43***	0.44***	0.46***
		(0.11)	(0.11)	(0.11)	(0.11)
Venture size		0.07	0.07	0.08	0.09
		(0.09)	(0.09)	(0.09)	(0.09)
Venture age		$-0.04^{***}$	-0.05***	$-0.05^{***}$	-0.05***
		(0.01)	(0.01)	(0.01)	(0.01)
Number of founders		0.13***	0.12***	0.11***	0.11***
		(0.03)	(0.03)	(0.03)	(0.03)
Office region controls		Included	Included	Included	Included
Funding stage controls		Included	Included	Included	Included
Sector controls		Included	Included	Included	Included
Cofounder	0.46	0.75*	0.76**	0.86**	0.56*
	(0.31)	(0.29)	(0.30)	(0.32)	(0.28)
Managers	0.66***	0.38***	0.38***	0.39***	0.39***
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
Professionals	0.69***	0.34*	0.35**	0.35**	0.34**
	(0.15)	(0.13)	(0.13)	(0.13)	(0.13)
Technicians	0.45***	0.12	0.11	0.11	0.11
	(0.12)	(0.12)	(0.12)	(0.11)	(0.11)
AIC	5149.64	4994.49	4998.41	4987.33	4982.71
Log likelihood (df)	-2,568.82***	-2,461.25***	-2,460.21***	-2,453.66***	-2,450.36***
	(7)	(37)	(40)	(41)	(42)
Likelihood ratio test against competing models (df)		215.15***	2.08	13.08***	6.62*
		(30)	(3)	(1)	(1)

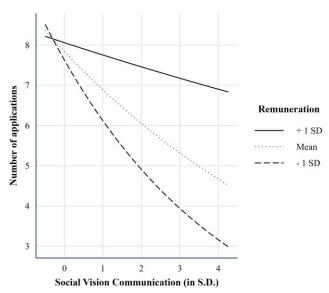
Notes. Standard errors are in parentheses. We present heteroskedasticity-consistent standard errors.

 $p^{+} < 0.10; p^{+} < 0.05; p^{+} < 0.01; p^{+} < 0.001.$ 

observed the marginal effect of social vision to be negative and significantly different from zero for startups offering average remuneration ( $\beta = -1.11$ , SE = 0.31, p <0.001) or one standard deviation below ( $\beta = -1.84$ , SE = 0.44, p < 0.001), but not for ventures offering one standard deviation above average ( $\beta = -0.34$ , SE = 0.37, p =0.36). Furthermore, we tested second-order differences in average marginal effects to determine whether differences between the marginal effects prove significant (Mize 2019). Results indicate all differences between the conditional average marginal effects to significantly differ from each other. The smallest difference is between the marginal effects at the mean renumeration and at one standard deviation below that mean ( $\beta = -0.73$ , SE = 0.27, p < 0.01; see Table S4.2 and Figure S4 in the online appendix).

To unpack the role of equity and salary dimensions of renumeration, we ran a version of Model 5 from Table 2 that included the moderation between social vision communication and salary and social vision communication and equity, instead of remuneration. The results in Figure S5a and Table S5.1 of the online appendix show that equity ( $\beta = 0.06$ , SE = 0.01, p < 0.001) and not salary ( $\beta = 0.01$ , SE = 0.01, p = 0.58) is driving the result of remuneration. Nonetheless, an analysis on the subset of ventures that do not offer any equity (n = 235) provides marginal evidence that higher salary offers also reduce the negative effect of social vision communication in the





absence of equity ( $\beta$  = 0.04, SE = 0.02, *p* = 0.06; see Figure S5b and Table 5.2 in the online appendix).

#### **Robustness Analysis**

In our final sample, 23.52% of ventures communicated a social vision. Given the recent rise in ventures communicating a social vision, such ventures may be younger, and thus smaller with limited vacancies, lower variation in job types, and number of locations throughout North America. Here, the communication of a social vision may well correlate with particular characteristics that potentially confound the comparison of ventures that communicate a social vision versus those that do not. To check robustness of our analyses, we conducted coarsened exact matching to estimate the average marginal effect of social vision communication on the number of job applications. We used 1:1 matching without replacement on the variables Number of vacancies, Started posting within timeframe, Company size, Investment type, Venture age, and Sector. Through this process, 69 ventures that communicated a social vision were paired with an equal number of ventures not doing so, yielding a total matched sample of 138 ventures. Here, 657 of 795 ventures were thus excluded.

To estimate the conditional effect of social vision communication, we replicated regression analysis per our main analyses of Models 4 and 5 in Table 2. We applied full matching weights in the estimation and report cluster-robust standard errors using matching-stratum membership as the clustering variable. Estimated effect of social vision communication ( $\beta = -0.14$ , SE = 0.05, p < 0.01) and its interaction with remuneration ( $\beta = 0.12$ , SE = 0.04, p < 0.01) remained qualitatively similar to our main analyses in Models 4 and 5, respectively, thus affirming the robustness of our results.

Finally, we confirmed that our primary findings were robust to using ordinary least squares (OLS) regression on the untransformed dependent variable and log-linear regression on the log-transformed dependent variable. Results remain similar for social vision communication in Model 4 (OLS:  $\beta = -1.26$ , SE = 0.33, p < 0.001; log-linear:  $\beta = -0.09$ , SE = 0.04, p = 0.02) and the interaction with remuneration in Model 5 (OLS:  $\beta = 0.45$ , SE = 0.24, p = 0.07; log-linear:  $\beta = 0.07$ , SE = 0.03, p = 0.02).

#### Study 1 Discussion

In Study 1, we found that a venture communicating a social vision is associated with receiving fewer applications, which can be offset by offering a larger renumeration package. Our data set for this study was obtained from a unique empirical setting that provided observations directly relevant for both business practitioners and researchers studying venture recruitment practices. Importantly, Angel.co is (to the best of our knowledge) one of the few, if not the only, worldwide recruitment platform dedicated to startups, thereby offering high ecological validity to our findings. However, Study 1 has three limitations. One, the generalizability might be limited, as the data come from a single online platform in North America. Second is the cross-sectional nature of these archival data, providing only associative evidence as to the impact of social vision communication on application decisions. Three, the study lacks the data to ascertain the underlying perceptions in jobseeker sensemaking. To address these limitations, we replicated our findings in a controlled randomized field experiment on job seeking business students in Europe.

## Study 2: Field Experiment with Student Jobseekers Participants

The focal unit of Study 2 comprises young, highly educated, potential recruits. We obtained names and contact details for all 619 students graduating a public business school in the Netherlands. Our focus on business students is consistent with prior research on social ventures. Businesspeople (e.g., analysts, data scientists, business developers, managers) are essential for organizing growth in early-stage ventures. However, as the literature suggests, ventures communicating a social vision have struggled retaining people with a business focus (Smith et al. 2013). Our aim is to ascertain whether they also struggle to convince these jobseekers to initially apply.

We contacted students in the spring term of their final year when most begin actively hunting for jobs that start after summer break. We sent an introductory email to each student's university address to invite participation in our research on student job decisions and placement options. We offered in return for their participation the opportunity to apply for a unique, genuine job opportunity, along with a comparison of their job preferences and interests versus participant averages. Over 200 students (n = 217) proceeded to click the link to an introductory page further detailing the survey. This web page informed participants that we would ask them about their job preferences, status, and an employment decision about the venture to be presented. Thirty-seven respondents opted not to give their informed consent. We discarded respondents who indicated they were not looking for a job or planning to stay in the Netherlands. The remaining 123 students actively seeking employment could provide their contact details and/or apply for the job at the survey's end by uploading their résumé to a secure drive.

After eliminating participants who did not fully finish the survey or failed the attention checks, our final sample comprised 102 participants: 57% male, averaging 23.62 years old (SD = 1.59), with 53% being of Dutch nationality, 10% of western European nationality, 17% from other European countries (i.e., eastern and southern Europe), and 20% non-European.<sup>8</sup>

#### Design

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We recruited one startup through the university's entrepreneurship center to supply a genuine vacancy for a starter position in business consulting, analytics, and operations research. We selected this venture because its vacancy matched the skills and interests of our business school graduates. We next crafted a two (low versus high social vision communication) × two (low versus high disruptive vision communication) randomized between-subjects experiment.9 Each condition was based on one job posting while keeping its description and requirements as similar as possible to the original. However, we manipulated the venture's vision statement over the test conditions (see online appendix). We retrieved the original vision statement from the venture for further editing to achieve our purposes. Last, we anonymized the name of the venture to avoid having participants search for the company online during their participation in the experiment.

### Measures

**Dependent Variables.** Our dependent variables aimed toward assessing the effects of the venture's vision communication on a jobseeker's actual application decision and proposal of a minimum salary. First, we included *Application decision* as a dummy variable in our models where one signals student submission of an email address or uploaded résumé, and zero otherwise.

Second, we operationalized salary demands by asking each participant to indicate the *Minimum demanded salary* (gross per month in euros) that the venture would have to offer for serious consideration in joining the venture (Cable and Turban 2003, Burbano 2016). This question was answered using a slider scale ranging 1,578 euros (Dutch legal minimum wage at the time of the study) to 10,000 euros.

**Independent Variables.** Identical to Study 1, our core manipulation pertained to the communication of a social vision. Study 1 controlled for communication of *disruptive* visions as a common alternative way for ventures to present themselves. To control for the potential effect of a type of nonsocial vision, we included the communication of a disruptive vision in our experimental design. We assigned dummy variables for *Social* versus *Disruptive vision communication* in our analyses and tested the interaction between these dummies as a control. For the social (disruptive) vision variable, one denotes survey participants exposed to a high social (disruptive) vision communication, and zero otherwise.

We measured perceived *Opportunity for career advancement* using four items adapted from Jarvenpaa and Staples (2001). Respondents were asked to indicate to what extent they agreed with the following four items on a five-point Likert scale (one = strongly disagree, five = strongly agree): "The job at this venture provides opportunity for my advancement and achievement," "This venture is a prestigious organization to work for," "In the job at the venture, my individual search for excellence has a top priority," and "My pursuit of individual power is acceptable in the job at the venture" (Cronbach's alpha = 0.69).

Control Variables. We controlled for various characteristics of the participants and their perceptions of the presented startup. First, to ascertain that perceived career advancement opportunity is the primary driver of application decisions above and beyond value fit, we controlled for perceived Value fit of participants with the featured startup. We measured value fit using three items adapted from Cable and DeRue (2002) on a five-point Likert-scale (one = strongly disagree, five = strongly agree): "The venture's values and goals provide a good fit with the things that I value in life," "The things that I value in life are very similar to the things that the venture values," and "My personal values match the venture's values and goals" (Cronbach's alpha = 0.92). In the Results section, we discuss our investigation of value fit as an alternative mediating mechanism.

Not all jobseekers perceive themselves equally capable of fulfilling specific job requirements. Hence, we controlled for *Skill fit* regarding perceived alignment between jobseeker skills with the job demands (Cable and DeRue 2002).We adapted three items from Spreitzer (1995) on a five-point Likert-scale (one = strongly disagree, five = strongly agree): "I am confident about my ability to do the job presented by the venture," "I am self-assured about my capabilities to perform the work activities required by the venture," and "I have

	Table 3.	Pearson	Correlations	of	Study	72	)
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Variable name	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Application decision $(1 = Yes)$	0.55	0.50										
2. Minimum demanded salary <sup>a</sup>	2.88	0.61	-0.21									
3. Social vision communication (dummy)	0.58	0.50	-0.22	0.13								
4. Disruptive vision communication (dummy)	0.48	0.50	-0.04	-0.16	0.07							
5. Opportunity for career advancement	3.29	0.65	0.38	-0.33	-0.08	0.13						
6. Value fit	3.56	0.79	0.37	-0.12	0.21	0.06	0.38					
7. Skill-fit	3.71	0.75	0.29	0.28	0.10	-0.08	0.25	0.40				
8. Age	23.62	1.59	0.33	0.15	-0.18	-0.10	-0.04	0.09	0.26			
9. Gender $(1 = Male)$	0.57	0.50	0.05	0.06	-0.10	0.01	-0.15	-0.15	0.02	0.03		
10. Expected salary <sup>a</sup>	2.67	0.44	0.00	0.51	0.07	-0.01	0.08	0.16	0.25	0.10	-0.18	
11. Nationality Dutch <sup>b</sup>	0.53	0.50	-0.38	-0.01	0.03	-0.12	-0.07	-0.34	-0.19	-0.30	0.09	-0.18
12. Nationality Western European	0.10	0.30	0.03	0.45	-0.12	-0.12	-0.25	0.03	0.14	0.20	0.09	0.12
13. Nationality Rest Europe	0.17	0.37	0.35	-0.33	-0.04	0.15	0.14	0.27	-0.02	-0.12	0.12	-0.09
14. Nationality Rest World	0.21	0.41	0.12	-0.01	0.09	0.09	0.14	0.15	0.14	0.34	-0.29	0.21

Note. SD, standard deviation.

<sup>a</sup>In thousands of Euros.

<sup>b</sup>The table does not include the correlations between the nationality dummies because respondents only had one nationality.

mastered the skills necessary for a job at the venture" (Cronbach's alpha = 0.89).

We also controlled for respondent *Gender*, *Age*, and *Nationality*. For nationality, we categorized respondents as either Dutch, western European, rest of Europe (mainly including eastern and southern European countries), or non-European. Last, our model estimating minimum demanded salary included a subject's expectation of the salary a venture will pay for the job as a control variable: *Expected salary*. This measurement scale was identical to that for the minimum demanded salary variable. Table 3 displays descriptive statistics for Study 2.

## Results

**Descriptive Statistics.** Fifty-five percent of respondents provided their contact information or applied for the vacancy. Participants, on average, indicated that for 2,876.28 euros (SD = 607.59) in minimum gross monthly salary they would seriously consider the vacancy, while expecting the venture to pay 2,669.55 euros (SD = 442.52) gross monthly, on average. In the online appendix, we tabulate detailed descriptive statistics for all variables in our models.

**Manipulation Checks.** To assess the manipulation of social vision communication, we asked subjects to rate on a five-point Likert scale (strongly disagree—strongly agree) agreement level with this: "In the job advertisement, the venture expresses concern for the future of the natural environment, societal issues and human well-being." Analysis under one-way analysis of variance (ANOVA) showed strong, significant differences between conditions (F(3, 98) = 44.70, p < 0.001). Post hoc contrast analysis revealed significant mean differences between all conditions involving a social vision versus those conditions not. The lowest mean difference of

significance arose for the "social×disruptive" versus "no vision" communication conditions (mean difference = -1.71, SE = 0.24, p < 0.001; Tukey adjusted).

To assess the effectiveness of our disruptive vision communication manipulation, we asked participants to answer on a five-point Likert scale (strongly disagree—strongly agree) how much they agreed with the statement: "In the job advertisement, the venture claims it aims to disrupt the market of supply chain analytics." One-way ANOVA showed strong, significant differences between conditions on this query (F(3, 98) = 7.50, p < 0.001). Post hoc contrast analysis indicated significant mean differences between all conditions involving a disruptive vision versus those conditions not. The lowest mean difference of significance emerged for the social versus social × disruptive vision communication conditions (mean difference = 0.89, SE = 0.27, p < 0.01; Tukey adjusted).

**Hypothesis Testing.** Table 4 shows the results of our analyses for Study 2. Model 4 regresses the talent application decision against our control variables. In line with prior research (Cable and Judge 1996, Jones et al. 2014), jobseekers who perceived value fit with the venture ( $\beta = 1.01$ , SE = 0.43, p = 0.03) were more likely to either provide their contact details or submit their CVs. We further note that older jobseekers ( $\beta = 0.73$ , SE = 0.24, p < 0.01) and those from non-Dutch, nonwestern European countries were more likely to apply ( $\beta = 3.33$ , SE = 1.16, p < 0.01) versus Dutch students. We ran a Wald test to assess the overall effect of *Nationality* and found it significant (F = 2.91, df = 3, p = 0.04).

Model 5 replicates the results for Hypothesis 1 observed in Study 1. Study 1 found that ventures communicating a fully social vision attracted 46.3% fewer applicants. Again, we see jobseekers less likely to apply

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Table 4. Regression Results of Study 2

	Opportunity :	Opportunity for career advancement (OLS)	cement (OLS)	Applicat	Application decision (logistic regression)	(logistic reg	ression)	Minim	num demar	Minimum demanded salary (OLS)	(OLS)
Variable name	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Intercept	2.53*	3.06** // 07)	2.86**	-23.38***	-21.80*** (6.47)	-22.10***	-31.89***	1.08	0.71	0.80	1.44 <sup>†</sup>
Social vision communication (SVC)	(06.0)	$(0.31)$ $-0.31^{*}$	(0.90) 0.47**	(17.0)	$(0.47) - 1.61^{**}$	$(0.00) -1.98^{*}$	(0.30) $-1.67+$	(07.0)	0.22*	(0.77) 0.24 <sup>+</sup>	(0.7 <i>0</i> ) 0.14
		(0.12)	(0.17)		(0.62)	(0.84)	(0.95)		(60.0)	(0.12)	(0.12)
Disruptive vision communication			-0.07 (0.18)			-1.12 (0.92)	-1.10 (1.02)			-0.00 (0.13)	-0.06 (0.13)
SVC  imes Disruptive vision			0.34			0.77	0.72			-0.04 0.18)	0.03
Opportunity for career advancement			(0.24)			(01.1)	(1.27) 2.02** (0.74)			(01.0)	(0.17) -0.23** (0.07)
Value fit	$0.24^{**}$	0.29**	0.29**	$1.01^{*}$	$1.25^{**}$	$1.28^{**}$	$0.90^{+}$	$-0.15^{*}$	$-0.18^{**}$	$-0.18^{**}$	$-0.12^{+}$
Skill-fit	(0.09) $0.15^{+}$	(0.09) $0.17^*$	(0.09) $0.19^*$	(0.43) 0.58	(0.46) $0.73^{+}$	(0.46) $0.76^{+}$	(0.50) 0.55	(0.06) $0.16^{*}$	(0.06) $0.15^*$	(0.07) $0.15^*$	(0.07) $0.19^{**}$
``	(0.09)	(0.09)	(60.0)	(0.40)	(0.42)	(0.42)	(0.46)	(0.07)	(0.06)	(0.07)	(0.06) 0.06)
Age	-0.02 (0.04)	-0.00 (10.04)	-0.04 (0.04)	0.73** (0.24)	0.65° (0.25)	0.67*** (0.26)	0.88**	-0.00	0.02	0.01 (0.03)	0.00
Gender	-0.11	-0.11	-0.11	0.52	0.41	0.49	0.42	0.11	0.11	0.11	0.11
	(0.13)	(0.12)	(0.12)	(0.55)	(0.59)	(0.60)	(0.66)	(0.0)	(0.00)	(0.0)	(60.0)
Expected salary								0.64***	0.64***	0.64***	0.64***
Nationality Western European	-0.55*	$-0.60^{**}$	$-0.61^{**}$	-0.30	-0.53	-0.77	0.37	0.64***	0.67***	0.67***	0.53***
	(0.21)	(0.21)	(0.21)	(0.81)	(0.86)	(0.89)	(1.04)	(0.16)	(0.15)	(0.16)	(0.16)
Nationality Rest Europe	0.07	0.01	-0.03	3.33** (1.16)	3.59** (1.24)	3.80** (1.29)	4.36** (1.38)	-0.35** (0.13)	$-0.31^{*}$	-0.29* (0.13)	-0.30* (0.12)
Nationality Rest World	0.05	0.08	0.00	0.34	0.51	0.63	0.41	-0.12	-0.14	-0.12	-0.12
	(0.17)	(0.17)	(0.17)	(0.69)	(0.73)	(0.80)	(0.87)	(0.13)	(0.13)	(0.13)	(0.12)
R²/AIC F statistic (df1/df2) and log likelihood (df)	$0.24$ $4.31^{***}$	0.29 4.78***	$0.31$ $4.18^{***}$	110.34 -47.17***	104.70 43.35***	107.00 -42.50***	98.87 —37.44***	0.54 13.43***	0.56 $13.25^{***}$	0.57 $10.76^{***}$	0.61 11.55***
	(7/94)	(8/93)	(10/91)	(8)	(6)	(11)	(12)	(8/93)	(9/92)	(11/90)	(12/89)
Test <sup>a</sup> against competing models (df)		6.33*	1.57		7.64**	1.7	$10.13^{**}$		6.02*	0.37	9.33**
		(1)	(2)		(1)	(2)	(1)		(1)	(2)	(1)
<i>Note.</i> Standard errors are in parentheses. <sup>a</sup> For the OLS regression, the Wald test was used ( <i>F</i> test statistic). $^{\dagger}p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001.$	sed (F test statisti		and the logistic regression applied a likelihood ratio test ( $\chi^2$ test statistic).	lied a likelihoo	d ratio test ( $\lambda$	<sup>2</sup> test statistic	÷				

van Balen and Tarakci: Social Vision Communication Organization Science, 2024, vol. 35, no. 1, pp. 326-345, © 2023 INFORMS to a venture communicating a social vision. In our field experiment, we detected potential recruits in the social vision communication conditions having 80% worse odds of applying to the venture than respondents in the control or disruptive vision conditions ( $\beta = -1.61$ , SE = 0.62, p = 0.01). To showcase these odds, we calculated the average marginal effect of social vision communication in Model 5 from Table 4. The calculation shows a 22% decline in the probability of receiving an application for ventures communicating a high social vision ( $\beta = -0.22$ , SE = 0.07, p < 0.01).

Model 8 features the regression of minimum demanded salary against our control variables. Results indicate jobseekers from non-Dutch, nonwestern European countries ( $\beta = -0.35$ , SE = 0.13, p = 0.01) and those who perceived value fit ( $\beta = -0.15$ , SE = 0.06, p = 0.02) as offering a discount on demanded gross monthly minimum salary. This finding echoes prior research (Cable and Turban 2003, Burbano 2016). We observe that respondents demanded a higher minimum salary for the position when originating from non-Dutch, Western-European nationalities ( $\beta = 0.64$ , SE = 0.16, p < 0.001), indicating high skill fit ( $\beta = 0.16$ , SE = 0.07, p = 0.02) or expecting the venture's level of pay<sup>10</sup> to prove superior ( $\beta = 0.64$ , SE = 0.10, p < 0.001).

We turned to Model 9 to test our hypothesis that jobseekers impose a salary premium for a venture communicating a social vision. Results show that respondents in the social vision condition demanded a salary premium of 221 euros on their minimum demanded gross monthly salary ( $\beta = 0.22$ , SE = 0.09, p = 0.02). This finding provides further empirical support for Hypothesis 2.

**Mediating Mechanisms.** We proposed the perceived opportunity for career advancement as the mechanism underlying the relationship among social vision communication and our dependent variables. Model 1 treated only control variables. Model 2 shows that a social vision communication negatively associated with a respondent's perceived opportunity for career advancement ( $\beta = -0.31$ , SE = 0.12, p = 0.02). In Models 7 and 11, we observe that a respondent's perceived opportunity for career advancement relates positively to their decision to apply for the vacancy ( $\beta = 2.02$ , SE = 0.74, p < 0.01) and negatively to their minimum salary demands ( $\beta = -0.23$ , SE = 0.07, p < 0.01).

To assess the indirect effect of social vision communication on the application decision through perceived opportunity for career advancement, we conducted mediation analysis via the mediation package in R (Tingley et al. 2014). Here we inferred the indirect effect by multiplication of coefficients from Models 3, 7, and 11. Confidence intervals (CIs) and p values were obtained via bootstrapping.<sup>11</sup> We found perceived opportunity for career advancement to statistically mediate the relationship between social vision communication and the application decision ( $\beta_{indirect} = -0.07, 95\%$  CI = [-0.17, -0.02], p = 0.02,  $\beta_{total} = -0.23, 95\%$  CI = [-0.40, -0.04], p = 0.02, 10,000 bootstraps). Furthermore, we see that perceived opportunity for career advancement mediates the relationship between social vision communication and minimum demanded salary ( $\beta_{indirect} = 0.07, 95\%$  CI = [0.02, 0.18],  $p = 0.02, \beta_{total} = 0.22, 95\%$  CI = [0.06, 0.38], p < 0.01, 10,000 bootstraps). The online appendix includes sensitivity analyses for our mediation models (Tingley et al. 2014).

Alternative Mechanisms. Our results suggest jobseekers' perceived career advancement opportunity explains the negative relationship between social vision communication and application decisions. Although we controlled for value fit in our models, alternative explanations may exist. Specifically, individuals sorting into startup employment may have a lower preference for social contributions in work, explaining our observed negative effect with the assortative matching principle.<sup>12</sup> If so, then the average jobseeker in our experiment should have perceived less value fit in the social vision conditions, because a preference for social contributions would be low. To ascertain robustness of findings, we regressed our main predictors and control variables against perceived value fit (Model 3 from Table 4) and applied mediation analysis on value fit as mediator between social vision communication and the application decision.

Results show that participants in the social vision communication condition experienced markedly higher value fit ( $\beta$  = 0.51, SE = 0.19, p < 0.01). Yet, mediation analysis detected no evidence of value fit mediating social vision communication and the decision to apply ( $\beta_{indirect} = 0.04, 95\%$  CI = [-0.01, 0.10], p = 0.24,  $\beta_{total} = -0.12, 95\%$  CI = [-0.31, 0.06], p = 0.17, 10,000 bootstraps). Furthermore, no strong evidence showed value fit mediating the relationship between social vision communication and minimum demanded salary ( $\beta_{indirect} = -0.04, 95\%$  CI = [-0.14, 0.01], p = 0.14,  $\beta_{total} = 0.11, 95\%$  CI = [-0.08, 0.27], p = 0.23, 10,000 bootstraps). We also included value fit in the model as an alternative confounding mediator and obtained similar results (see the online appendix for more details).

Finally, we included an interaction term for disruptive versus social vision communication in Model 3 of Table 4. This model provides no evidence of a statistically significant interaction effect between the two vision types on our mediator ( $\beta = 0.34$ , SE = 0.24, p = 0.16). Moreover, moderated mediation analysis indicated a significant mediation effect of perceived career advancement opportunity on the application decision to have been especially strong in the social vision communication condition ( $\beta_{indirect} = -0.12$ , 95% CI = [-0.23, -0.03], p = 0.02, 10,000 bootstraps), but *not so* in the social × disruptive vision communication condition ( $\beta_{indirect} = -0.3$ , 95% CI = [-0.13, 0.03], p = 0.38, 10,000 bootstraps). Likewise, mediation

effect of perceived opportunity for career advancement on minimum salary demand was driven by the social vision communication condition ( $\beta_{indirect} = 0.11, 95\%$  CI = [0.03, 0.26], p < 0.01, 10,000 bootstraps) and *not* by the social × disruptive vision communication condition ( $\beta_{indirect}$ = 0.03, 95% CI = [-0.03, 0.13], p = 0.36, 10,000 bootstraps).

## Study 2 Discussion

This field experiment study had three advantages over Study 1. First, it strengthens the generalizability our findings beyond the context of the Angel.co platform. Second, the randomized control nature of the study strengthened the causal claims regarding the impact of social vision communication on application decisions. Third, we could measure in Study 2 the underlying jobseeker perceptions associated with interpreting social vision communication and assess the (alternative) mechanisms.

The results of Study 2 replicate the main findings of Study 1: Strong social vision communication hampers a venture's ability to convince jobseekers to apply. We also find that talent will impose a salary premium for working at a venture communicating social vision. Finally, our experiment shows that jobseekers might perceive lower career advancement opportunity for joining a startup communicating a social vision. Our mediation analyses suggest this as a potential explanation for the negative effects of social vision communication on application decisions.

## General Discussion

We investigated how social vision communication affects entrepreneurs' ability to recruit talent. This is a crucial challenge for entrepreneurs because there is dire need for skilled professionals to help grow their ventures amid resource constraints. We hypothesized and subsequently showed in two studies that social vision communication attracts fewer applications to the startup and higher remuneration demands from the applicants. Results suggest that this is because social vision communication blunts jobseekers' perceived opportunity for career advancement. Our research poses strong theoretical implications for research on purpose-driven organizations, human resources management, and (social) entrepreneurship.

## Implications for Research on Purpose-Driven Organizations

Prior research extols socially oriented communications in attracting jobseekers (Greening and Turban 2000, Backhaus et al. 2002, Evans and Davis 2011, Jones et al. 2014, Burbano 2016, Bohlmann et al. 2018). Only recently, however, has research started to unearth the boundary conditions of purpose-driven organizations (Lee and Huang 2018, Gartenberg et al. 2019, Burbano 2021, Ganguli et al. 2021, Durand and Huysentruyt 2022, Gartenberg and

Serafeim 2022) and their recruitment efforts specifically (Burbano 2016, Abraham and Burbano 2022). Because prior studies have predominantly studied large existing organizations or freelance gig work, they have overlooked that startup recruitment and employment conditions differ starkly from other contexts. Although freelancers, for example, might accept such one-off assignments for altruistic reasons, working at a startup entails a multiyear commitment shaping one's entire future career (Roach and Sauermann 2015, Sauermann 2018, Nyström 2021). Our discussion invites future work to weigh vision communication directly under different employment conditions: large established firms, temporary or gig work, and startup employment. Such a comparative integration will provide a better understanding of socially oriented communications in recruitment.

We also observe that offering high renumeration may serve to offset the negative effect of social vision communication. This result echoes the work on mission-oriented grand challenges. For example, Agarwal et al. (2021) recently emphasized that public sector communication of the perceived impact and time urgency of grand challenges fails to motivate private enterprises absent the articulate alignment and augmentation of both financial and mission goals. Future research can unearth how complementing social vision communication with financial assurances beyond remuneration may alleviate jobseeker concerns.

#### Implications for Human Resources Research

We responded to the call for scrutinizing mechanisms that underlie the communication and applicant attraction relationship (Aguinis and Glavas 2012, Breaugh 2013), as well as reaffirm that research should look beyond value-fit perceptions as the main mechanism explaining job application decisions (Dineen et al. 2002, Jones et al. 2014, Swider et al. 2015, Van Vianen 2018) and more toward the match between jobseeker needs and potential pecuniary and nonpecuniary benefits of the job (Cable and DeRue 2002, Chapman et al. 2005, Ployhart 2006, Breaugh 2013, Ployhart et al. 2017, Guan et al. 2021). Specifically, we spotlight that potential recruits' interpretations of the messaging in job vacancies affect their perceived career advancement opportunity, showing that their general interpretation of social vision communication may limit this perception. Our finding supports the notion that messaging content affects jobseeker expectations as to the particular work environment an organization offers (Wanous et al. 1992). In light of HR literature's over-reliance on ratings of organizational attractiveness (Dineen et al. 2002, Chapman et al. 2005, Breaugh 2013, Jones et al. 2014, Moser et al. 2017), our behavioral measure of jobseeker application decisions reaffirms that the factors influencing applicant attraction may not always equate with those impacting the application decision.

#### Implications for Research on Entrepreneurship

This study has responded to the recent call for more empirical research into social "for-profit" ventures and their talent recruitment (Wry and Haugh 2018, p. 568). A current set of qualitative investigations has suggested that social for-profit ventures face a tense struggle between their social and business missions, and that startups need to actively balance these two rationales when managing stakeholders (Battilana and Dorado 2010, Smith et al. 2013, Wry and York 2017, Smith and Besharov 2019). However, the impacts of communicating social aims on the initial attraction of talent, as well as the underlying processes of the jobseeker's decision in social ventures, have remained in the dark. Here, we contribute to a deeper sense of the challenges that social for-profit ventures must conquer to attain the needed human resources (Smith et al. 2013, McMullen 2018, Wry and Haugh 2018).

By extension, this suggests that startups using social visions risk being "stuck in the middle" of the labor market between classic for-profit ventures and social nonprofit enterprises. An arguably even stronger mission orientation of nonprofit organizations allows them to draw heavily from the labor pool of applicants gravitating toward social causes, while for-profit organizations have the edge in reaping the conventional labor pool. This would leave fewer candidates for social forprofit enterprises to capture. Whether social for-profit startups indeed draw from a thin labor pool at the start of the recruiting process appears to be a worthwhile direction for future research.

We also responded to the call for more studies on entrepreneurial resource acquisition that analyze outcomes beyond financial capital (Clough et al. 2019). Although there is a burgeoning stream of research on the labor market for startup employment (Barber et al. 1999, Sauermann 2018, Nyström 2021, Sorenson et al. 2021), recognizing that jobseekers at startups have different traits from those in the orbit of large established firms (Barber et al. 1999, Roach and Sauermann 2015), studies that drill down at how exactly entrepreneurs convince talent to join them are rare (for exceptions, see Chung and Parker (2022) and Moser et al. (2017)).

#### Managerial Implications

Entrepreneurial vision communication is an impression management technique that affects stakeholder understanding of a venture (Garud et al. 2014, van Balen et al. 2019, Wood et al. 2021). Visionary entrepreneurs can communicate how their venture activities translate into market outcomes in the future (e.g., how they effectuate large societal impact). Although visionary content is strongly advised for communicating what a venture aims to attain, entrepreneurs should be keenly attentive to potential up- and downsides of particular forms of communication. Research has shown efforts exploiting specific types of language, such as figurative or assertive speech (Parhankangas and Renko 2017, Clarke et al. 2019), including image-evoking words (Carton et al. 2014), or those conjuring integrative themes focused on conveying images of growth (Baum et al. 1998, Baum and Locke 2004), aspiring leadership (Martens et al. 2007) or disruption (van Balen et al. 2019) can impart quite diverging effects on how stakeholders view and act toward a venture. Our investigation has shown that showcasing social impact may curb entrepreneurial ability to attract a large applicant pool as this conveys limited opportunities for career advancement to startup jobseekers. To mitigate this downside, our results suggest coupling high levels of remuneration while emphasizing career advancement opportunities.

#### Limitations and Directions for Future Research

We recognize that the communication of social aims can yield a very different effect at later stages of the recruitment process (Swider et al. 2015). For example, at the selection stage, it may be the specific goal of the entrepreneur to select individuals from the applicant pool most motivated by the social vision. The retention stage entails keeping employees in the organization. Since our work is silent on later stages and the integrity of the social vision content—as some organizations may mislead jobseekers about their organizational cultures (Weller et al. 2019)—future research should unearth how the communication of social visions pans out in these subsequent phases of the recruitment-socialization process. Also, because HRM literature currently suggests that an organization's social aims correlate with lower turnover rates and higher satisfaction (Bode et al. 2015, Ng et al. 2019, Nejati et al. 2021), future research may espouse whether this retention effect of social visions also prevails for startups where it would offset the initial detriments of the social vision on the entry applicant pool.

Both the self-selection of applicants seeking a job on the AngelList Talent platform and our reliance on a sample of business students in Study 2 pose limitations as to ruling out any sorting and/or selection effects. For example, recent research has shown over-representation of men in the labor pool of startup recruits, repelling women applicants to these ventures (Engel et al. 2022). Also, there is a risk that jobseekers embracing social visions and startups that feature social messaging may tend to tap personal networks to screen and match up (Weller et al. 2019). In other words, particular types of applicants may identify startups with a social vision through routes different than those we investigated empirically. Future research should study the effects of startup visions and applicant characteristics using data that allow two-sided matching models (for guidelines and examples, see Honoré and Ganco (2023), Mindruta (2013), and Mindruta et al. (2016)).

Additionally, we acknowledge that our conclusions from Study 2 may apply chiefly to students seeking business positions (e.g., data scientists, analysts, business developers, managers). Arguably, these positions are essential for early-stage venture growth, and our focus on business students aligns with prior research on hybrid ventures (Smith et al. 2013). Notwithstanding, the underlying sensemaking processes of the various audiences may differ, as well as the exact causal link with the type of communication. Future research should also investigate whether our findings are singular to jobseekers for business positions or extend to other types of positions such as the ones controlled for in Study 1.

## Conclusion

We presented theory and empirical evidence that entrepreneurial communication of a social vision for ventures may well hamper ability to attract talent because it may limit jobseekers' perception of career advancement opportunity. We challenge the taken for granted assumption that socially oriented communications unilaterally facilitate recruitment and highlight perceived career advancement opportunities as a key mechanism in jobseeker decisions. Our work motivates further investigation of how social for-profit ventures can overcome their communicative challenges, for example, by offering higher renumeration. Finally, our work suggests that entrepreneurs should feature social visionsany vision content for that matter—with great caution, ever aware of the many communicative aspects that may play a role in stakeholder sensemaking.

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## Endnotes

<sup>1</sup> Recent research shows that startup employees earn less money over time and on average do not compensate for their initially low salaries with stronger earnings trajectories later on (Sorenson et al. 2021). However, it is likely that jobseekers of startups still find the possibility of extreme equity returns attractive to offset the risk.

<sup>2</sup> This paper focuses specifically on startups that, in their vision communication, purport to address societal and environmental issues with their business activities. This does not include companies that just take a stand on social problems through, for example, brand activism or donations.

<sup>3</sup> As per March 2023, AngelList Talent will branch out into a separate entity from AngelList Venture and continues under the name Wellfound.

<sup>4</sup> The sample with only data from Angel.co (i.e., excluding the data from Crunchbase.com) is 1,112 observations. The results for social vision communication remain qualitatively similar ( $\beta = -0.11$ , standard error = 0.03, *p* < 0.001).

<sup>5</sup> See https://osf.io/9nrgs/?view\_only=4a3b3460940340b8a5c048e8 83951930.

<sup>6</sup> We additionally ran topic modeling with latent Dirichlet allocation (LDA) on the ventures' statements. We also checked the correlations between our coded measure and a word count of social vision related words and the social and environmental impact categories listed in the Crunchbase database. We include these validity analyses in the online appendix. Importantly, we note here that both the topic modeling approach and the word count method appear to fall short in distilling vision content. For example, social vision should communicate an image of the future, which is often context dependent, instead of just mentioning sustainability-related words. This is why we had opted for the more complex and accurate approach of manually coding the ventures' communication.

<sup>7</sup> Study 2 measures the remuneration demands from potential job applicants. Remuneration offered in Study 1 is obtained from the venture. It would be ideal if we could have aligned the test of Hypothesis 2 between Studies 1 and 2. Nevertheless, we ran a version of Model 4 from Table 2 with *Remuneration* as the dependent variable. Results provide no evidence of a significant effect of social vision communication on the level of remuneration offered ( $\beta = -0.04$ , standard error = 0.04, p = 0.36).

<sup>8</sup> There were no significant differences between our full sampling frame (the discarded participants plus nonrespondents) and those in the final sample in terms of age (t = 0.39, df = 145.92, p = 0.70) and gender ( $\chi^2 = 0.12$ , df = 1, p = 0.73). However, we did find a significant difference in terms of Nationality ( $\chi^2 = 17.40$ , df = 3, p < 0.001). Notably, the proportion of Dutch students is significantly lower in the final sample (difference = -14%;  $\chi^2 = 6.75$ , df = 1, p < 0.01), whereas the rate of participants from outside of Europe was larger (difference = 12%;  $\chi^2$  = 12.63, df = 3, *p* < 0.001) than in the full sampling frame. This difference is not surprising, because students outside of Europe must find a job if they wish to stay in the country after their studies. At the same time, Dutch students would have an easier time finding jobs due to knowing the local language and face less immediate pressure to start a job after graduation as the government allows them to postpone student debt repayments. We conducted a Heckman correction for Models 2, 5, and 9 (from Table 4) to account for possible sample selection bias. We used Age, Gender, and Nationality as exclusion restrictions. Results for the effects of social vision communication on opportunity for career advancement ( $\beta = -0.23$ , standard error = 0.12, p = 0.06), the application decision ( $\beta = -0.32$ , standard error = 0.09, p < 0.001), and minimum salary demanded ( $\beta = 0.18$ , standard error = 0.10, p = 0.06) remained qualitatively similar.

<sup>9</sup> For our final sample, we checked the randomization of participants between experimental conditions. We find that participants were correctly randomized between conditions. The largest difference was in the rate of European versus non-European nationalities ( $\chi^2$  = 4.98, df = 3, *p* = 0.17).

<sup>10</sup> There was no evidence that our manipulations affected respondent perception of salary level that the venture offered for the job.

<sup>11</sup> We used nonparametric bootstrapping with bias-corrected and accelerated (BCa) confidence intervals (DiCiccio and Efron 1996).

<sup>12</sup> Assortative matching refers to the principle where, on a labor market with friction, people valuing work on social and/or environmental issues ultimately match best with startups communicating a social vision. This assumes that the baseline interest in social and/or environmental issues might be lower in the labor pool of people attracted to startup employment. In that case, it is less likely that the negative effect is observed because jobseekers interpret social vision communication as limiting to career advancement opportunity, but because they simply value working on social and/or environmental issues less on average.

#### References

- Abraham M, Burbano V (2022) Congruence between leadership gender and organizational claims affects the gender composition of the applicant pool: Field experimental evidence. *Organ. Sci.* 33(1):393–413.
- Agarwal R, Kim S, Moeen M (2021) Leveraging private enterprise: Incubation of new industries to address the public sector's mission-oriented grand challenges. *Strategy Sci.* 6(4):385–411.
- Agarwal R, Ohyama A (2013) Industry or academia, basic or applied? Career choices and earnings trajectories of scientists. *Management Sci.* 59(4):950–970.
- Aguinis H, Glavas A (2012) What we know and don't know about corporate social responsibility: A review and research agenda. *J. Management* 38(4):932–968.
- Aiman-Smith L, Bauer TN, Cable DM (2001) Are you attracted? Do you intend to pursue? A recruiting policy-capturing study. J. Bus. Psych. 16(2):219–237.
- Backhaus KB, Stone BA, Heiner K (2002) Exploring the relationship between corporate social performance and employer attractiveness. *Bus. Soc.* 41(3):292–318.
- Bacq S, Lumpkin GT (2014) Can social entrepreneurship researchers learn from family business scholarship? A theory-based future research agenda. J. Soc. Entrepreneurship 5(3):270–294.
- Barber AE, Wesson MJ, Roberson QM, Taylor MS (1999) A tale of two job markets: Organizational size and its effects on hiring practices and job search behavior. *Personality Psych.* 52(4):841–868.
- Battilana J, Dorado S (2010) Building sustainable hybrid organizations: The case of commercial microfinance organizations. Acad. Management J. 53(6):1419–1440.
- Baum JR, Locke EA (2004) The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *J. Appl. Psych.* 89(4):587–598.
- Baum JR, Locke EA, Kirkpatrick SA (1998) A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. J. Appl. Psych. 83(1):43–54.
- Beach LR (1993) Broadening the definition of decision making: The role of prechoice screening of options. *Psych. Sci.* 4(4): 215–220.
- Berson Y, Halevy N, Shamir B, Erez M (2015) Leading from different psychological distances: A construal-level perspective on vision communication, goal setting, and follower motivation. *Leadership Quart.* 26(2):143–155.
- Bhattacharya CB, Sen S, Korschun D (2008) Using corporate social responsibility to win the war for talent. *MIT Sloan Management Rev.* 49(2):37–44.
- Bidwell M, Briscoe F (2010) The dynamics of interorganizational careers. Organ. Sci. 21(5):1034–1053.
- Bidwell M, Mollick E (2015) Shifts and ladders: Comparing the role of internal and external mobility in managerial careers. Organ. Sci. 26(6):1629–1645.
- Bode C, Singh J, Rogan M (2015) Corporate social initiatives and employee retention. *Organ. Sci.* 26(6):1702–1720.
- Bohlmann C, Krumbholz L, Zacher H (2018) The triple bottom line and organizational attractiveness ratings: The role of pro-environmental attitude. *Corporate Soc. Responsibility Environment. Managment* 25(5): 912–919.

Branzei O, Parker SC, Moroz PW, Gamble E (2018) Going pro-social: Extending the individual-venture nexus to the collective level. *J. Bus. Venturing* 33(5):551–565.

Breaugh JA (2013) Employee recruitment. Annu. Rev. Psych. 64:389-416.

- Briggs E, Jaramillo F, Weeks WA (2012) Perceived barriers to career advancement and organizational commitment in sales. J. Bus. Res. 65(7):937–943.
- Bruton GD, Ketchen DJ, Ireland RD (2013) Entrepreneurship as a solution to poverty. J. Bus. Venturing 28(6):683–689.
- Burbano VC (2016) Social responsibility messages and worker wage requirements: Field experimental evidence from online labor marketplaces. Organ. Sci. 27(4):1010–1028.
- Burbano VC (2021) The demotivating effects of communicating a social-political stance: Field experimental evidence from an online labor market platform. *Management Sci.* 67(2):1004–1025.
- Burton MD, Dahl MS, Sorenson O (2018) Do start-ups pay less? Industry Labor Related Rev. 71(5):1179–1200.
- Cable DM, DeRue DS (2002) The convergent and discriminant validity of subjective fit perceptions. J. Appl. Psych. 87(5):875–884.
- Cable DM, Judge TA (1994) Pay preferences and job search decisions: A person-organization fit perspective. *Personality Psych.* 47(2):317–348.
- Cable DM, Judge TA (1996) Person-organization fit, job choice decisions, and organizational entry. Organ. Behav. Human Decision Processes 67(3):294–311.
- Cable DM, Turban DB (2003) The value of organizational reputation in the recruitment context: A brand-equity perspective. J. Appl. Soc. Psych. 33(11):2244–2266.
- Cardon MS, Stevens CE (2004) Managing human resources in small organizations: What do we know? *Human Resources Management Rev.* 14(3):295–323.
- Carton AM, Murphy C, Clark JR (2014) A (blurry) vision of the future: How leader rhetoric about ultimate goals influences performance. Acad. Management J. 57(6):1544–1570.
- Chapman DS, Uggerslev KL, Carroll SA, Piasentin KA, Jones DA (2005) Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes. J. Appl. Psych. 90(5):928–944.
- Chung SHD, Parker SC (2022) Founder affiliations: Jobseeker reactions and impact on employee recruitment by start-up ventures. *Small Bus. Econom.* https://doi.org/10.1007/s11187-022-00694-7.
- Clarke JS, Cornelissen JP, Healey MP (2019) Actions speak louder than words: How figurative language and gesturing in entrepreneurial pitches influences investment judgments. Acad. Management J. 62(2):335–360.
- Clough DR, Fang TP, Bala Vissa B, Wu A (2019) Turning lead into gold: How do entrepreneurs mobilize resources to exploit opportunities? *Acad. Management Ann.* 13(1):240–271.
- Cunningham CJL (2009) Keeping work in perspective: Work-nonwork considerations and applicant decision making. *Employee Responsibility Rights J.* 21(2):89–113.
- Dacin MT, Dacin PA, Tracey P (2011) Social entrepreneurship: A critique and future directions. *Organ. Sci.* 22(5):1203–1213.
- De Dreu CKW, Nauta A (2009) Self-interest and other-orientation in organizational behavior: Implications for job performance, prosocial behavior, and personal initiative. J. Appl. Psych. 94(4):913–926.
- Delignette-Muller ML, Dutang C (2015) fitdistrplus: An R package for fitting distributions. J. Statist. Software 64(4):1–34.
- den Besten ML (2020) Crunchbase research: Monitoring entrepreneurship research in the age of big data. Preprint, submitted November 3, http://dx.doi.org/10.2139/ssrn.3724395.
- DiCiccio TJ, Efron B (1996) Bootstrap confidence intervals. Statist. Sci. 11(3):189–212.
- Dineen BR, Ash SR, Noe RA (2002) A web of applicant attraction: Person-organization fit in the context of web-based recruitment. J. Appl. Psych. 87(4):723–734.

- Durand R, Huysentruyt M (2022) Communication frames and beneficiary engagement in corporate social initiatives: Evidence from a randomized controlled trial in France. *Strategic Management J.* 43(9):1823–1853.
- Edwards J, Billsberry J (2010) Testing a multidimensional theory of person-environment fit. J. Managment Issue 22(4):476–493.
- Elfenbein DW, Hamilton BH, Zenger TR (2010) The small firm effect and the entrepreneurial spawning of scientists and engineers. *Management Sci.* 56(4):659–681.
- Engel PY, Lewis DT, Cardon DMS, Hentschel PT (2022) Signaling diversity debt: Startup gender composition and the gender gap in joiners' interest. Acad. Management J. Preprint, submitted November 10, https://doi.org/10.5465/amj.2021.1197.
- Evans WR, Davis WD (2011) An examination of perceived corporate citizenship, job applicant attraction, and CSR work role definition. *Bus. Soc.* 50(3):456–480.
- Evans WR, Davis WD, Frink DD (2011) An examination of employee reactions to perceived corporate citizenship. J. Appl. Soc. Psych. 41(4):938–964.
- Faberman J, Kudlyak M (2016) What does online job search tell us about the labor market? *Econom. Perspective* 40(1):1–15.
- Fackler D, Hölscher L, Schnabel C, Weyh A (2021) Does working at a start-up pay off? *Small Bus. Econom.* 58:2211–2233.
- Friendly M, Franklin PE, Hoffman D, Rubin DC (1982) The Toronto Word Pool: Norms for imagery, concreteness, orthographic variables, and grammatical usage for 1,080 words. *Behav. Res. Methods Instruments* 14(4):375–399.
- Ganguli I, Huysentruyt M, Le Coq C (2021) How do nascent social entrepreneurs respond to rewards? A field experiment on motivations in a grant competition. *Management Sci.* 67(10):6294–6316.
- Gartenberg C, Prat A, Serafeim G (2019) Corporate purpose and financial performance. *Organ. Sci.* 30(1):1–18.
- Gartenberg C, Serafeim G (2022) Corporate purpose in public and private firms. *Management Sci.* 1–25. https://doi.org/10.1287/ mnsc.2022.461.
- Garud R, Schildt HA, Lant TK (2014) Entrepreneurial storytelling, future expectations, and the paradox of legitimacy. *Organ. Sci.* 25(5):1479–1492.
- Grant AM (2008) Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. J. Appl. Psych. 93(1):48–58.
- Greening DW, Turban DB (2000) Corporate social performance as a competitive advantage in attracting a quality workforce. *Bus. Soc.* 39(3):254–280.
- Guan Y, Deng H, Fan L, Zhou X (2021) Theorizing personenvironment fit in a changing career world: Interdisciplinary integration and future directions. *J. Vocation Behav.* 126:103557.
- Guzman J, Oh JJ, Sen A (2020) What motivates innovative entrepreneurs? Evidence from a global field experiment. *Management Sci.* 66(10):4808–4819.
- Highhouse S, Thornbury EE, Little IS (2007) Social-identity functions of attraction to organizations. Organ. Behav. Human Decision Processes 103(1):134–146.
- Honoré F, Ganco M (2023) Entrepreneurial teams' acquisition of talent: Evidence from technology manufacturing industries using a two-sided approach. *Strategic Management J.* 44(1):141–170.
- Jarvenpaa SL, Staples DS (2001) Exploring perceptions of organizational ownership of information and expertise. J. Management Inform. Systems 18(1):151–183.
- Jones DA, Willness CR, Madey S (2014) Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. *Acad. Management J.* 57(2):383–404.
- Kanze D, Iyengar SS (2017) Startups that seek to "disrupt" get more funding than those that seek to "build." *Harvard Bus. Rev.* November:2–6.

- Kouretsis A, Bampouris A, Morfiris P, Papageorgiou K (2020) labourR: Classify Multilingual Labour Market Free-Text to Standardized Hierarchical Occupations. Accessed May 20, 2021, https://cran.rproject.org/web/pack ages/labourR/index.html.
- Kristof-Brown AL, Zimmerman RD, Johnson EC (2005) Consequences of individuals' fit at work: A meta-analysis of personjob, person-organization, person-group, and person-supervisor FIT. *Personality Psych.* 58(2):281–342.
- Larkin I, Pierce L, Gino F (2012) The psychological costs of pay-forperformance: Implications for the strategic compensation of employees. *Strategic Management J.* 33(10):1194–1214.
- Lee M, Huang L (2018) Gender bias, social impact framing, and evaluation of entrepreneurial ventures. Organ. Sci. 29(1):1–16.
- Lumpkin GT, Moss TW, Gras DM, Kato S, Amezcua AS (2013) Entrepreneurial processes in social contexts: How are they different, if at all? *Small Bus. Econom.* 40(3):761–783.
- Markman GD, Russo M, Lumpkin GT, Jennings PDD, Mair J (2016) Entrepreneurship as a platform for pursuing multiple goals: A special issue on sustainability, ethics, and entrepreneurship. J. Management Stud. 53(5):673–694.
- Martens ML, Jennings JE, Jennings PD (2007) Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. Acad. Management J. 50(5):1107–1132.
- McMullen JS (2018) Organizational hybrids as biological hybrids: Insights for research on the relationship between social enterprise and the entrepreneurial ecosystem. J. Bus. Venturing 33(5): 575–590.
- Miller TL, Grimes MG, McMullen JS, Vogus TJ (2012) Venturing for others with heart and head: How compassion encourages social entrepreneurship. Acad. Management Rev. 37(4):616–640.
- Mindruta D (2013) Value creation in university-firm research collaborations: A matching approach. *Strategic Management J.* 34(6):644–665.
- Mindruta D, Moeen M, Agarwal R (2016) A two-sided matching approach for partner selection and assessing complementarities in partners' attributes in inter-firm alliances. *Strategic Management J.* 37(1):206–231.
- Mize TD (2019) Best practices for estimating, interpreting, and presenting nonlinear interaction effects. Sociol. Sci. 6:81–117.
- Moizer J, Tracey P (2010) Strategy making in social enterprise: The role of resource allocation and its effects on organizational sustainability. Systems Res. Behav. Sci. 27(3):252–266.
- Mollick E (2020) The Unicorn's Shadow: Combating the Dangerous Myths that Hold Back Startups, Founders, and Investors (Wharton School Press, Philadelphia).
- Moser KJ, Tumasjan A, Welpe IM (2017) Small but attractive: Dimensions of new venture employer attractiveness and the moderating role of applicants' entrepreneurial behaviors. J. Bus. Venturing 32(5):588–610.
- Nejati M, Brown ME, Shafaei A, Seet PS (2021) Employees' perceptions of corporate social responsibility and ethical leadership: Are they uniquely related to turnover intention? *Soc. Responsibility J.* 17(2):181–197.
- Ng TWH, Yam KC, Aguinis H (2019) Employee perceptions of corporate social responsibility: Effects on pride, embeddedness, and turnover. *Personality Psych.* 72(1):107–137.
- Non A, Rohde I, de Grip A, Dohmen T (2022) Mission of the company, prosocial attitudes and job preferences: A discrete choice experiment. *Labour Econom.* 74:102087.
- Nyström K (2021) Working for an entrepreneur: Heaven or hell? Small Bus. Econom. 56(2):919–931.
- Ouimet P, Zarutskie R (2014) Who works for startups? The relation between firm age, employee age, and growth. J. Financial Econom. 112(3):386–407.
- Parhankangas A, Renko M (2017) Linguistic style and crowdfunding success among social and commercial entrepreneurs. J. Bus. Venturing 32(2):215–236.

- Parker SC (2009) Why do small firms produce the entrepreneurs? J. Soc. Econom. 38(3):484–494.
- Piazza M, Mazzola E, Perrone G, Vanhaverbeke W (2023) How do startups influence the resources commitment of different venture capital investors by communicating disruptiveness? *Long Range Planning* 56(2). https://doi.org/10.1016/j.lrp.2022.102293.
- Ployhart RE (2006) Staffing in the 21st century: New challenges and strategic opportunities. J. Management 32(6):868–897.
- Ployhart RE, Schmitt N, Tippins NT (2017) Solving the supreme problem: 100 Years of selection and recruitment at the Journal of Applied Psychology. J. Appl. Psych. 102(3):291–304.
- Rauch A, Frese M, Utsch A (2005) Effects of human capital and long-term human resources development and utilization on employment growth of small-scale businesses: A causal analysis. *Entrepreneurial Theory Practice* 29(6):681–698.
- Retterath A, Braun R (2020) Benchmarking venture capital databases. Preprint, submitted September 17, http://dx.doi.org/10.2139/ ssrn.3706108.
- Roach M, Sauermann H (2015) Founder or joiner? The role of preferences and context in shaping different entrepreneurial interests. *Management Sci.* 61(9):2160–2184.
- Sauermann H (2018) Fire in the belly? Employee motives and innovative performance in start-ups vs. established firms. *Strategic Entrepreneurial J.* 12(4):423–454.
- Savickas ML (2020) Career construction theory and counseling model. Brown SD, Lent RW, eds. Career Development and Counseling: Putting Theory and Research to Work, 3rd ed. (John Wiley & Sons, Hoboken, NJ), 165–200.
- Schwartz SH, Bardi A (2001) Value hierarchies across cultures: Taking a similarities perspective. J. Cross Culture Psych. 32(3):268–290.
- Smith WK, Besharov ML (2019) Bowing Before Dual Gods: How Structured Flexibility Sustains Organizational Hybridity.
- Smith WK, Gonin M, Besharov ML (2013) Managing social-business tensions: A review and research agenda for social enterprise. *Bus. Ethics Quart.* 23(3):407–442.
- Sorenson O, Dahl MS, Canales R, Burton MD (2021) Do startup employees earn more in the long run? Organ. Sci. 32(3):587–604.
- Spreitzer GM (1995) Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Acad. Management J.* 38(5):1442–1465.
- Stam D, Lord RG, van Knippenberg D, Wisse B (2014) An image of who we might become: Vision communication, possible selves, and vision pursuit. Organ. Sci. 25(4):1172–1194.
- Stern S (2004) Do scientists pay to be scientists? *Management Sci.* 50(6):835–853.
- Stinchcombe AL (2000) Social structure and organizations. Baum JAC, Dobbin F, ed. *Economics Meets Sociology in Strategic Management*, vol. 17 (Emerald Group Publishing Limited, Bingley), 229–259.
- Swider BW, Zimmerman RD, Barrick MR (2015) Searching for the right fit: Development of applicant person-organization fit perceptions during the recruitment process. J. Appl. Psych. 100(3):880–893.
- Tan WL, Williams J, Tan TM (2005) Defining the 'social' in 'social entrepreneurship': Altruism and entrepreneurship. Internat. Entrepreneurial Management J. 1(3):353–365.
- Tingley D, Yamamoto T, Hirose K, Keele L, Imai K (2014) Mediation: R package for causal mediation analysis. J. Statist. Software 59(5).

- Turban DB, Greening DW (1997) Corporate social performance and organizational attractiveness to prospective employees. Acad. Management J. 40(3):658–672.
- van Balen T, Tarakci M, Sood A (2019) Do disruptive visions pay off? The impact of disruptive entrepreneurial visions on venture funding. J. Management Stud. 56(2):303–342.
- van Knippenberg D, Stam D (2014) Visionary leadership. Oxford Handbook of Leadership in Organizations (Oxford University Press, New York), 241–259.
- Van Vianen AEM (2018) Person-environment fit: A review of its basic tenets. Annu. Rev. Organ. Psych. Organ. Behav. 5:75–101.
- van Werven R, Bouwmeester O, Cornelissen JP (2015) The power of arguments: How entrepreneurs convince stakeholders of the legitimate distinctiveness of their ventures. J. Bus. Venturing 30(4):616–631.
- Vroom VH (1966) Organizational choice: A study of pre- and postdecision processes. Organ. Behav. Human Performance 1(2):212–225.
- Waddoups CJ (2007) Employer size-wage effects in Australia. Labour 21(4–5):809–835.
- Wanous JP, Poland TD, Premack SL, Davis KS (1992) The effects of met expectations on newcomer attitudes and behaviors: A review and meta-analysis. J. Appl. Psych. 77(3):288–297.
- Weerawardena J, Mort GS (2006) Investigating social entrepreneurship: A multidimensional model. J. World Bus. 41(1):21–35.
- Weller I, Hymer CB, Nyberg AJ, Ebert J (2019) How matching creates value: Cogs and wheels for human capital resources research. Acad. Management Ann. 13(1):188–214.
- Williamson IO (2000) Employer legitimacy and recruitment success in small businesses. Entrepreneurial Theory Practice 25(1):27–42.
- Wood MS, Bakker RM, Fisher G (2021) Back to the future: A timecalibrated theory of entrepreneurial action. Acad. Management Rev. 46(1):147–171.
- Wright C, Nyberg D, Grant D (2012) "Hippies on the third floor": Climate change, narrative identity and the micro-politics of corporate environmentalism. Organ. Stud. 33(11):1451–1475.
- Wry T, Haugh H (2018) Brace for impact: Uniting our diverse voices through a social impact frame. J. Bus. Venturing 33(5):566–574.
- Wry T, Lounsbury M, Glynn MA (2011) Legitimating nascent collective identities: Coordinating cultural entrepreneurship. Organ. Sci. 22(2):449–463.
- Wry T, York JG (2017) An identity-based approach to social enterprise. Acad. Management Rev. 42(3):437–460.

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