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# The role of target difficulty and career tournaments in retaining creative R&D employees

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## Abstract

We explore the turnover intentions of creative R&D employees and the role of performance management practices in shaping these considerations. Since the success of a firm's R&D efforts hinges on the innovative ideas of its employees, it is crucial to retain particularly creative individuals. At the same time, however, we argue that this is especially difficult because both the higher outside options of creative employees and their specific individual characteristics make them, on average, more likely to leave their company. Most importantly, we suggest that two widely studied performance management design choices (target difficulty and career tournaments) typically used to motivate effort may influence the loss of creative talent. Using survey data from our unique access to R&D employees of a large manufacturing firm and a complementary experiment among business students, we find evidence that creative employees are, on average, more likely to leave their firm. Consistent with creative employees possessing a stronger learning orientation, we also predict and find that this tendency to leave is mitigated by target difficulty (as difficult targets speak to creative individuals' learning orientation) and exacerbated by the intensity of career tournaments (as they reduce team cohesion and, ultimately, undermine learning opportunities).

**KEYWORDS**

career tournaments, creativity, learning goal orientation, research and development, target difficulty, voluntary turnover

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## Le rôle de la difficulté d'accès de l'objectif et des compétitions en entreprise dans la rétention des employés créatifs en R&D

**Résumé**

Les auteurs étudient les intentions des employés créatifs affectés à la R&D de quitter l'entreprise et le rôle des pratiques de gestion des performances dans l'élaboration de ces réflexions. Le succès des efforts de R&D d'une entreprise reposant sur les idées novatrices de ses employés, il est crucial de retenir les personnes particulièrement créatives. Toutefois, les auteurs avancent que cela est difficile parce que l'éventail d'options offertes à l'externe aux employés créatifs et leurs caractéristiques individuelles spécifiques les rendent, en moyenne, plus susceptibles de quitter leur entreprise. Avant tout, ils suggèrent que deux choix de conception largement étudiés en matière de gestion des performances (la difficulté d'accès de l'objectif et les compétitions en entreprise), souvent utilisés pour inciter à l'effort, peuvent influencer la perte de talents créatifs. À l'aide de données d'enquêtes recueillies de manière exclusive auprès des employés de R&D d'une grande entreprise manufacturière, ainsi que d'une expérience complémentaire menée auprès d'étudiants en gestion, les auteurs constatent que les employés créatifs sont, en moyenne, plus susceptibles de quitter leur entreprise. Comme les employés créatifs démontrent un plus haut niveau d'orientation d'apprentissage, les auteurs formulent et confirment aussi l'hypothèse selon laquelle cette tendance à quitter l'entreprise est modérée par la difficulté d'accès de l'objectif (car les objectifs difficiles génèrent un effet sur l'orientation d'apprentissage des individus créatifs) et amplifiée par l'intensité des compétitions en entreprise (car elles affaiblissent la cohésion d'équipe et, ultimement, laissent passer les occasions d'apprentissage).

**MOTS-CLÉS**

compétitions en entreprise, créativité, difficulté d'accès de l'objectif, orientation d'apprentissage, recherche et développement, roulement volontaire

## 1 | INTRODUCTION

Following the Great Resignation during the COVID-19 pandemic, talent retention has recently become a key priority for many companies (de Smet et al., 2022). In particular, R&D departments—often central to the creation of competitive advantage and, ultimately, firm value (Hall et al., 2005; Mudambi & Swift, 2014)—have been shown to struggle with keeping their best employees (Aghina et al., 2011; Simeth & Mohammadi, 2022). In this study, we focus on *creativity* as a particularly important employee trait in the context of R&D (Amabile, 1994) and suggest that retaining particularly creative R&D employees is as challenging as it is important. Building on the notion that, besides their effort-inducing role,

performance management practices also affect employee retention, we investigate how two widely studied control choices (target difficulty and career tournaments) may influence the loss of creative talent.

While some level of turnover in an R&D department may be desirable to ensure fresh outside perspectives (Staw, 1980), voluntary turnover of R&D employees typically imposes significant replacement cost of knowledge and skills (T. W. Lee & Maurer, 1997). Losing particularly *creative* R&D employees, in fact, can be even more costly to firms, as there is a high risk that creative individuals will realize their talent in another company or in their own venture and, at worst, become a competitor to the firm (Agarwal et al., 2016). Problematically, the threat of such dysfunctional turnover (Abelson & Baysinger, 1984; Dalton et al., 1982) may be particularly present in creative employees. More specifically, we predict that both better outside opportunities, due to a highly relevant and transferable skill set, and their particular personal characteristics, such as a strong desire for new challenges and learning opportunities, make creative individuals, on average, more willing to leave their organization in favor of new endeavors.

This, in turn, raises the question of whether and how companies can avert such loss of creative employees. Building on the concept of person-organization fit (Kristof, 1996), we explore the turnover intentions of creative R&D employees and the consequences that select performance management practices might have for their retention.

Typically, performance management practices are designed with the motive of incentivizing employees' overall job performance (Prendergast, 1999) rather than to attract or retain (creative) employees. We, however, argue that the design of such performance management practices will have important effects on the turnover decisions of creative R&D employees through the level of learning opportunities such practices create. In fact, highly creative individuals have been consistently associated with a strong desire to learn and to improve their abilities through competence development and task mastery—commonly referred to as a strong learning-goal orientation (Gong et al., 2009; Hirst et al., 2009, 2011). In this study, we argue that the design of performance management practices can be an important organizational lever for creating or undermining meaningful opportunities to learn, thereby addressing creative employees' preferences for learning and, ultimately, influencing their voluntary turnover decisions.

Literature in management accounting and beyond often differentiates between two classic practices to motivate employees: annual performance evaluations and promotion decisions (e.g., Baker et al., 1988; Ederhof, 2011). While both can be tailored to a firm's needs along a multitude of dimensions, we focus on one core dimension of each that we particularly expect to relate to the learning opportunities they create for employees. More concretely, we investigate how the difficulty of performance targets[1] and the intensity of career tournaments (i.e., the extent to which employees need to compete with their peers for a limited number of promotion spots) influence creative R&D employees' turnover intentions. While both performance management design choices induce performance pressure, which increases the need for learning, we expect opposite effects on creative employees' *opportunity* to learn, and consequently their turnover decisions.

Regarding target difficulty, we argue that although employees often prefer lower targets, this tendency is relatively less pronounced for highly creative employees. In fact, we predict that more difficult targets induce a challenge to upgrade one's skills, which speaks to the learning-goal orientation of highly creative individuals and thus reduces their propensity to leave the company. Conversely, we argue that promotion policies that challenge employees through a competition against team members for a limited number of promotion spots may achieve

[1]We acknowledge that performance targets are merely one component of performance-based evaluation and compensation schemes (Prendergast, 1999). In this study, we focus on performance target difficulty in particular for two reasons. First, while the effort-inducing mechanism indeed is the expected reward (i.e., the bonus), the incentive strength, and thus the degree of challenge that we want to capture, is determined by the difficulty of the associated performance target. Second, from a practical perspective, incentive policies are often uniform across divisions in firms, whereas performance targets are typically set by the respective supervisors. This makes target difficulty a control choice that is comparably easy to adjust and thus a more flexible lever to fit the needs of a specific team or division.

the opposite. R&D is typically a highly collaborative task that hinges on the exchange of knowledge and ideas (Adler & Chen, 2011). Intense career tournaments have been shown to reduce team cohesion and obstruct knowledge exchange and cooperation (C. X. Chen et al., 2012; Siegel & Hambrick, 2005), ultimately undermining the opportunity to learn on the job. Thus, while difficult targets create meaningful learning challenges for creative employees and consequently decrease their likelihood to leave, intense career tournaments will increase creative employees' intentions to leave the company.

We use a multi-method approach based on both a field study and an experiment to test our predictions. We first exploit our unique access to a large German manufacturing firm in the technology sector and collect survey evidence of 249 R&D employees. Our research site is an ideal setting for our purposes: it is located in one of Europe's largest technology clusters, making it easy for individuals to switch employers, and it is thus a particularly suitable environment for studying the phenomenon of talent loss. To complement our field study, validate key measures, replicate findings, and provide process evidence on theoretical arguments, we also collect survey and experimental evidence from business students at a major European university.

In line with our predictions, we find evidence that creative employees are more likely to leave their firm. We also find that this tendency to leave is mitigated by target difficulty, as difficult targets speak to creative individuals' learning orientation, and worsened by the intensity of career tournaments, as they reduce team cohesion and, ultimately, undermine learning opportunities.

Our study contributes to the creativity and performance management literatures in two important and interrelated ways. First, prior literature on the management of creativity has largely focused on the role of performance management practices in directing and allocating effort to *motivate* creative performance (e.g., Grabner, 2014; Kachelmeier et al., 2008). Similarly, research on the management of R&D performance typically focuses on incentivizing creativity-enhancing behaviors (e.g., Speckbacher & Wabnegg, 2020; Wabnegg, 2023). However, there are theoretical arguments and some limited empirical evidence that, in addition to their well-known motivational effect, performance management practices have attraction and retention effects (e.g., Banker et al., 1996; Gerakos et al., 2018; Kachelmeier & Williamson, 2010; Labro & Omartian, 2023; Lazear, 2000) that are far less studied than the typical motivation effects. We provide evidence that performance management choices related to target setting and promotion decisions drive creative employees' retention ambitions. Given that almost all firms use some sort of performance management system comprising performance targets and promotion opportunities, it is highly relevant for academia and practice that such practices have implications for other objectives of the talent management process like talent retention, and in particular the retention of creative employees. In fact, this is good news for practitioners, as firms control the design of performance management systems, and thus can take direct actions to discourage creative employees from leaving the firm.

Second, we also contribute to a large body of research on individual characteristics associated with creative performance. In general, these studies reveal that a set of individual characteristics are positively and consistently related to measures of creative *performance* across a variety of domains (Cummings & Oldham, 1997; Feist, 1999; Gough, 1979; Mumford et al., 2002; Oldham & Cummings, 1996). We argue and provide empirical evidence that such individual characteristics might affect not only employees' ability and motivation to deliver creative outputs but also other important choices regarding their work life, such as their intention to switch employers. Perhaps more importantly, our findings can further be interpreted as evidence that creative individuals derive higher utility from certain job characteristics (e.g., the challenge to learn and/or master new skills induced by difficult targets), leading them to evaluate the costs and benefits of staying in their current job differently from other employees in the organization.

## 2 | THEORY AND HYPOTHESIS DEVELOPMENT

In an effort to produce innovative products and services, R&D departments are tasked with a broad set of activities, ranging from the search for and discovery of novel ideas to their selection, refinement, and, ultimately, implementation (March, 1991; McCarthy & Gordon, 2011). To address these demands, R&D employees must likewise possess a variety of traits and skills including, for instance, scientific expertise, job-related knowledge, and social skills (Faraj & Sproull, 2000; Romijn & Albaladejo, 2002; Yun & Lee, 2017). Especially for the early stages of innovation, creativity has traditionally been ascribed a particularly important role (Anderson et al., 2014).[2]

In pursuing such talent for their R&D department, however, firms face several problems. Attracting creative individuals on the job market is argued to be a uniquely challenging endeavor for many organizations (Hunter et al., 2012). Losing creative employees is often an even bigger problem—particularly in the context of R&D, where technological know-how and discoveries are often lost to competitors or to newly founded start-ups (Agarwal et al., 2016). In the following sections, we discuss why creative R&D employees are especially at risk of leaving and how choices within a firm's performance management system may mitigate or exacerbate this risk.

### 2.1 | The loss of creative employees in R&D

In light of high replacement cost, avoiding voluntary turnover of individuals who are well-matched with the company and whom the firm thus wants to retain is especially important (Abelson & Baysinger, 1984; Dalton et al., 1982). In essence, an individual's intention to leave the firm, and ultimately the voluntary turnover decision, is driven by two broad factors: the individual's ease of movement—often captured by the concept of *movement capital* (Trevor, 2001)—and their own *desire to leave* (T. H. Lee et al., 2008; March & Simon, 1958). Focusing on employees in R&D departments, we argue that both factors are particularly high for creative individuals.

Faced with an ever-increasing need for innovation, firms across all industries rely heavily on their employees' knowledge, skills, and motivation to generate creative ideas. This is also reflected in recent practitioner evidence showing that creativity is among the top skills that executives seek in their employees (LinkedIn, 2020; World Economic Forum, 2018). From an employee perspective, the need for such an important and transferable skill increases outside opportunities. Particularly in R&D-intensive settings, where firms have been shown to actively court key engineers from competitors (Almeida & Kogut, 1999; Rogers & Larsen, 1984), creative employees should thus possess higher *movement capital* and find it easier to switch employers.

Regarding the *desire to leave*, literature on creativity has shown that highly creative individuals are associated with certain personal characteristics. One crucial characteristic is a strong learning-goal orientation (hereafter, "learning orientation"; Hirst et al., 2009). Learning orientation is rooted in the achievement motivation literature, which describes how individuals approach, interpret, and respond to achievement situations, and relates to a motivational orientation that places a strong emphasis on the development of skills and mastery of new tasks

[2]While a large part of modern research on creativity in accounting and beyond has focused on finding ways to foster creative thinking among employees to achieve creative outcomes (i.e., supporting them in achieving a creative *state*; e.g., Grabner, 2014; Kachelmeier et al., 2008; Klein & Speckbacher, 2019), the literature equally highlights the importance of selecting and retaining creative employees, who possess "a cognitive style favorable to taking new perspectives on problems, an application of heuristics for the exploration of new cognitive pathways, and a working style conducive to persistent, energetic pursuit of one's work" to boost innovation (i.e., creativity as a *trait*; Amabile, 1988, p. 131; Amabile & Pillemer, 2012; Zandi et al., 2022; Zhang et al., 2020).

(Dweck & Leggett, 1988; Elliott & Dweck, 1988; Miron-Spektor & Beenen, 2015; Nicholls & Dweck, 1979; Payne et al., 2007). In particular, a strong learning orientation leads to a deeper and more intensive engagement with challenging tasks, increases resilience and investments in skill development when facing obstacles, and even creates a preference for challenging and demanding tasks—all of which are likely to result in more creative output (e.g., Hirst et al., 2009). Apart from being an important antecedent of creative results, however, it may be precisely this aspect of a creative personality that makes it more likely for creatives to seek out new challenges beyond firm boundaries, and, conversely, renders it difficult for the organization to retain them.

In addition, literature has long argued that highly creative people typically behave like "cosmopolitans" rather than like "locals," meaning that they are "low on loyalty to the employing organization and high on commitment to specialized role skills" (Gouldner, 1957, p. 290; Harrell & Stahl, 1981; Robertson & Wind, 1983; Rostan, 1998). Coupled with a strong learning orientation aimed at upgrading these skills, creative individuals should thus be more likely to seek learning opportunities outside their organization and to switch jobs with relative frequency and ease (Fehr, 2012; Feist, 1999; Wille et al., 2010).

Taken together, these arguments suggest that more creative R&D employees have, on average, better outside opportunities due to their higher movement capital and possess individual characteristics that make them feel less attached to the organization they work for and more actively seek outside learning opportunities. We thus state the following hypothesis:

> **Hypothesis 1 (H1).** Compared with less creative R&D employees, more creative R&D employees have a higher intention to leave their company.

## 2.2 | Target difficulty, career tournament intensity, and the retention of creative R&D employees

If creative R&D employees are more likely to leave their organizations, then this raises the question of whether and how companies can prevent their departure. Whereas organizations have little control over creative individuals' ease of movement, they do control the work environment in general, and the design of performance management practices in particular.

In fact, a long line of research on the "person-organization fit" highlights the role that a fit between an organization's structures and systems and an individual's own needs and preferences plays in employees' career choices (e.g., Cable & Judge, 1994; Kristof, 1996; Lievens et al., 2001; Parkes et al., 2001). This literature finds that such a fit not only increases a firm's attractiveness for potential applicants (e.g., Judge & Cable, 1997) but also decreases existing employees' intention to leave (e.g., Kristof-Brown et al., 2005; Verquer et al., 2003). Building on the idea that the preferences of individuals often stem from their personality traits (Judge & Cable, 1997), we draw on learning orientation as a key trait of creative R&D employees and argue that whether performance management practices fit or clash with this characteristic will influence their turnover decisions.

In an organizational setting, performance management practices, especially those targeted at providing incentives, can create challenging goals and therefore speak particularly to creative individuals' desire to be challenged to upgrade their skills. In the following sections, we examine two central dimensions through which learning opportunities can be induced or undermined in performance management—target difficulty (i.e., hard-to-reach performance targets; e.g., Arnold & Artz, 2015) and career tournaments (i.e., intense competition for limited promotion spots; e.g., Demeré et al., 2016)—and develop hypotheses for how they factor into the loss of creative employees.

### 2.2.1 | Target difficulty

Target setting has long been considered a core element of incentive systems to manage employee effort (Otley, 1999). Most firms define some sort of goals for their employees (Merchant & Van der Stede, 2017), and R&D departments are no exception (e.g., Wabnegg, 2023). Rooted in goal-setting theory, the ubiquitous use of targets in practice can be explained by the premise that conscious goals impact action and that assigning goals—even in the absence of monetary incentives—is a powerful mechanism for motivating and directing employee effort (Locke & Latham, 1990). Against this backdrop, management accounting studies have frequently examined how target difficulty impacts employee performance and found that effort is typically maximized when targets are challenging and achievable. This implies that, from a company perspective, this level of target difficulty is optimal for motivation purposes (Birnberg et al., 2006; Merchant et al., 2003).

Employees, on the other hand, typically prefer lower targets, as this increases their expected returns (e.g., from bonus payments; Jensen, 2001; Merchant & Van der Stede, 2017). Thus, when it comes to the *retention* effects of target setting, firms seeking to retain employees have often been found to increase the likelihood that bonuses can be paid and to set easier targets (Indjejikian et al., 2014; Labro & Omartian, 2023; Matějka & Ray, 2017). For retaining creative R&D employees specifically, however, this mechanism may be less straightforward: given their strong learning-goal orientation, we expect them to be less driven by purely financial concerns and to particularly appreciate and derive value from the inherent challenge of reaching difficult performance targets.

More specifically, challenging targets allow employees to evaluate their own competence and provide them with an opportunity to master their skills. Indeed, the management literature shows that employees high on learning orientation tend to prefer challenging tasks and difficult goals (e.g., Hirst et al., 2011; VandeWalle, 1997). This is especially the case for particularly difficult targets, which create an information-processing challenge that requires individuals to find new sources and types of information (Sitkin et al., 2011). The management accounting literature has similarly produced evidence in support of this notion, with Fehrenbacher et al. (2017) showing that individuals with a strong need to outperform their own prior accomplishments prefer contracts based on meeting difficult targets to those based on fixed or piece-rate pay. They, too, attribute this finding to these individuals seeing such targets as a challenge to master a task.

For turnover decisions, the psychology literature shows that, if employees perceive pressure as a challenge (rather than a hindrance to their work), this also leads to more positive job attitudes and enhanced retention (Boswell et al., 2004). Accordingly, we argue that if a firm poses difficult targets, highly creative R&D people will appreciate this as a learning challenge and be less likely to seek challenges outside of organizational boundaries. We thus state the following hypothesis:

> **Hypothesis 2 (H2).** Target difficulty decreases the intention of more creative R&D employees to leave their company.

### 2.2.2 | Career tournament intensity

Another performance management practice through which organizations aim to induce effort provision is promotion opportunities (DeVaro, 2006). Promotions constitute a desired prize, as they typically bring increased compensation, status, and responsibility (e.g., Ederhof, 2011; Prendergast, 1999). Promotions can result in major changes to the task environment (e.g., the step toward management responsibilities) or entail movements to similar tasks with increased scope and authority (e.g., promotions to expert roles) (Grabner & Moers, 2013a). The latter is

especially attractive for (creative) R&D employees who strive for career advancement but who hesitate to replace operational work with management tasks.

Literature rooted in economics has a long history in conceptualizing performance-based promotion practices as tournaments where workers compete with their peers for a limited number of promotion spots (Baik et al., 2015; Baker et al., 1988; Connelly et al., 2014; Lazear & Rosen, 1981). While the specifics of such promotion policies may differ across firms, several key characteristics are fundamental to the emergence of career tournaments (Connelly et al., 2014). First, career tournaments are defined by direct competition between employees and result in clear winners and losers for a given promotion opportunity. Second, promotion decisions are not based on an employee's absolute level of performance but on their relative rank among their peers. Finally, the number of promotion spots (i.e., the tournament's prize) is limited. For the purposes of this study, we build on these characteristics and define intense career tournaments as promotion policies that are highly competitive, largely based on relative performance evaluation, and subject to a more limited number of promotion spots.

Based on this definition, a higher career tournament intensity inherently creates more challenging performance expectations for employees and thereby may also relate to the learning orientation of creative employees. Indeed, the focus on promotion should create an environment that demands personal investments in human capital acquisition (Grabner & Moers, 2013a) and therefore align with the strong learning-goal orientation of creative R&D employees.

However, this line of reasoning disregards an important characteristic of the R&D function in particular: in most organizations, R&D is highly collaborative and crucially hinges on learning opportunities that arise from knowledge exchange between employees (Speckbacher & Wabnegg, 2020). We argue that intense career tournaments undermine these opportunities and thus—potentially inadvertently—create a setting that runs against the learning orientation of creative employees. Because R&D employees need to work closely together each day, intense career tournaments expose them to the immediate effects of intra-group dynamics arising from an increased competition for promotion spots (Aram & Morgan, 1976; C. X. Chen et al., 2012; Thamhain, 2003). In line with research suggesting that tournaments increase competition to the detriment of collaboration (C. X. Chen et al., 2012; Drake et al., 1999), we particularly expect intense career tournaments to contribute to a competitive mindset that becomes entrenched in a team, ultimately undermining the extent to which it is united in achieving work tasks together (team cohesion; Carless & De Paola, 2000). Such a context has been shown to lead to distrust loops and a lack of collaboration among peers (Černe et al., 2014; Nerstad et al., 2013), preventing individuals from exchanging knowledge and learning from each other.

Although a high career tournament intensity might not be particularly valued by less creative employees either, we expect highly creative R&D employees to react sooner and more strongly given their higher learning orientation and the constraints on learning opportunities that intense tournaments create. In sum, we expect a higher career tournament intensity, and the resulting lower team cohesion, to further increase the intention of creative R&D employees to leave the company.

> **Hypothesis 3 (H3).** Career tournament intensity further increases the intention of more creative R&D employees to leave their company.

## 3 | RESEARCH STRATEGY AND EMPIRICAL SETTING

We conduct a survey-based field study at a German manufacturing company and complement it with experimental data from a large pool of business students. This multi-method approach helps us better navigate the particular strengths and weaknesses of each method and provides us with a more robust handle to test our hypotheses and their underlying mechanisms.

In our field study, we administer a survey to R&D employees of a large manufacturing company in the technology and automotive sector. This single-firm field study approach allows us to examine individual retention decisions in a real-world setting where the influences of the institutional context can be held constant, yet where there is sufficient variation in the performance evaluation practices that employees are exposed to. That said, while our insights from the field are high on external validity, the survey-based nature of this study, as well as restrictions on survey length and content imposed by the works council, limits our ability to capture the underlying mechanisms of the associations we hypothesize.

We therefore complement our field study with a vignette-based experiment we conducted among business students at a major European university. We leverage these data to validate key measures, replicate findings, and provide process evidence on learning orientation at the core of our theorized mechanisms. While, in contrast to our survey-based field study, this approach is lower on external validity, the ability to freely tailor this study to our participant pool and randomly assign participants to our experimental conditions provides us with a cleaner way of testing our theory.

Ultimately, we believe that the two approaches complement each other in providing robust evidence regarding our research questions. In the following sections, we first present the setting and results from our field study, after which we draw from both our survey and our experiment to show process evidence for our findings.

## 3.1 | Research site of the field study

We cooperate with a large German manufacturing company in the technology and automotive sector (hereafter named TechCo).[3] Our research site is an ideal setting for our purposes for several reasons: first, TechCo is located in one of Europe's largest technology clusters, making it easy for individuals to switch employers. Combined with the fact that TechCo and most other firms in the cluster do not make use of noncompete agreements for R&D employees, this creates a particularly suitable environment for studying the phenomenon of talent loss. Second, with more than 10,000 employees active in R&D, we expect to find sufficient variation in both the creative potential of individuals and the performance management practices they are exposed to. Note that we deliberately focus on performance management practices that can be differentially applied and/or influenced by the immediate supervisor, as opposed to formal standardized practices implemented organization-wide, such as compensation schemes. Finally, TechCo's organizational structure builds on hundreds of teams of 10–15 employees each, and the teams are stable over multiple years. This allows us to study a setting where intra-group dynamics stemming from competition within a team occur to a meaningful degree.

R&D employees at TechCo are typically responsible for developing new solutions in a wide range of applications, including hardware, software, systems, and services. Their job profile includes tasks as diverse as analyzing and benchmarking existing technologies, communicating with internal and external parties, representing the firm at trade fairs, understanding customer needs, and finding creative solutions to address new markets. Creativity is certainly an important, yet by far not the *only*, antecedent of their job performance. Consequently, employees' profiles vary with respect to creativity, and performance management is not geared toward creativity alone.

R&D employees are evaluated annually and individually by their direct supervisor on at least five goals. These goals are determined by the supervisor at the beginning of the work year and vary significantly across teams and projects. However, within teams, employees evaluated

[3]The study was formally approved by the local works councils and received a positive evaluation from the academic institution's ethics review board.

by a particular supervisor tend to share the same set of performance dimensions. These typically include objectively measured dimensions, like development milestones, cost targets, quality targets, or sales figures, and subjectively evaluated dimensions, like communication skills, technological expertise, or entrepreneurial thinking. Given the nature of these goals, R&D employees at TechCo are typically evaluated on a mix of individual and group-based goals, and these goals tend to be short-term (i.e., focus on a period of less than a year) rather than long-term. Ultimately, however, performance evaluation is not formulaic. Supervisors do not explicitly weigh goals but form a subjective opinion of each employee's performance, which is then discussed individually at an annual performance meeting. Goal achievement is also not tied to an explicit financial bonus payment. That said, the annual performance evaluation process has important consequences for R&D employees. Performing well allows them to take on new and more interesting tasks in their current job and increases their likelihood of promotion.

Most importantly for the purposes of our study, R&D employees at TechCo perceive substantial variation in the overall target difficulty that supervisors apply when evaluating their subordinates. While TechCo encourages its managers to strive for an equitable setting of targets, our interviews with R&D employees suggest that target difficulty does vary across individuals and teams, with some supervisors known to set particularly challenging targets for some or all of their employees.

Regarding the presence of career tournaments, TechCo similarly represents a good testing ground for our theory. R&D employees can be promoted to either specialist or management positions, making promotions attractive even for employees who do not pursue a management career. In addition, there is evidence of varying levels of competition within both these tracks.

Promotion spots for specialist positions typically open up when new business opportunities arise and a new R&D project with functional expertise in a technological subject area is required. Given the ad hoc nature of business opportunities, such spots do not occur at regular intervals and tend to be limited. While supervisors do not have full control over the occurrence of such promotion spots, they play an important role in defining the new role and screening potential candidates among their employees in the time leading up to a promotion decision. Thus, perceived career tournament intensity for these positions can vary significantly between teams.

Promotions to management positions are subject to a highly structured process at TechCo. R&D employees aiming to pursue a management career must apply for admittance to a talent pool, where they receive management training and are subsequently selected for a leadership position. Selection decisions are made by a panel of division heads, who compare applicants based on their job performance and application materials.[4] While the selection process for management promotions is heavily centralized at TechCo, also for these positions perceived career tournament intensity can vary substantially between teams. Part of this variation is driven by team composition (i.e., some teams have a higher share of employees pursuing a management career), but supervisors also play a major role, as they are the ones who formally nominate their employees for the talent pool.

## 3.2 | Data collection

To inform the development of our survey, we conducted a series of 15 interviews with employees and supervisors involved in R&D and innovation-related functions at TechCo. During these discussions, we confirmed the range of control practices in use to help us develop

[4]Anecdotal evidence from our interviews suggests that this competitive process has led to anti-cooperative behavior in the past, with some R&D employees withholding information from others to increase their chances of being selected.

measures for our main variables and choose crucial control variables for our survey. We distributed our questionnaire via an online survey to 1,812 R&D employees in a particularly research-dependent division of TechCo in March 2020. To reduce the threat of untruthful or biased responses, we granted employees anonymity. Over the following 2 months, we sent out four reminder emails. In total, we obtained 280 usable employee responses, for a response rate of 15%. Given that we capture some personal information (e.g., job tenure, age, presence of children) with optional questions, we arrive at a usable data set of 249 observations for our analyses.[5]

We check our data set for typical issues arising from survey-based research, such as nonresponse and common method bias. Regarding the former, we conduct univariate ANOVAs between observations of early and late respondents and find differences only to the extent that we would expect simply by pure chance (Armstrong & Overton, 1977). Regarding common method bias—apart from having taken several established procedural steps ex ante to lessen it (i.e., avoid ambiguity, guarantee anonymity, reduce the salience of the linkages between core constructs by means of the cover story)—we also ex post perform a single-factor test and find no evidence for the presence of such bias. In addition, since most of our hypotheses imply testing for interaction effects, which are less susceptible to common method bias in the first place, this threat should be even less of a concern in our study (Chang et al., 2010; Podsakoff et al., 2003).

## 3.3 | Measures

We collected most of our main variables through reflective multi-item constructs measured on a seven-point Likert scale (typically anchored at 1 = *does not apply* and 7 = *fully applies*) and took several steps to promote the validity and reliability of our measures. Wherever possible, we relied on established constructs from prior literature. In cases where such constructs were not available, we adapted similar constructs or purpose-developed items based on definitions of the phenomenon in earlier studies. To avoid issues stemming from potential language barriers, we translated the survey into German and, to ensure that we did not compromise validity, had it back-translated by an academic unaffiliated with the study. Before administering the survey, we pretested it with academics and practitioners at TechCo, which resulted in slight verbal adjustments to ensure that all constructs were well understood in the context of this organization.

Ex post, we employ several tests to assess the validity and reliability of our constructs by conducting a confirmatory factor analysis and assessing the average variance extracted (AVE), composite reliability, and Cronbach's alpha, and reviewing the response ranges and inter-construct correlations of all our variables. We drop survey items with factor loadings below 0.4. Tables 1–3 present the results of these analyses, which largely support the validity and reliability of our constructs. As suggested by Bedford and Speklé (2018), we further assess the discriminant validity of our constructs by calculating their respective heterotrait-monotrait ratios. We consistently find values below the commonly used threshold of 0.85 (Henseler et al., 2014), suggesting that all constructs are sufficiently distinct from one another. Finally, to compute the variables that we use in our modeling, we average the items for each construct.[6]

### 3.3.1 | Main variables

We measure our main dependent variable, *Intention to Leave*, using a slightly adapted three-item scale used by Bol et al. (2018), capturing the extent to which employees consider leaving

[5]In our robustness tests, we find no evidence of bias due to missing values in our data.
[6]As a robustness test, we also run our models using factor scores and find fully consistent results.

**TABLE 1** Construct measurement and factor analysis.

| | Factor |
|---|---|
| ***Intention to Leave*** (AVE = 0.65, CR = 0.84, Cronbach's $\alpha = 0.81$) | |
| Unless my organization undertakes steps, I consider leaving *TechCo*. | 0.849 |
| I consider leaving *TechCo* to work for another company soon. | 0.921 |
| I do not see myself working at *TechCo* in the long run. | 0.613 |
| ***Creativity*** (AVE = 0.43, CR = 0.79, Cronbach's $\alpha = 0.70$) | |
| *Indicate how often you could be described as a person who. . .* | |
| . . . always thinks of other ways to solve problems when they run into obstacles. | 0.690 |
| . . . has fresh perspectives on old problems. | 0.660 |
| . . . copes with several new ideas and problems at the same time. | 0.601 |
| . . . helps other people develop new ideas. | 0.570 |
| . . . has lots of new ideas. | 0.730 |
| ***Target Difficulty*** (AVE = 0.53, CR = 0.77, Cronbach's $\alpha = 0.76$) | |
| My target levels are only achievable with maximum effort. | 0.700 |
| Achieving my target levels requires extensive skills. | 0.724 |
| It is very difficult to reach my target levels. | 0.761 |
| ***Career Tournament*** **(formative construct)** | |
| Whether or not I get promoted also depends on if I perform better or worse that my peers at the same level. | |
| I have to compete with fellow employees at the same level for a promotion spot. | |
| Even if everyone in my team performs well, not every member can be promoted to a higher position. | |
| ***Job Ambiguity*** (AVE = 0.54, CR = 0.87, Cronbach's $\alpha = 0.87$; reverse-coded) | |
| *I. . .* | |
| . . . know exactly what is expected of me. | 0.871 |
| . . . know what my responsibilities are. | 0.872 |
| . . . know I have divided my time properly among the responsibilities related to my job. | 0.588 |
| . . . have clear goals and objectives for my work. | 0.722 |
| . . . receive clear explanations of what is to be done. | 0.571 |
| . . . feel certain about how much authority I have. | 0.712 |
| ***Transformational-Charismatic Leadership*** (AVE = 0.71, CR = 0.96, Cronbach's $\alpha = 0.95$) | |
| *Please indicate the extent to which you agree with the following statements about your immediate supervisor. My immediate supervisor. . .* | |
| . . . mediates pride, respect, and trust. | 0.854 |
| . . . puts the interest of the team above their own. | 0.844 |
| . . . follows ethical and moral principles. | 0.717 |
| . . . demands and promotes high engagement. | 0.866 |
| . . . communicates convincing values and goals. | 0.909 |
| . . . sees the future optimistically. | 0.798 |
| . . . radiates enthusiasm. | 0.862 |
| . . . offers attractive visions for the future. | 0.841 |
| . . . mediates trust and confidence that the goals can be reached. | 0.861 |
| ***Organic Controls*** (AVE = 0.54, CR = 0.89, Cronbach's $\alpha = 0.89$) | |
| *To what extent do the following describe TechCo in your view?* | |
| A corporate culture that encourages informal signaling of potential problems. | 0.714 |
| Open channels of communication and free flow of information. | 0.747 |
| Fast reaction to take advantage of unexpected opportunities. | 0.703 |
| Fast, informal access to management. | 0.701 |
| Employees are encouraged to develop new ideas even if they fall outside the individual's area of responsibility. | 0.769 |

**TABLE 1** (Continued)

| | Factor |
|---|---|
| Tolerance for mistakes, learning, and sharing lessons from them. | 0.747 |
| An emphasis on consensus-seeking, staff participative decision-making. | 0.760 |
| ***Company Identity*** (AVE = 0.55, CR = 0.83, Cronbach's $\alpha = 0.83$) | |
| *Please state to what extent the following statements apply to your relationship to TechCo as a whole*: | |
| I am very interested in what others think about it. | 0.707 |
| When I talk about it, I usually say "we" rather than "they." | 0.673 |
| Its successes are my successes. | 0.818 |
| When someone praises it, it feels like a personal compliment. | 0.749 |
| ***Incubator Knowledge*** (AVE = 0.71, CR = 0.88, Cronbach's $\alpha = 0.85$) | |
| I have heard a lot about *the incubator program at TechCo* before this survey. | 0.966 |
| I am well-informed about *the incubator program at TechCo*. | 0.906 |
| I know someone who has participated in *the incubator program at TechCo*. | 0.616 |
| ***Start-Up Support*** (AVE = 0.87, CR = 0.95, Cronbach's $\alpha = 0.95$) | |
| *To what extent do the following statements apply? My company*. . . | |
| . . . promotes the formation of employee-driven start-ups. | 0.958 |
| . . . supports employee-driven start-ups. | 0.965 |
| . . . sees employee-driven start-ups as a strategic priority. | 0.864 |
| ***Career Prospects*** (AVE = 0.61, CR = 0.82, Cronbach's $\alpha = 0.81$) | |
| *Please indicate the extent to which you agree with the following statements*: | |
| In terms of my career, I have not yet reached my ceiling at *TechCo*. | 0.587 |
| I have a good chance of being promoted soon. | 0.880 |
| I expect to advance quickly at *TechCo*. | 0.843 |
| ***Financial Risk-Taking*** (AVE = 0.66, CR = 0.85, Cronbach's $\alpha = 0.83$) | |
| *Please indicate the extent to which you agree with the following statements*: | |
| I am willing to take high financial risks in order to realize higher average yields. | 0.892 |
| I like taking big financial risks. | 0.853 |
| I am willing to invest 5% of my annual income in a speculative stock. | 0.677 |
| ***Social Risk-Taking*** (AVE = 0.39, CR = 0.66, Cronbach's $\alpha = 0.67$) | |
| *For each of the following statements, please indicate your likelihood of engaging in each activity or behavior*: | |
| Asking your boss for a raise. | 0.571 |
| Openly disagreeing with your boss in front of your coworkers. | 0.622 |
| Speaking your mind about an unpopular issue at a social occasion. | 0.684 |
| ***Self-Efficacy*** (AVE = 0.50, CR = 0.83, Cronbach's $\alpha = 0.84$) | |
| When facing difficult tasks, I am certain that I will accomplish them. | 0.725 |
| In general, I think that I can obtain outcomes that are important to me. | 0.711 |
| I believe I can succeed at most any endeavor to which I set my mind. | 0.721 |
| I am confident that I can perform effectively on many different tasks. | 0.711 |
| Compared to other people, I can do most tasks very well. | 0.649 |

*Note*: This table presents the survey items and standardized confirmatory factor loadings for all multi-item survey constructs.
Abbreviations: AVE, average variance extracted; CR, composite reliability.

the company in the absence of further action by the firm, do not see themselves working for the company in the long run, and consider leaving to join another company.

Regarding our main independent variables, *Creativity* is measured using items from Farmer et al.'s (2003) established scale on self-views on employees' past creative behavior. It captures, among other things, employees' assessment of how often they are described as someone who takes on new perspectives or has new ideas. We choose the same five items as prior research on

creativity in management accounting (Speklé et al., 2017) and find very similar measurement properties in our data set.[7]

Given the centrality of this construct for our research interests, we further test for the validity of *Creativity* in a separate, follow-up survey study among a large pool of business students at a major European university ($n = 906$). We find strong evidence that *Creativity* is significantly correlated with Kaufman and Baer's (2004) established *Creative Personality Scale* ($r = 0.37$, $p < 0.01$) and—also fully in line with prior literature on creativity and the "Big Five" personality traits—that *Creativity* is positively correlated with extraversion and openness (Hornberg & Reiter-Palmon, 2017; Wolfradt & Pretz, 2001). More importantly, providing us with first evidence for our reasoning on the underlying mechanism of our hypotheses, we also find that *Creativity* is strongly correlated with an individual's learning-goal orientation (*Learning*; VandeWalle, 1997; $r = 0.49$, $p < 0.01$). All associations hold when controlling for other central respondent characteristics (i.e., gender, age, years of study, work experience, overconfidence), as well as for a marker variable to mitigate potential common method bias in this follow-up study. Overall, we are thus confident in the use of *Creativity* for our analyses.

*Target Difficulty* is measured using a three-item reflective construct from Arnold and Artz (2015), capturing the amount of effort, skills, and overall difficulty of reaching set targets. *Career Tournament* is a purpose-developed formative scale for measuring the extent to which employees perceive their work environment as subject to a tournament-like competition for promotion spots. In line with the defining features of career tournaments outlined by tournament theory (Connelly et al., 2014), it captures the extent to which employees directly compete with their peers (i.e., "I have to compete with my peers at the same level for a promotion spot"), the extent to which promotion decisions are made based on ranking employees (i.e., "Whether or not I get promoted also depends on if I perform better or worse than my peers at the same level"), and the extent to which promotion spots are limited (i.e., "Even if everyone in my team performs well, not every member can be promoted to a higher position").[8]

### 3.3.2 | Control variables

We apply a broad set of control variables potentially related to *Intention to Leave*, all of which can be clustered into three categories. First, in controlling for *Job Ambiguity* and *Transformational-Charismatic Leadership*, we control for central factors related to an employee's job environment. *Job Ambiguity* captures the extent to which an employee lacks clarity in central job dimensions, like duties, authority, or allocation of time, and is measured using a six-item scale by Rizzo et al. (1970). *Transformational-Charismatic Leadership* measures the ability of an employee's supervisor to articulate an attractive vision for the unit and to behave as a role model consistent with that vision. It is measured using a nine-item construct adopted from Klein and Speckbacher (2019), who, in turn, build on Bass and Avolio's (1995) original scale.

Second, we control for factors related to employees' perception of the organization, including their assessment of a firm's controls with regard to flexible structures and communication processes (*Organic Controls*; adopted from Chenhall et al., 2011) and the extent to which they identify with the company (*Company Identity*; adopted from Mael & Ashforth, 1992). To

[7]Just like in prior studies using the same scale (e.g., Speklé et al., 2017), the AVE of our measure is slightly below the suggested cutoff of 0.5, perhaps reflecting the complexity of the construct we aim to capture. Acknowledging that the AVE is a quite conservative measure (Fornell & Larcker, 1981), prior literature has repeatedly made the point that convergent validity may still be deemed adequate if composite reliability is acceptable (e.g., Lam, 2012), which is the case in our study (CR = 0.79).

[8]In line with tournament theory, we treat *Career Tournament* as a formative construct, as the three dimensions outlined above jointly give rise to career tournament intensity, and we do not expect them to necessarily covary (Bedford & Speklé, 2018).

**TABLE 2** Descriptive statistics.

| | Mean | SD | Min | Q1 | Median | Q3 | Max |
|---|---|---|---|---|---|---|---|
| *Intention to Leave* | 2.51 | 1.54 | 1.00 | 1.00 | 2.00 | 3.33 | 7.00 |
| *Creativity* | 5.14 | 0.88 | 2.40 | 4.60 | 5.20 | 5.80 | 7.00 |
| *Target Difficulty* | 4.73 | 1.18 | 1.00 | 4.00 | 5.00 | 5.33 | 7.00 |
| *Career Tournament* | 4.11 | 1.31 | 1.00 | 3.00 | 4.00 | 5.00 | 7.00 |
| *Job Ambiguity* | 3.14 | 1.16 | 1.00 | 2.17 | 3.17 | 3.83 | 6.50 |
| *Transformational-Charismatic Leadership* | 5.00 | 1.43 | 1.00 | 4.11 | 5.33 | 6.11 | 7.00 |
| *Organic Controls* | 4.27 | 1.16 | 1.00 | 3.43 | 4.43 | 5.00 | 7.00 |
| *Company Identity* | 4.66 | 1.25 | 1.00 | 4.00 | 4.75 | 5.50 | 7.00 |
| *Tenure* | 8.13 | 7.84 | 0.50 | 2.50 | 5.00 | 12.00 | 36.00 |
| *Incubator Knowledge* | 1.74 | 1.17 | 1.00 | 1.00 | 1.33 | 2.00 | 7.00 |
| *Likelihood to Apply* | 3.95 | 1.71 | 1.00 | 3.00 | 4.00 | 5.00 | 7.00 |
| *Prior Application* | 0.02 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| *Start-Up Support* | 3.72 | 1.36 | 1.00 | 2.67 | 4.00 | 4.67 | 7.00 |
| *Career Prospects* | 3.77 | 1.49 | 1.00 | 2.67 | 4.00 | 5.00 | 7.00 |
| *Financial Risk-Taking* | 3.34 | 1.51 | 1.00 | 2.00 | 3.33 | 4.33 | 7.00 |
| *Social Risk-Taking* | 4.62 | 1.26 | 1.00 | 3.67 | 4.67 | 5.33 | 7.00 |
| *Self-Efficacy* | 5.71 | 0.78 | 3.40 | 5.20 | 5.80 | 6.20 | 7.00 |
| *Intention to Found* | 3.06 | 1.79 | 1.00 | 1.00 | 3.00 | 4.00 | 7.00 |
| *Age* | 3.33 | 0.99 | 2.00 | 3.00 | 3.00 | 4.00 | 6.00 |
| *Gender* | 0.84 | 0.37 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| *Children* | 0.47 | 0.50 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 |
| *Academic Degree* | 0.95 | 0.22 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |

*Note*: This table presents the descriptive statistics for all variables used in our main models. See Table 1 for the measurement of all multi-item constructs. To accommodate for potential privacy concerns, *Age* was measured using a seven-point Likert scale with the following age brackets: 1 (<20), 2 (20–29), 3 (30–39), 4 (40–49), 5 (50–59), 6 (60–69), and 7 (70+).

capture firm-internal innovation opportunities, we measure the extent to which they know about *TechCo's* incubator program (*Incubator Knowledge*, purpose-developed), the likelihood that they would apply for it (*Likelihood to Apply*), whether they have already applied for it (*Prior Application*), and the extent to which the company's leadership supports employee-driven start-up initiatives (*Start-Up Support*; adapted from Liang et al., 2007). As a final firm-level control, we add *Career Prospects*, thus holding the respondents' perceived promotion opportunities constant when exploring the role of *Target Difficulty* and *Career Tournament* for voluntary turnover decisions.

We also control for employees' personal characteristics. *Self-Efficacy* is based on an established scale used by G. Chen et al. (2001) and includes items like "Compared to other people, I can do most tasks very well" and "I will be able to achieve most of the goals that I have set for myself." In addition, we control for employees' propensity to engage in *Financial Risk-Taking* (Pennings & Smidts, 2000; Weber et al., 2002) and *Social Risk-Taking* (Weber et al., 2002) and their intention to become an entrepreneur (*Intention to Found*).

Finally, we also control for demographics, such as the respondent's *Age* (captured on a seven-point Likert scale), *Gender* (a dummy variable with one indicating a male participant), whether they have *Children*, and whether they hold an *Academic Degree*.

**TABLE 3** Pairwise correlations.

| Variables | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) *Intention to Leave* | 1.00 | | | | | | | | | | | | | | | | | | | | | |
| (2) *Creativity* | 0.22* | 1.00 | | | | | | | | | | | | | | | | | | | | |
| (3) *Target Difficulty* | 0.08 | 0.04 | 1.00 | | | | | | | | | | | | | | | | | | | |
| (4) *Career Tournament* | 0.10 | −0.02 | 0.26* | 1.00 | | | | | | | | | | | | | | | | | | |
| (5) *Job Ambiguity* | 0.30* | 0.08 | 0.04 | 0.11* | 1.00 | | | | | | | | | | | | | | | | | |
| (6) *Transformational-Charismatic Leadership* | −0.23* | 0.00 | 0.09 | 0.02 | −0.36* | 1.00 | | | | | | | | | | | | | | | | |
| (7) *Organic Controls* | −0.40* | −0.12* | −0.09 | 0.04 | −0.34* | 0.44* | 1.00 | | | | | | | | | | | | | | | |
| (8) *Company Identity* | −0.21* | 0.17* | 0.14* | 0.06 | −0.23* | 0.17* | 0.24* | 1.00 | | | | | | | | | | | | | | |
| (9) *Tenure* | −0.20* | −0.17* | 0.01 | −0.09 | −0.12* | −0.06 | −0.10 | −0.01 | 1.00 | | | | | | | | | | | | | |
| (10) *Incubator Knowledge* | 0.02 | 0.14* | 0.06 | 0.12* | −0.02 | 0.05 | −0.02 | 0.12* | 0.04 | 1.00 | | | | | | | | | | | | |
| (11) *Likelihood to Apply* | −0.03 | 0.06 | 0.14* | 0.08 | −0.04 | 0.21* | 0.21* | 0.23* | −0.19* | 0.15* | 1.00 | | | | | | | | | | | |
| (12) *Prior Application* | −0.02 | 0.11* | −0.05 | 0.10* | 0.02 | −0.15* | −0.07 | 0.06 | 0.05 | 0.58* | 0.10 | 1.00 | | | | | | | | | | |
| (13) *Start-Up Support* | −0.18* | −0.04 | 0.02 | 0.02 | −0.22* | 0.21* | 0.47* | 0.29* | −0.01 | 0.11* | 0.24* | −0.03 | 1.00 | | | | | | | | | |
| (14) *Career Prospects* | 0.13* | 0.25* | 0.08 | 0.15* | 0.03 | 0.14* | 0.11* | 0.11* | −0.47* | 0.03 | 0.20* | 0.03 | −0.04 | 1.00 | | | | | | | | |
| (15) *Financial Risk-Taking* | 0.37* | 0.18* | 0.18* | 0.20* | 0.18* | −0.09 | −0.07 | 0.03 | −0.17* | 0.11* | 0.06 | −0.01 | −0.15* | 0.22* | 1.00 | | | | | | | |
| (16) *Social Risk-Taking* | 0.25* | 0.35* | 0.21* | 0.15* | 0.14* | −0.03 | −0.11* | 0.05 | −0.19* | 0.18* | 0.07 | 0.11* | −0.08 | 0.25* | 0.22* | 1.00 | | | | | | |
| (17) *Self-Efficacy* | 0.05 | 0.42* | 0.12* | 0.03 | −0.13* | 0.05 | 0.03 | 0.13* | −0.23* | 0.07 | 0.17* | −0.01 | 0.02 | 0.25* | 0.12* | 0.27* | 1.00 | | | | | |
| (18) *Likelihood to Found* | 0.40* | 0.17* | 0.12* | 0.20* | 0.09 | 0.01 | −0.03 | −0.09 | −0.21* | 0.05 | 0.02 | −0.04 | −0.10 | 0.19* | 0.39* | 0.24* | 0.14* | 1.00 | | | | |
| (19) *Age* | −0.17* | −0.07 | 0.02 | −0.20* | −0.08 | −0.11* | −0.13* | 0.08 | 0.64* | 0.04 | −0.07 | 0.04 | 0.02 | −0.45* | −0.09 | −0.09 | −0.18* | −0.28* | 1.00 | | | |
| (20) *Gender* | 0.02 | 0.10 | 0.12* | 0.02 | 0.01 | −0.05 | 0.09 | 0.05 | 0.05 | 0.05 | −0.03 | −0.02 | 0.03 | 0.08 | 0.25* | 0.10 | 0.03 | 0.11* | 0.11* | 1.00 | | |
| (21) *Children* | −0.23* | 0.02 | −0.04 | −0.08 | −0.06 | 0.03 | 0.07 | 0.13* | 0.31* | 0.05 | 0.05 | 0.04 | 0.09 | −0.16* | −0.18* | 0.03 | −0.15* | −0.17* | 0.42* | 0.04 | 1.00 | |
| (22) *Academic Degree* | 0.03 | 0.10 | 0.03 | −0.03 | 0.10 | −0.09 | −0.02 | 0.02 | −0.18* | 0.06 | −0.11* | 0.03 | −0.03 | 0.12* | 0.08 | 0.04 | −0.05 | −0.04 | −0.03 | 0.04 | −0.10 | 1.00 |

*Note*: This table presents pairwise correlations for all main variables (see Table 1 for variable measurement).
* denotes significance below the 0.1 level.

# 4 | RESULTS

## 4.1 | Hypothesis tests

H1 suggests a positive association between an R&D employee's creativity and their intention to leave the organization. To test it, we use a linear regression model (Model (1) in Table 4) on *Intention to Leave* using all our main and control variables as predictors. Doing so, we indeed find that employees scoring higher on *Creativity* also show a higher *Intention to Leave* ($p < 0.05$, two-tailed), thus supporting H1.

To test our hypotheses on how design features of performance management practices affect this association, we introduce interaction terms between *Creativity* and *Target Difficulty*, and between *Creativity* and *Career Tournament* in Model (2). We also perform a supplementary analysis based on sample splits. Looking at the interaction coefficients in Model (2), we find evidence in support of H2 and H3: the positive association between *Creativity* and *Intention to Leave* is reduced by a higher *Target Difficulty* ($p < 0.1$, two-tailed) and increased by a more pronounced *Career Tournament* ($p < 0.01$, two-tailed).[9] For the corresponding sample-split analysis, we split our observations into employees scoring above and below the median value of *Creativity* and compare the coefficients for *Target Difficulty* and *Career Tournament* across these two subsamples (Models (3) and (4) of Table 4).[10] We find that, in the *Low Creativity* subsample, *Target Difficulty* is positively associated with the *Intention to Leave* ($p < 0.05$, two-tailed), whereas in the *High Creativity* subsample, this association is indeed negative ($p < 0.1$, two-tailed). This difference across groups is also statistically significant ($p < 0.01$, two-tailed). Importantly, the opposite coefficients in the subsamples corroborate our argument for H2 that, whereas difficult targets may *increase* voluntary turnover for many employees, creative individuals actually display a *lower* intention to leave when faced with challenging targets. Similarly, related to H3, we find that higher levels of *Career Tournament* are associated with a lower intention to leave in the *Low Creativity* subsample and a higher intention to leave in the *High Creativity* subsample (both at $p < 0.1$, one-tailed). Crucially, we also find that the coefficients for *Career Tournament* differ significantly across subsamples, in line with the hypothesized direction ($p < 0.05$, two-tailed). Thus, overall, we find evidence in support of H2 and H3.[11]

## 4.2 | Robustness tests

First, we consider the extent to which the association between *Creativity* and *Intention to Leave* may be subject to biases stemming from omitted correlated variables. On a general level, we assess the potential threat of omitted correlated variable bias by using two partial identification strategies, that is, the approaches by Oster (2019) and Frank (2000). The results from both approaches suggest that our findings are unlikely to be subject to biases from unexpected or unmeasurable omitted correlated variables. On a more concrete level, we investigate the role of more general performance perceptions in biasing our results on *Creativity* and *Intention to*

[9]Prior literature suggests that, if targets are set prohibitively high, they may lose their motivating nature (e.g., Locke & Latham, 2002). Based on our interviews with both employees and supervisors at TechCo, however, we do not expect to encounter such an extreme level of target difficulty (nor extreme levels of career tournament intensity) in our sample. Nevertheless, we empirically test for such a curvilinear effect of *Target Difficulty* and *Career Tournament* by introducing their quadratic terms and find no evidence for such a relationship.

[10]Note that in all sample-split analyses, observations at the median are allocated to the "low group."

[11]Given the growing awareness in management accounting literature that control choices often show interdependencies between one another (Chapman et al., 2020; Grabner & Moers, 2013b), we also test for a potential three-way interaction between *Creativity*, *Target Difficulty*, and *Career Tournament*. Perhaps suggesting that the positive effect of challenging targets for retaining creative employees is undermined if there is a strong competition for promotions, we find a positive, yet only marginally significant ($p = 0.18$), coefficient.

**TABLE 4** Main hypothesis tests.

| | *Intention to Leave* | | | |
|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** |
| ***Creativity* (H1)** | **0.215**** | **0.218**** | | |
| | **(2.18)** | **(2.37)** | | |
| *Target Difficulty* | −0.023 | −0.002 | **0.168**** | **−0.173*** |
| | (−0.34) | (−0.03) | **(2.22)** | **(−1.68)** |
| *Career Tournament* | −0.004 | −0.026 | **−0.158**†** | **0.149**†** |
| | (−0.06) | (−0.39) | **(−1.41)** | **(1.46)** |
| *Job Ambiguity* | 0.068 | 0.086 | 0.051 | 0.121 |
| | (0.74) | (0.94) | (0.42) | (0.89) |
| *Transformational-Charismatic Leadership* | −0.066 | −0.045 | −0.027 | −0.088 |
| | (−1.04) | (−0.72) | (−0.31) | (−0.93) |
| *Organic Controls* | −0.460*** | −0.503*** | −0.426*** | −0.678*** |
| | (−5.59) | (−6.49) | (−3.97) | (−5.46) |
| *Company Identity* | −0.153* | −0.122 | −0.178* | −0.032 |
| | (−1.95) | (−1.56) | (−1.69) | (−0.28) |
| *Tenure* | −0.015 | −0.015 | 0.003 | −0.048** |
| | (−0.91) | (−0.96) | (0.16) | (−2.27) |
| *Incubator Knowledge* | −0.006 | 0.002 | 0.073 | −0.118 |
| | (−0.07) | (0.02) | (0.61) | (−0.83) |
| *Likelihood to Apply* | 0.033 | 0.046 | 0.084 | −0.073 |
| | (0.61) | (0.84) | (1.17) | (−0.90) |
| *Prior Application* | −0.531 | −0.715 | | −0.012 |
| | (−0.66) | (−0.88) | | (−0.01) |
| *Start-Up Support* | 0.125* | 0.146** | 0.103 | 0.231** |
| | (1.83) | (2.26) | (1.19) | (2.14) |
| *Career Prospects* | 0.014 | 0.011 | 0.058 | −0.024 |
| | (0.21) | (0.16) | (0.73) | (−0.22) |
| *Financial Risk-Taking* | 0.207*** | 0.222*** | 0.149** | 0.352*** |
| | (3.86) | (4.08) | (2.49) | (3.29) |
| *Social Risk-Taking* | 0.120 | 0.129 | 0.213** | 0.049 |
| | (1.50) | (1.63) | (1.99) | (0.41) |
| *Self-Efficacy* | −0.182* | −0.256** | −0.323** | 0.051 |
| | (−1.89) | (−2.54) | (−2.35) | (0.31) |
| *Intention to Found* | 0.208*** | 0.208*** | 0.197*** | 0.221*** |
| | (3.88) | (3.82) | (3.24) | (2.53) |
| Demographic controls | Yes | Yes | Yes | Yes |
| ***Creativity* × *Target Difficulty* (H2)** | | **−0.128*** | | |
| | | **(−1.87)** | | |
| ***Creativity* × *Career Tournament* (H3)** | | **0.167***** | | |
| | | **(2.65)** | | |
| Intercept | 4.481*** | 4.707*** | 4.382*** | 3.439* |
| | (3.64) | (3.81) | (2.66) | (1.86) |

**TABLE 4** (Continued)

| | *Intention to Leave* | | | |
|---|---|---|---|---|
| | **(1)** | **(2)** | **(3)** | **(4)** |
| Obs. | 249 | 249 | 140 | 109 |
| $R^2$ | 0.438 | 0.456 | 0.37 | 0.56 |
| Subsample difference for *Target Difficult* ($\chi^2$) | | **8.66*** ** | | |
| Subsample difference for *Career Tournament* ($\chi^2$) | | **3.92** ** | | |

*Note*: Models (3) and (4) split the sample at the median score for *Creativity*. Observations at the median are included in the *Low Creativity* subsample. *Prior Application* is omitted in Model (4) since there is only one observation in this subset where the dummy variable takes the value one. Robust *t*-statistics clustered at the team level are reported in parentheses beneath each estimate. All variables linked to interaction terms are mean-centered. Hypothesized associations are bold.
*, **, and *** represent significance levels of 0.10, 0.05, and 0.01, respectively (two-tailed test). † represents a significance level of 0.10 (one-tailed test).

*Leave*. In fact, the possibility exists that our measure of employee creativity might not only capture an employee's assessment of their creative potential but also more generally reflect an employee's perception regarding their own performance potential and competence (i.e., self-efficacy). Also conceptually, one could argue that employees who perceive themselves as high performers are more likely to leave the firm and to embrace challenging targets. Examining whether self-efficacy moderates the relationship between the intention to leave and the performance management practices, we fail to find any significant coefficients while our hypothesized associations still hold.

We further address the concern that participants with higher intentions to leave report biased perceptions on the performance management practices they are exposed to. Assuming that career tournament intensity is similar for employees in the same team, we substitute their self-reported score on career tournament intensity with the average score of their peers' evaluation (*Career Tournament_Peers*) and find fully consistent results.[12] To hold the perceived likelihood of promotion constant in the context of H2 and H3, we also add an interaction term of *Creativity* and *Career Prospects* and again find fully robust results.

Finally, we specify a full covariance-based structural equation model, combining both the measurement and structural model and thereby explicitly accounting for measurement error. Again, our results remain robust.

## 4.3 | Process evidence

In our field study, we provide empirical evidence that creative R&D employees show lower intentions of leaving their organization when challenged by difficult targets (H2) and higher intentions of leaving when faced with more intense career tournaments (H3). These findings alone, however, do not speak to the underlying mechanisms of both hypotheses. We therefore complement our field study with a vignette-based experiment (aimed at providing process evidence for H2) and further analyses in our main survey data set (aimed at further supporting the underlying mechanism for H3).

[12]For completeness, we similarly run a test where we substitute *Target Difficulty* with the average scores of an employees' peers and unsurprisingly fail to find significant results. Our interviews with employees and supervisors at TechCo suggest that perceived target difficulty varies across individuals, and peer perceptions on the difficulty of their targets are thus not sufficiently representative for a focal employee's *Target Difficulty*.

### 4.3.1 | Process evidence on target difficulty (H2)

In the first additional analysis, we conducted a contextually rich vignette experiment among European business school students in November 2022. Our goal was to replicate our findings on the role of target difficulty for creative individuals' career decisions (H2) and, perhaps more importantly, to provide process evidence that it is indeed the strong learning orientation of creative individuals that largely drives our results.

To recruit participants, we contacted business students from a large, university-wide panel via email and asked them to complete our online study. To incentivize participation, each student was eligible to enter a lottery for one of 10 gift cards (with a value of 100 EUR each) of a large online retailer. On average, participants in our final sample of 446 observations were 23.3 years old and had been pursuing their studies for 2.35 years. Of the participants, 49.2% were female, and the median duration of the study was about 11 min.

We present participants with a scenario in which they have just graduated from university and have to decide on a job offer that is presented to them. When designing the experiment, we specifically chose to have participants decide whether to *accept* a job offer instead of whether to *quit* their job. This choice was both necessary from an empirical point of view and warranted from a theoretical perspective: an important aspect of successful vignette-based experimental research lies in participants being able to put themselves in the shoes of the decision-maker, which is often achieved by matching the vignette's setting to the abilities and knowledge of the sample (Aguinis & Bradley, 2014; Wason et al., 2002). Since asking students with little work experience to picture themselves in a long-term work engagement and contemplating to quit would introduce a lot of noise, we picked the job application process as a setting that is much closer to the lived reality of our student population and, consequently, provides us with a more accurate estimate for how they would actually behave. Crucially, we also see this as a valid choice from a theory perspective, since the underlying theory of our argument (i.e., the "person-organization fit") has been shown to apply equally for both retention and attraction decisions (e.g., Judge & Cable, 1997; Kristof-Brown et al., 2005; Verquer et al., 2003).

In the vignette, we ask participants to imagine that they have just graduated from a master's program at their university and are aiming to begin their professional career. They have already sent out some job applications and have participated in several job interviews that have gone well. Participants are then presented with a job offer from MultiCo, a fictional company from their top-five list of potential employers. MultiCo is described as a midsized, multidivisional company with a good reputation that pays salaries similar to other potential employers. Work projects at MultiCo are long-term and project-based and require creative solutions through strong collaboration between employees. We ensure that participants understand the setting well through a series of comprehension checks.

While we hold this company information constant across conditions, we manipulate information on the target difficulty that participants can expect at MultiCo. We tell participants that they have contacted a good friend who used to work for MultiCo to provide them some insights on how the company evaluates and rewards employees. In the condition of high *Target Difficulty*, the text message participants receive from their friend contains the following information: "Compared to the other firms you have applied for, I would say that targets at MultiCo are relatively challenging to achieve. During my time there, it was quite common that employees did not achieve their targets. Personally, I had to put in a lot of effort and continuously develop my skills to have a chance at hitting my target."[13] In the condition of low

[13]Note that this description is based on our measure for *Target Difficulty* in our field study and that our phrasing is mindful of targets appearing challenging, yet still achievable.

*Target Difficulty*, participants are told that targets at MultiCo are relatively easy to achieve, that it is common for every employee to achieve their target, and that their friend did not have to put in a lot of effort or develop new skills to meet the target. We randomly assign participants to one of these conditions.

We then ask them whether they would accept the offer or not (*Accept*) and use this as our dependent variable for all subsequent models. In our post-experimental questionnaire, we measure *Creativity* using the same construct as in our main study, as well as *Learning* using an established scale by VandeWalle (1997).[14] We also capture several control variables to rule out the most likely alternative mechanisms, including whether the participant made the decision considering the risk of not getting an alternative offer later on (*Risk Consideration*), that a friend used to work at MultiCo (*Friend Consideration*), and the prospect of a competitive work environment (*Competition Consideration*). As demographic controls, we capture whether participants have considerable work experience (*Experienced*), as well as their *Gender*, *Years of Study*, and *Age*.

Overall, the results of this additional analysis (see Table 5) provide further support for H2 and its underlying processes. While Models (1) through (4) in Table 6 show our results without controls, Models (5) through (8) include the control variables (and respective interaction terms to address alternative decision mechanisms) mentioned above. For simplicity, we will refer to the coefficients from the latter models when discussing our findings.

In line with H2, when running a probit model on *Accept*, we find a positive interaction coefficient between *Creativity* and *Target Difficulty* ($p < 0.05$, two-tailed; Model (5)), suggesting that while participants in the high *Target Difficulty* condition are less likely to accept the job offer, they are more likely to do so when scoring high on *Creativity*. In developing our hypothesis, we argue that creativity is inherently a quite broad personality construct and that its association with employees' career choices is, in fact, largely driven by its narrower manifestation of a strong learning orientation. To provide process evidence on this mechanism, we follow the bulk of studies in the personality psychology literature using mediation analysis as a way to test the extent to which the relation between a broad variable (in our case *Creativity*) and an outcome variable (*Accept*) is mediated by a narrower manifestation (*Learning*) of the broad variable (see Chaplin, 2007, for a discussion of this approach).

Following the steps outlined by Baron and Kenny (1986), we first find that *Creativity* is positively associated with *Learning* (0.603, $p > 0.01$, two-tailed; Model (6)). Next, we find a positive and significant interaction effect of *Learning* and *Target Difficulty* on *Accept* (0.709, $p < 0.01$, two-tailed; Model (7)). Finally, we find that the interaction effect of *Creativity* and *Target Difficulty* becomes insignificant in a joint model with the interaction term between *Learning* and *Target Difficulty* (Model (8)), suggesting a full (moderated) mediation. Finally, following Preacher and Hayes (2004), we also test for the significance of the indirect effect of *Creativity* via *Learning* and its interaction with *Target Difficulty* on *Accept* and find a positive and significant index of moderated mediation.

As further evidence for the role of *Target Difficulty* in our participants' decision to accept the job offer, we exploit a question in our post-experimental questionnaire (*TD-PEQ*) that captures the extent to which participants state that their decision was influenced by the information they received on the firm's target difficulty in performance evaluation. If our results are indeed driven by differential preferences for target difficulty, we expect them to be stronger for those individuals scoring high on *TD-PEQ*. We test this in two ways: First, we split our sample at the median of *TD-PEQ* and rerun our analyses in Table 5 on the two subsamples. We indeed find

[14]For participants who also took part in a prior survey in this student panel (104 observations), we match their existing responses on *Creativity* and *Learning Orientation* to this study instead of asking them to provide their responses in the post-experimental questionnaire.

**TABLE 5** Process evidence on target difficulty.

| | (1) *Accept* | (2) *Learning* | (3) *Accept* | (4) *Accept* | (5) *Accept* | (6) *Learning* | (7) *Accept* | (8) *Accept* |
|---|---|---|---|---|---|---|---|---|
| *Target Difficulty* | −0.708*** | | −0.789*** | −0.797*** | −0.844*** | | −0.905*** | −0.911*** |
| | (−5.80) | | (−6.23) | (−6.27) | (−6.18) | | (−6.44) | (−6.46) |
| *Creativity* | −0.056 | 0.571*** | | 0.145 | −0.219* | 0.603*** | | −0.043 |
| | (−0.56) | (11.21) | | (1.29) | (−1.89) | (11.89) | | (−0.33) |
| *Learning* | | | −0.365*** | −0.417*** | | | −0.327*** | −0.310*** |
| | | | (−4.02) | (−4.17) | | | (−3.31) | (−2.78) |
| *Target Difficulty × Creativity* | **0.248*** | | | **−0.204** | **0.374**** | | | **−0.109** |
| | **(1.79)** | | | **(−1.24)** | **(2.43)** | | | **(−0.59)** |
| *Target Difficulty × Learning* | | | **0.720***** | **0.801***** | | | **0.709***** | **0.767***** |
| | | | **(5.83)** | **(5.60)** | | | **(5.33)** | **(4.85)** |
| *Experienced* | | | | | −0.398** | −0.026 | −0.380** | −0.376** |
| | | | | | (−2.33) | (−0.22) | (−2.17) | (−2.14) |
| *Gender* | | | | | 0.077 | 0.239** | 0.102 | 0.085 |
| | | | | | (0.55) | (2.54) | (0.72) | (0.59) |
| *Years of Study* | | | | | −0.033 | −0.061* | −0.053 | −0.054 |
| | | | | | (−0.70) | (−1.93) | (−1.07) | (−1.10) |
| *Age* | | | | | 0.030* | 0.008 | 0.026 | 0.028* |
| | | | | | (1.82) | (0.74) | (1.56) | (1.66) |
| *Risk Consideration* | | | | | 0.161*** | −0.048** | 0.143*** | 0.145*** |
| | | | | | (3.14) | (−2.08) | (2.79) | (2.79) |
| *Friend Consideration* | | | | | 0.141*** | −0.029 | 0.130** | 0.129** |
| | | | | | (2.63) | (−1.15) | (2.37) | (2.36) |
| *Competition Consideration* | | | | | 0.239*** | −0.043* | 0.210*** | 0.214*** |
| | | | | | (4.15) | (−1.69) | (3.72) | (3.66) |
| *Target Difficulty × Risk Consideration* | | | | | 0.006 | | 0.055 | 0.062 |
| | | | | | (0.09) | | (0.79) | (0.89) |

**TABLE 5** (Continued)

| | (1) *Accept* | (2) *Learning* | (3) *Accept* | (4) *Accept* | (5) *Accept* | (6) *Learning* | (7) *Accept* | (8) *Accept* |
|---|---|---|---|---|---|---|---|---|
| *Target Difficulty* × *Friend Consideration* | | | | | −0.101 | | −0.092 | −0.090 |
| | | | | | (−1.35) | | (−1.20) | (−1.17) |
| *Target Difficulty* × *Competition Consideration* | | | | | −0.279*** | | −0.244*** | −0.245*** |
| | | | | | (−3.76) | | (−3.26) | (3.19) |
| Intercept | 0.268*** | 5.304*** | 0.320*** | 0.326*** | −0.024 | 5.138*** | 0.114 | 0.078 |
| | (3.12) | (117.82) | (3.56) | (3.61) | (0.365) | (21.86) | (0.30) | (0.21) |
| Observations | 446 | 446 | 446 | 446 | 446 | 446 | 446 | 446 |
| (Pseudo) $R^2$ | 0.062 | 0.221 | 0.114 | 0.117 | 0.182 | 0.272 | 0.224 | 0.226 |

*Note*: All continuous variables linked to interaction terms are mean-centered. *t*-statistics (for OLS-regressions) or *z*-statistics (for probit regressions) are presented in parentheses beneath each estimate. Hypothesized associations are bold.

*, **, and *** represent significance levels of 0.10, 0.05, and 0.01, respectively (two-tailed test).

that all coefficients related to target difficulty are significantly stronger in the high-*TD-PEQ* subsample. Second, instead of splitting the sample at the median of *TD-PEQ*, we make use of the continuous nature of the variable and include it as a moderator for the respective *Target Difficulty* interactions in our main models. The positive and statistically significant interaction terms are again fully consistent with our theory.

In conclusion, as we find evidence of the same underlying theory (i.e., that the "person-organization fit" between a certain character trait (creativity) and a particular organizational environment (difficult targets) affects how attractive it is for an employee to work there) in two different empirical settings (career decisions related to attraction and retention), we suggest our empirical analyses provide convincing evidence for H2 and its underlying mechanism.

### 4.3.2 | Process evidence on career tournament intensity (H3)

In developing H3, we argue that a higher career tournament intensity reduces team cohesion, thereby undermining cooperation and knowledge exchange between R&D employees and ultimately reducing learning opportunities for them. Given their strong learning orientation, creative R&D employees will show higher intentions of leaving when faced with such an environment. Put differently, our theoretical argument implies a moderated mediation model with *Career Tournament* leading to lower *Team Cohesion* which, in turn, interacts with *Creativity* on R&D employees' *Intention to Leave*.

In our field study, we measure *Team Cohesion* using an established construct from Carless and De Paola (2000), capturing the extent to which an R&D employee's immediate work team is united in achieving work tasks together. Its four items include the following statements: "Our team is united in trying to reach its goals for performance," "I am happy with my team's level of commitment to the task," "Our team members have the same aspirations for the team's performance," and "This team gives me enough opportunities to improve my personal performance." To test the mediating role of *Team Cohesion* in our model, we follow Baron and Kenny (1986) and Preacher and Hayes (2004). The results of this analysis are shown in Table 6.

**TABLE 6** Process evidence on career tournament intensity.

| | (1) *Team Cohesion* | (2) *Intention to Leave* | (3) *Intention to Leave* |
|---|---|---|---|
| ***Creativity*** | −0.035 | 0.229** | 0.228** |
| | (−0.34) | (2.35) | (2.55) |
| *Target Difficulty* | 0.207*** | 0.022 | 0.034 |
| | (3.04) | (0.34) | (0.52) |
| *Career Tournament* | **−0.115**† | 0.001 | −0.019 |
| | **(−1.59)** | (0.01) | (−0.29) |
| *Job Ambiguity* | −0.179 | 0.020 | 0.039 |
| | (−1.62) | (0.23) | (0.44) |
| *Transformational-Charismatic Leadership* | 0.277*** | −0.037 | −0.015 |
| | (3.95) | (−0.56) | (−0.23) |
| *Organic Controls* | 0.174* | −0.443*** | −0.481*** |
| | (1.79) | (−5.46) | (−6.33) |
| *Company Identity* | 0.026 | −0.159* | −0.128 |
| | (0.31) | (−1.97) | (−1.58) |

**TABLE 6** (Continued)

| | (1) *Team Cohesion* | (2) *Intention to Leave* | (3) *Intention to Leave* |
|---|---|---|---|
| *Tenure* | 0.018 | −0.016 | −0.016 |
| | (1.09) | (−0.97) | (−1.02) |
| *Incubator Knowledge* | 0.122 | 0.011 | 0.016 |
| | (1.60) | (0.12) | (0.18) |
| *Likelihood to Apply* | 0.008 | 0.031 | 0.042 |
| | (0.19) | (0.56) | (0.76) |
| *Prior Application* | −0.136 | −0.595 | −0.742 |
| | (−0.17) | (−0.78) | (−0.96) |
| *Start-Up Support* | −0.032 | 0.118* | 0.138** |
| | (−0.44) | (1.69) | (2.09) |
| *Career Prospects* | 0.100 | 0.011 | 0.007 |
| | (0.14) | (0.16) | (0.11) |
| *Financial Risk-Taking* | −0.060 | 0.171*** | 0.188*** |
| | (−0.89) | (3.12) | (3.41) |
| *Social Risk-Taking* | −0.175** | 0.089 | 0.097 |
| | (−2.02) | (1.14) | (1.26) |
| *Self-Efficacy* | 0.310** | −0.160 | −0.221** |
| | (2.51) | (−1.54) | (−2.04) |
| *Intention to Found* | −0.102** | 0.200*** | −0.199*** |
| | (−2.00) | (3.62) | (3.59) |
| Demographic controls | Yes | Yes | Yes |
| ***Creativity* × *Team Cohesion*** | | **−0.151**** | **−0.133**** |
| | | **(−2.61)** | **(−2.31)** |
| ***Creativity* × *Career Tournament*** | | | **0.157***** |
| | | | **(2.70)** |
| ***Creativity* × *Target Difficulty*** | | | **−0.086**†** |
| | | | **(−1.30)** |
| Intercept | 2.305 | 4.530** | 4.623*** |
| | (1.44) | (4.00) | (4.03) |
| Obs. | 249 | 249 | 249 |
| $R^2$ | 0.372 | 0.462 | 0.476 |

*Note*: Robust *t*-statistics clustered at the team level are reported in parentheses beneath each estimate. All continuous variables linked to interaction terms are mean-centered. Hypothesized associations are bold.
*, **, and *** represent significance levels of 0.10, 0.05, and 0.01, respectively (two-tailed test). † represents a significance level of 0.10 (one-tailed test).

First, we show that *Career Tournament* is negatively and significantly associated with *Team Cohesion* ($p < 0.1$, one-tailed; Model (1)). Next, we find a negative and significant interaction term between *Team Cohesion* and *Creativity* on *Intention to Leave* ($p < 0.05$, two-tailed; Model (2)), implying that when faced with lower team cohesion, creative R&D employees show a higher intention to leave than their less creative peers. When adding the interaction terms from our main models, we find that both the interaction between *Creativity* and *Team Cohesion* and that between *Creativity* and *Career Tournament* remain statistically significant, suggesting a partial (moderated) mediation. In line with these findings, we also find a

statistically significant index of moderated mediation (Preacher & Hayes, 2004) for the indirect path of *Career Tournament* via *Team Cohesion* and its interaction with *Creativity* on *Intention to Leave*. Taken together, the results of this additional analysis support our theoretical arguments on the underlying mechanism of H3.

## 5 | CONCLUSION

Identifying and retaining talent is one of the most important and, at the same time, most difficult challenges that firms face. A crucial skill type that can be expected to gain in value even in functions and industries that are not traditionally regarded as "creative" (World Economic Forum, 2018) is an employee's creative talent, which makes retaining creative employees an important, yet understudied, challenge. While our results confirm our expectation that retaining creative employees is particularly difficult, we also show that firms can take direct actions to mitigate such talent loss via the design of their performance management system.

This, however, is easier said than done. The adoption of specific control practices is influenced by many factors other than the desire to retain creative employees (e.g., simply inducing higher effort on job-related tasks), which might conflict with this objective. This implies that, in designing the control system, practitioners need to make important trade-offs and consider potentially unintended consequences of their design choices. For instance, while literature suggests that difficult targets may undermine employees' outside-the-box thinking (e.g., Webb et al., 2013), we show that they may, in fact, play an important role in attracting and retaining particularly creative employees in the first place. Relatedly, our results suggest a trade-off between setting uniform targets across team members for fairness reasons versus more customized targets that are adapted to employees' preferences for learning challenges. Conversely, while tournament-style promotion practices are an important lever for enhancing employee effort or sorting individuals into leadership positions (e.g., Grabner & Moers, 2013a), we show that they may also come with the drawback of further facilitating the loss of creative employees. Only if firms understand the favorable and unfavorable consequences of performance management practices for various aspects of employee behavior and different employee types can they exploit the performance management system to also contribute to other goals, such as employee retention. While some negative side effects might be unavoidable, understanding them allows firms to tackle the resulting trade-offs in alternative ways.

While our empirical findings confirm our theoretical predictions, we caution that the results of our main survey must be interpreted in light of their potential limitations. Besides the common drawbacks of cross-sectional survey designs, we acknowledge that the impact of a certain control practice on employee behavior is typically contingent on the design of other control practices in place (e.g., Grabner & Moers, 2013b). For example, the degree to which intense tournaments will affect (creative) employees' turnover decisions might depend on the respective promotion criteria or on how competition and/or collaboration are embedded in the organizational values. Likewise, the effect of target difficulty might be contingent on the types of tasks delegated to the (creative) employees. Investigating the boundary conditions when difficult targets or intense tournaments are most likely to unfold their (un)desirable effects on the loss of creative talent is a fruitful avenue for future research.

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