



# Perceptions of Entrepreneurial Passion and Employees' Commitment to Entrepreneurial Ventures

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Drawing on theories of emotional contagion and goal setting, we propose two mechanisms as to how employees' perceptions of entrepreneurial passion influence their commitment to entrepreneurial ventures. Testing these mechanisms with data from a survey of 124 employees, we find that employees' perceptions of their supervisors' passion for inventing, founding, and developing differentially impact commitment. While perceptions of entrepreneurs' passion for inventing and developing enhance commitment, passion for founding reduces it. Employees' experiences of positive affect at work and their goal clarity mediate these effects. Our results have implications for the literature on entrepreneurial passion and leadership in entrepreneurial firms.

## Introduction

Entrepreneurial passion refers to "consciously accessible intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur" (Cardon, Wincent, Singh, & Drnovsek, 2009, p. 517). Experiencing passion is typical of many successful entrepreneurs; it is the "fire of desire" that drives their daily efforts (Cardon, Wincent et al., 2009, p. 515) and motivates them to persist in the face of obstacles (Chen, Yao, & Kotha, 2009). However, we still know relatively little about how an entrepreneur's employees are affected by their perceptions of their supervisor's entrepreneurial passion. As employee commitment is crucial for the success of entrepreneurial firms (Baron & Hannan, 2002), understanding how employees' perceptions of entrepreneurial

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passion can influence their commitment to new ventures is an important topic for entrepreneurship research.

Since entrepreneurs and employees are in frequent and direct contact with each other in most small ventures, it is likely that entrepreneurs substantially impact employee motivation and behavior (Ensley, Hmieleski, & Pearce, 2006). However, generating and preserving employee commitment in entrepreneurial ventures is challenging since missing organizational legitimacy, the lack of financial resources for paying high salaries, and the uncertainty about the venture's future development path often motivate employees to look for career options outside the venture (Cardon, 2003; Cardon & Stevens, 2004).

Therefore, in this paper, we investigate how employees' perceptions of entrepreneurial passion influence their commitment to entrepreneurial ventures. That is, consistent with previous research (e.g., Brundin, Patzelt, & Shepherd, 2008; Newcombe & Ashkanasy, 2002), we view entrepreneurs' displays of passion from the employees' perspective and focus on the employees' perceptions of it. We draw on theories of emotional contagion (Epstude & Mussweiler, 2009; Hatfield, Cacioppo, & Rapson, 1994; Platow et al., 2005) and goal setting (Colbert & Witt, 2009; Locke & Latham, 1990; Locke, Smith, Erez, Chah, & Schaffer, 1994) and combine them with a model of entrepreneurial passion (Cardon, Wincent, et al., 2009) to propose two possible mechanisms as to how perceived entrepreneurial passion impacts employee commitment. Using survey data from 124 venture employees closely working with entrepreneurs, we find that employees' positive affect at work and the clarity of their work goals mediate the relationship between perceived entrepreneurial passion and commitment but in a different manner for different types of entrepreneurial passion. These findings inform existing literature in three important ways.

First, our study addresses Cardon's (2008) call for research on the impact of entrepreneurial passion on new venture employees. The existing literature on entrepreneurial passion has mostly focused on the entrepreneur (Cardon, Wincent, et al., 2009) and how his or her passion influences venture success (Baum & Locke, 2004) and investor decisions (Chen et al., 2009), but only a few studies have proposed that entrepreneurial passion can also impact new venture employees (Cardon, 2008). Our study is unique in that it explores this relationship empirically and acknowledges that different types of entrepreneurial passion exist (Cardon, Wincent, et al., 2009).

Second, our study is unique in proposing and empirically testing two possible non-exclusive mechanisms (mediating relationships) as to how the perception of the three types of entrepreneurial passion impacts employee commitment. We find that perceived passion can influence employees' positive affect at work and their goal clarity, which, in turn, trigger commitment. Importantly, these mechanisms explain why perceived passion for inventing and developing positively impacts employee commitment, whereas perceived passion for founding has a negative effect. Our data also suggest that the affective path is more dominant than the cognitive path (goal clarity). This supports Cardon's (2008) claim that entrepreneurial passion (and employees' perception of passion) is mainly affective in nature.

Finally, our results inform the leadership literature by showing that although leaders might display the "same" affect, its influence on followers can differ depending on the context. Existing studies (either implicitly or explicitly) suggest that leaders' displays of positive affect is generally contagious and evokes positive affective experiences in employees at work, which, in turn, results in positive outcomes such as organizational citizenship behavior (Johnson, 2008) or performance (George, 1995). For entrepreneurial passion, however, it appears that this argument does not apply uniformly. Specifically, our data suggest that employees' perceptions of entrepreneurs' passion for founding new ventures—the "heart" of entrepreneurial activity—can signal that the entrepreneur might

leave the current venture once it is established to found the next one, thus diminishing employee commitment to that venture. Focusing on how entrepreneurial passion influences employees also extends the literature on entrepreneurial leadership, which has focused on entrepreneurs' leadership styles (Ensley et al., 2006; Hmieleski & Ensley, 2007) but rarely on their affective displays (Brundin et al., 2008).

## Theory and Hypotheses

Cardon, Wincent, et al. (2009) distinguish three different types of entrepreneurial passion. Passion for *inventing* reflects entrepreneurs' passion for activities related to identifying, inventing, and exploring new opportunities; passion for *founding* reflects entrepreneurs' passion for activities involved in establishing a venture for commercializing and exploiting opportunities; and passion for *developing* reflects their passion for activities related to nurturing, growing, and expanding the venture after its founding.

When engaging in activities for which they are passionate, entrepreneurs "show strong and positive emotions toward their projects" (Chen et al., 2009, p. 203). This strong affect can be perceived by others through the passionate entrepreneur's animated facial expression, energetic body movements, and rich body language (Chen et al.).<sup>1</sup> Although entrepreneurs' engagement in activities for which they are passionate will arouse their positive affect (Cardon, Wincent, et al., 2009), "entrepreneurs who feel passion for their venture may also experience shorter-term emotions that vary in intensity and valence. For example, the loss of a client may yield a negative short-term emotion such as frustration, even when the entrepreneur still holds positive feelings for the venture and its future potential" (Cardon, 2008, p. 78). Hence, even if the activities for which entrepreneurs are passionate may currently be difficult or painful and, therefore, arouse short-term negative affect, passionate entrepreneurs are likely to display overall positive affect at work because "[p]assion ensures that the entrepreneur persists in the face of difficulties and keeps enthusiasm high during the pursuit" (Cardon, Zietsma, Saparito, Matherne, & Davis, 2005, p. 37).

We draw on two theoretical approaches to investigate how perceived entrepreneurial passion influences employees of entrepreneurial ventures.<sup>2</sup> First, the theory of emotional contagion (Epstude & Mussweiler, 2009; Hatfield et al., 1994; Platow et al., 2005) explains how an entrepreneur's display of positive affect can trigger employees' concordant or discordant affective reactions depending on social comparison processes. Second, goal setting theory (Colbert & Witt, 2009; Locke & Latham, 1990; Locke et al., 1994) suggests that perceptions of entrepreneurial passion can enhance employees' goal clarity; however, this impact of entrepreneurial passion depends on the extent to which employees and supervisors share goals and values (Haslam & Platow, 2001; Klein & House, 1995). Thus, we suggest two ways for how perceived entrepreneurial passion

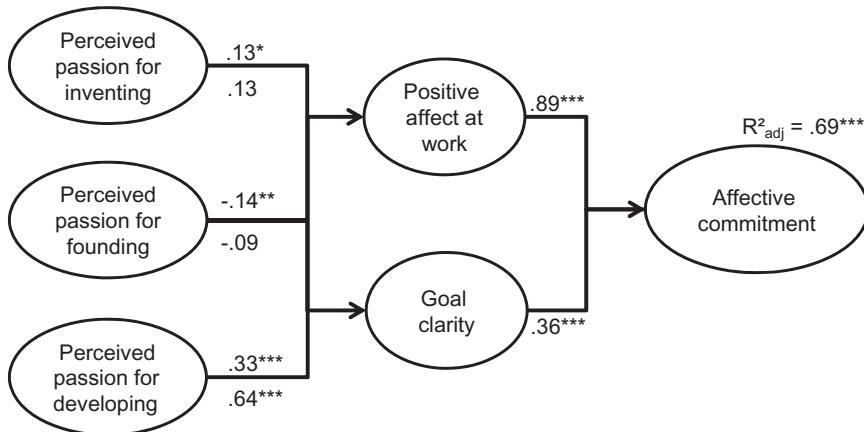
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1. Employees may also work and interact with more than one entrepreneur when the venture is run by an entrepreneurial team. In our theory and empirical design, we refer to the entrepreneur who the focal employee interacts with most and works with closest. We expect this entrepreneur to have more impact on the employee and to explain a larger part of variance in the employee's behavior than other entrepreneurs who are in less frequent and more distant contact with the employee (Vecchio, 2003).

2. These two theoretical explanations are consistent with the Social Identity Model of Leadership (van Knippenberg & Hogg, 2003), which postulates that leaders who share more attitudes, goals, or values with their employees will be better able to influence employees than those who share fewer attitudes, goals, or values.

Figure 1

## Research Model and Results



Notes: n = 124, \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ . Results are based on the Preacher and Hayes macro (2008). Control variables: Age, Gender, Time with entrepreneur, S&T education, Venture age, and Number of employees

can influence employee commitment via employees' positive affect and their goal clarity. In turn, the resulting positive affect and goal clarity will influence the employees' affective commitment (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003; Tubre & Collins, 2000) and thus represent possible mechanisms (mediators) as to how perceived entrepreneurial passion impacts employee commitment to entrepreneurial ventures.

It is important to emphasize that the experience of the three types of entrepreneurial passion is likely to be correlated (Cardon, Wincent, et al., 2009); thus, employees' perceptions of these passion types are likely to be correlated as well.<sup>3</sup> Our theory does not exclude this potential correlation; however, our theory postulates that the three passion types have a differential impact on employees' affective experiences and attitudes. In the following sections, we will present the reasoning for these differential impacts. The underlying research model is depicted in Figure 1.

### Perceived Entrepreneurial Passion and Employees' Positive Affect at Work

According to the theory of emotional contagion, affect can be transferred in social interactions because individuals have the innate tendency to mimic another person's facial expressions. As a response to physiological feedback from muscles involved in this mimicking, people tend to experience the exposed affect themselves (see Hatfield et al., 1994, for an overview). For example, when one observes others in his or her environment cheering and laughing, he or she is likely to experience positive affect as well. Importantly, however, this *concordant* affective transfer (i.e., transfer of the same or a

3. However, these correlations are unlikely to equal 1. For example, some entrepreneurs may be passionate for founding only, while others may be passionate for both founding and developing. Whereas the first may go on and found another venture soon after founding the first, the latter may found a second venture—if at all—only after the first one has grown to a certain size. Our model covers both possibilities.

similar affective experience) does not occur to the same extent under all circumstances; sometimes there are even *discordant* reactions where displays of affect induce a different affective experience in others (Heider, 1958). For example, when one experiences malicious joy, he or she feels happy when others appear to suffer.

The type of reaction triggered when someone observes someone else's affect depends on social comparison processes (Epstude & Mussweiler, 2009; Platow et al., 2005). When the sender of affect is perceived to be close to or in a similar situation as ("in the same boat") oneself, concordant affective reactions are triggered (Platow et al.; Sullins, 1991). Heider's (1958) balance theory explains this concordant reaction by proposing that people feel a strong drive to be equal with members of their group—namely people who they perceive to be close to them and with whom they share goals and values. However, when people perceive the sender of affect to have different goals and values or not to be in the same group, they want to differentiate themselves from that person and are more likely to react with discordant affect (Epstude & Mussweiler; Heider) or with no affective contagion at all (Platow et al.). We suggest that depending on the type of passion that employees perceive their supervisors to have, the display of positive affect connected to entrepreneurial passion (Cardon, 2008; Chen et al., 2009) can trigger concordant or discordant affective reactions.

First, entrepreneurs who are passionate about *inventing* show positive affect while identifying and exploring new opportunities and developing new products and services. In young ventures where marketable products still have to be developed and inventing is the venture's key activity, employees are often actively involved in the invention process (Katz, Aldrich, Welbourne, & Williams, 2000). Indeed, research has found that many highly skilled inventors tend to select themselves as employees into small firms (Zenger, 1994). This involvement allows them to understand this type of entrepreneur's perspective, decisions, and actions—that is, to "put themselves in the shoes" of an entrepreneur who is passionate about inventing. These employees will vicariously experience the entrepreneur's affect through a concordant affective reaction (Epstude & Mussweiler, 2009; Platow et al., 2005). Further, since developing new products and services is essential for the venture's future performance, employees working with these passionate entrepreneurs will perceive that it is highly important for the entrepreneurs to make the venture successful in the long run—an attitude that employees are likely to share given their interest in job and income security (Monsen, Patzelt, & Saxton, 2010). Finally, in young ventures, employees often indirectly or directly participate in the success of innovation efforts (e.g., through stock options, profit sharing, and other performance-based incentives, Cardon & Stevens, 2004), which aligns their goals with the entrepreneur's passionate inventing activities. Thus, an entrepreneur who is passionate about inventing is likely to share perspectives, attitudes, and goals with (the majority of) his or her employees, which will trigger the employees' concordant affective reaction—that is, positive affect—when they perceive higher levels of entrepreneurial passion for inventing (Epstude & Mussweiler; Platow et al.).

Second, entrepreneurs who are passionate for *founding* display positive affect during activities related to the creation of a new firm, such as raising capital, finding the right location, and expanding the founding team. These entrepreneurial activities are different from employees' activities in entrepreneurial ventures and usually do not involve them (Katz et al., 2000). Thus, employees are likely to have a limited understanding of the entrepreneur's decisions and actions related to these activities (e.g., why the entrepreneur spends so much time talking to potential investors instead of developing the venture's internal operations). Due to this limited understanding, it is likely more difficult for employees to "put themselves into the entrepreneur's shoes," which

will limit their concordant affective reactions to the entrepreneur's displayed affect (Platow et al., 2005). Further, employees may interpret entrepreneurs' passion for such activities in such a way that they believe once the current venture is sufficiently established (e.g., the seed capital is raised, the right location is found, and the founding team is expanded), the entrepreneur will be motivated to engage in these activities again and will move on to create the next firm instead of making the current venture successful in the long run. Therefore, there appears to be a conflict between the entrepreneurs' and employees' goals and attitudes regarding the current venture's future development in this particular context. This is also likely to reduce concordant affective transfer (Platow et al.) or even lead to a discordant affective reaction (e.g., employees worry about their future when they believe that the entrepreneur will leave the firm after the start-up phase), thus resulting in employees experiencing less positive affect at work.

Third, entrepreneurs experiencing passion for *developing* their current venture display positive affect when engaging in activities like finding new customers, developing new markets, and optimizing organizational processes—activities that are essential for making the company successful in the long run. Employees are likely to understand the importance of these activities because—like the entrepreneur—they have a vital interest in making the company successful in the long run. This will better enable them to take the entrepreneur's perspective. Further, developing the venture often offers career opportunities for employees. For example, research found that experienced employees often choose to work for entrepreneurial firms because they value the superior career opportunities related to the growth potential of small firms (Leung, 2003). Hence, the entrepreneur's interest in growing the firm is likely to be shared by the employees. Employees' perception of higher levels of passion for developing will thus indicate to them that they are “in the same boat” with the entrepreneur. This feeling and the effect of their common goals can be further enhanced when incentive systems allow employees to participate in the venture's future success (see above), thus intensifying the concordant transfer of positive affect (Platow et al., 2005; Sullins, 1991). Therefore, we postulate the following:

**Hypothesis 1a:** Perceived entrepreneurial passion for inventing will be *positively* related to employees' positive affect at work.

**Hypothesis 1b:** Perceived entrepreneurial passion for founding will be *negatively* related to employees' positive affect at work.

**Hypothesis 1c:** Perceived entrepreneurial passion for developing will be *positively* related to employees' positive affect at work.

## Perceived Entrepreneurial Passion and Employees' Goal Clarity

Passion can facilitate the communication of entrepreneurs' visions for their venture (Baum & Locke, 2004). Moreover, “when a particular identity is activated (say, *inventor*), we expect that the experience of passion mobilizes an entrepreneur's self-regulation processes that are directed toward effectiveness in the pursuit of the corresponding entrepreneurial goal (here, *opportunity recognition*)” (Cardon, Wincent, et al., 2009, p. 518, emphasis in the original). These activated self-regulation processes “coordinate entrepreneurs' cognitions and behaviors” and “aid in motivating coherent and coordinated goal pursuit” (Cardon, Wincent, et al., 2009, p. 518). Therefore, perceptions of entrepreneurial passion are likely to demonstrate to employees that entrepreneurs pursue their goals in a coherent and coordinated way. They are likely to

observe the entrepreneur's goal-oriented efforts that will illustrate the entrepreneur's priorities to them.<sup>4</sup>

According to goal setting theory (Locke & Latham, 1990), supervisors' communication and clarification of goals helps employees better understand their tasks and the expectations with which they are confronted (Colbert & Witt, 2009). Therefore, perceptions of entrepreneurial passion can influence employees' goal clarity at work—that is, “the extent to which the outcome goals and objectives of the job are clearly stated and well defined” (Sawyer, 1992, p. 134). However, the effect of supervisors' communication of goals and visions to employees depends on the extent to which values and goals are shared by them (Haslam & Platow, 2001). When values and orientations differ, employees are likely to be “flame resistant” (Klein & House, 1995, p. 189) to communication related to the entrepreneur's passion. Thus, it appears that perceptions of different types of entrepreneurial passion (reflecting different entrepreneurial goals and visions) impact employees' goal clarity differently.

First, entrepreneurs who are passionate for *inventing* attach high levels of importance to the identification and pursuit of new opportunities (Cardon, Wincent, et al., 2009). Through their actions, these entrepreneurs either directly or indirectly communicate to employees that inventing new products and services is crucial for them and their venture to achieve desired outcomes. This communication helps the employees understand that creativity and innovation are important goals whereas, for example, the development of routines to boost efficiency is a less important goal of their work activities. Indeed, employees in entrepreneurial ventures often appreciate the lack of routines and the innovative climate in these firms (Cardon & Tolchinsky, 2006) and will thus be particularly receptive to the visions communicated by entrepreneurs passionate about inventing. Being receptive to these visions and perhaps turning them into their own visions helps employees clarify what is expected from them (Klein & House, 1995) at the workplace.

In contrast, perceived entrepreneurial passion for *founding* new ventures likely decreases employees' goal clarity. The nature of the tasks associated with founding a venture is quite different from the tasks of new venture employees (Katz et al., 2000). Thus, it is likely difficult for them to take the entrepreneur's perspective and understand his or her decisions and actions or the value of the activities he or she pursues (Edwards & Cable, 2009). Indeed, employees' perceptions of passion for founding may be interpreted as the entrepreneur's motivation to leave the venture and found the next one once the current venture is sufficiently established. For example, when an entrepreneur who is passionate about founding spends a substantial amount of time negotiating with investors, employees may perceive that he or she is already trying to acquire capital for the next venture and that he or she is investing less time, money, and effort into developing the current venture or is even considering leaving. In these situations, it is rather unclear to employees how important the current venture is to the entrepreneur and whether his or her primary goal is to make the venture successful or to move on. Employees may perceive that there are multiple and incompatible goals (i.e., supporting the current firm vs. starting a new venture), leading to potential goal conflict (Locke et al., 1994) and diminished goal clarity.

Finally, when passionate for *developing*, “an entrepreneur's goal pursuit is likely to be regulated for venture growth” (Cardon, Wincent, et al., 2009, p. 522). Thus, such entrepreneurs demonstrate a strong interest in their current venture and that developing this

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4. We acknowledge that some entrepreneurs may also be passionate and act haphazardly at the same time. However, according to Cardon, Wincent, et al. (2009), on average, passion facilitates coherent and coordinated action.

venture is a priority goal for them. For example, they might communicate a vision of a strongly growing and dynamic firm that will soon be the biggest supplier worldwide of the product offered. Development-related activities are likely to closely involve employees (Katz et al., 2000) and are also likely to be consistent with their goals, as they offer the possibility for a successful career in the growing venture (see above, Leung, 2003). This alignment will enable the employees to put themselves in the entrepreneur's shoes and help them better understand the entrepreneur's decisions (Edwards & Cable, 2009). In turn, employees will more likely adopt the goals and visions communicated by the entrepreneur (Haslam & Platow, 2001), thereby helping them clarify expectations and goals at work.<sup>5</sup> Therefore, we postulate the following:

**Hypothesis 2a:** Perceived entrepreneurial passion for inventing will be *positively* related to employees' goal clarity.

**Hypothesis 2b:** Perceived entrepreneurial passion for founding will be *negatively* related to employees' goal clarity.

**Hypothesis 2c:** Perceived entrepreneurial passion for developing will be *positively* related to employees' goal clarity.

## Indirect Effects of Entrepreneurial Passion on Employees' Affective Commitment

The effects of perceived entrepreneurial passion on employees' positive affect at work and on the clarity of their work goals can impact employee commitment to the venture. That is, positive affect and goal clarity are likely to mediate the effect of perceived entrepreneurial passion on employees' affective commitment. Affective commitment is an attachment-based orientation toward one's organization (Meyer & Allen, 1991) and denotes "the relative strength of an individual's identification with and involvement in a particular organization" (Mowday, Steers, & Porter, 1979, p. 226). Studies on the individual-level antecedents of affective commitment found that, for example, an internal locus of control, high self-efficacy, and organizational tenure trigger commitment. Organizational-level factors influencing commitment include organizational support, organizational justice, and transformational leadership (see the meta-analysis by Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

The affect infusion model (Forgas & George, 2001) suggests that positive affect has a direct influence on employees' work-related attitudes because it infuses their cognitive processes (Thoresen et al., 2003). Positive affect at work signals to employees that everything is going well, that the current situation is not threatening, and that their environment is safe. Thus, employees experiencing positive affect can fully focus on the demands of the current work task and build up resources for current or upcoming challenges (Fredrickson, 2001), which they can proactively approach even if they require extra effort (Foo, Uy, & Baron, 2009). A meta-analysis of studies on affect and work attitudes (Thoresen et al.) supports the positive relationship between employees' experiences of positive affect at work and their affective commitment.

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5. We acknowledge that some entrepreneurs might explicitly define goals with their employees, while others might not speak about the employees' goals. Thus, even if an entrepreneur is passionate for founding, he or she may or may not clarify the employees' goals with them, and even if an entrepreneur is passionate for inventing/developing, he or she may never explicitly clarify goals. However, the increase in employees' goal clarity due to their perceptions of the entrepreneur's passion for inventing/developing and the decrease due to perceived passion for founding is rather independent from explicitly set goals (Kirkpatrick & Locke, 1996).

Second, while clear and unambiguous goals trigger employees' satisfaction (Sawyer, 1992) and work performance (Tubre & Collins, 2000), conflicting goals and unclear priorities reduce their motivation to pursue these goals (Locke et al., 1994). Unclear work goals lose their importance for employees and reduce employees' commitment to their firm because they cannot link their effort to rewards (Tubre & Collins). In particular, in new ventures lacking established routines, clear goals and reward contingencies are crucial for attracting employees (Ensley et al., 2006). To the extent that employees' goal clarity at work is enhanced—for example, through their perceptions of passion for inventing and developing—they become more committed to these goals and, subsequently, the venture (Maier & Brunstein, 2001). Therefore, we postulate:

**Hypothesis 3a:** Perceived entrepreneurial passion for inventing will have a *positive indirect effect* on employees' affective commitment via positive affect at work.

**Hypothesis 3b:** Perceived entrepreneurial passion for founding will have a *negative indirect effect* on employees' affective commitment via positive affect at work.

**Hypothesis 3c:** Perceived entrepreneurial passion for developing will have a *positive indirect effect* on employees' affective commitment via positive affect at work.

**Hypothesis 4a:** Perceived entrepreneurial passion for inventing will have a *positive indirect effect* on employees' affective commitment via goal clarity.

**Hypothesis 4b:** Perceived entrepreneurial passion for founding will have a *negative indirect effect* on employees' affective commitment via goal clarity.

**Hypothesis 4c:** Perceived entrepreneurial passion for developing will have a *positive indirect effect* on employees' affective commitment via goal clarity.

## Research Method

### Data Collection and Sample

Our sample frame includes employees in German ventures who report that they work closely together with the founder of their firm. In order to find these employees, we first identified 47 business incubators from the German Federal Association of Innovation, Technology, and Start-Up Centers (ADT, 2010) and regional associations. Focusing on incubator ventures is advantageous because they are usually in an early development phase (Rice, 2002) and are thus likely to be small and heavily influenced by the initial founder(s). From the incubators' websites we compiled a list of the ventures located in the incubators. We excluded subsidiaries of large firms because these are most likely to be led by a salaried manager. Altogether, our list contained 664 ventures.

For the second step, we trained two research assistants who contacted all firms by telephone, explained the purpose of our study, and asked for at least one employee who works closely together with the venture's founder to participate in the study. Of the 664 firms, we were able to contact 516; the others either did not exist anymore (15) or were unavailable by telephone (133). Further investigation revealed that most of the unavailable firms had also ceased to exist. Some (89) firms did not have any employees and were thus excluded. An additional 34 firms had to be excluded because the employees were unable to complete the questionnaire (e.g., because of insufficient knowledge of the German language). Employees from 241 firms out of the remaining 393 agreed to participate (61.3%). We sent e-mail invitations to these employees that summarized the study's purpose and provided them with a link to our online survey (see below). If employees did not participate within 10 days, we sent another e-mail that reminded them of the importance of their participation and again provided them with a link to the survey. We received

responses from 124 employees from 102 ventures,<sup>6</sup> representing a 19.8% response rate in terms of firms contacted. When we compared the assessments of early (first 31 respondents of the 124) and late respondents (last 31), there were no significant differences in any of the study variables ( $p > .10$ ), indicating that nonresponse bias was unlikely to be a problem in our data set.

On average, the employees were 37.13 years old (standard deviation [SD] 10.42 years), and 50.8% of them were female. In addition, 56% had a university degree, 16% had a high school degree, and 25% finished vocational education. They had 11.44 years of average working experience (SD 9.92 years) and had worked an average of 5.18 years (SD 5.14) for their current employer. Furthermore, 89% were in daily contact with the entrepreneur, 8% had weekly contact with him or her, and only 3% had less frequent contact with him or her. In total, 36% of the participants had vocational or university training in the field of business, 23% in the field of engineering, 15% in technology-oriented fields, 12% in sciences, and 8% in humanities, while 6% of the respondents chose the “others” category. The employees’ ventures were on average 9.52 years old (SD 5.95) and had 11.94 employees (SD 16.64). The respondents’ ventures operated in the following industries: engineering (31%); IT or software development (24%); biotechnology, chemistry, or medicine (14%); business consulting (4%); and others (27%).

## Measures

**Affective Commitment.** The dependent variable of our study is employees’ affective commitment and was measured with a 9-item scale (Mowday, Porter, & Steers, 1982) that captures affective attitudes toward the venture as a whole. An example item is “I really care about the fate of this organization.” A 7-point Likert scale with the anchors “I do not agree at all” and “I completely agree” was used to record employees’ commitment. The Cronbach’s alpha of the scale was .92, indicating high reliability (Hair, Black, Babin, Anderson, & Tatham, 2006).

**Perceptions of Entrepreneurial Passion.** To assess employees’ perceptions of the entrepreneurs’ passion, we adapted a scale on entrepreneurs’ self-reported passion (Cardon, Stevens, & Gregoire, 2009) to reflect the employees’ perspective. Table 1 displays the item wording. Perceptions of entrepreneurial passion were measured on 7-point Likert scales with the anchors “I do not agree at all” and “I completely agree.” Each scale consists of five items, and the Cronbach’s alphas were .82, .83, and .83 for passion for inventing, founding, and developing, respectively. These results indicate high reliability (Hair et al., 2006). Since our scale is an adaptation of the scale published by Cardon, Stevens, et al., we used confirmatory factor analysis (CFA) to confirm the distinctiveness of the three types of perceived entrepreneurial passion. We compared a three-factor model where the three latent variables for the passion types were allowed to correlate with a one-factor model where all 15 items loaded on one latent variable. The results indicated that the three-factor model ( $\chi^2(82) = 159.96$ ,  $p < .001$ ; comparative fit index [CFI] = .92; root mean square of approximation [RMSEA] = .09 (90% confidence interval [CI]: .067–.108); standardized root mean residual [SRMR] = .05;

6. As some participants worked for the same venture, we have a partly nested data structure. However, since the pattern of results did not change when we used only one employee per firm, we report the findings for the whole sample below.

Table 1

Items of the Perceived Entrepreneurial Passion Scale (Based on Cardon, Stevens, et al., 2009)

Perceived passion for inventing

The entrepreneur seems to be excited to figure out new ways to solve unmet market needs that can be commercialized  
The entrepreneur seems to enjoy searching for new ideas for products/services to offer  
The entrepreneur seems to feel energized when she/he is developing product prototypes  
The entrepreneur seems to be motivated to figure out how to make existing products/services better  
The entrepreneur really seems to be excited to scan the environment for new opportunities

Perceived passion for founding

The entrepreneur really seems to be excited to establish a new company  
The entrepreneur seems to be energized by owning his/her own company  
The entrepreneur seems to love creating a new firm  
The entrepreneur seems to be excited to create something out of nothing  
The entrepreneur seems to enjoy nurturing a new business through its emerging success

Perceived passion for developing

The entrepreneur seems to be motivated by trying to convince others to invest in his/her business  
The entrepreneur really seems to like finding the right people to market his/her product/service to  
The entrepreneur seems to be excited by assembling the right people to work for the business  
The entrepreneur really seems to enjoy commercializing new products/services  
The entrepreneur seems to be motivated by pushing his/her employees and him/herself to make the company better

parsimony normed fit index [PNFI] = .67)<sup>7</sup> fits the data better than the one-factor model ( $\chi^2(85) = 276.88$ ,  $p < .001$ ; CFI = .81; RMSEA = .14 (90% CI: .12–.15); SRMR = .09; PNFI = .61). This indicates that the three types of entrepreneurial passion can be discriminated by employees.

**Positive Affect at Work.** We measured employees' positive affect at work with a short version of the positive affect scale from the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). It consists of five items ("enthusiastic," "inspired," "attentive," "proud," and "interested") and has recently been used in entrepreneurship research (Foo et al., 2009). The PANAS can be applied in different settings (Watson et al.) and was framed as one's "mood generally experienced at work" (cf. Lee & Allen, 2002). Positive affect was assessed on a 5-point Likert scale with the anchors "not at all" and "always." The Cronbach's alpha was .84, indicating high reliability.

7. We acknowledge that the RMSEA is above the suggested cutoff of .6. However, it has been emphasized that the RMSEA is often too large in smaller samples (Hair et al., 2006). Further, the other fit indices are acceptable and the comparison of the three- and the one-factor model demonstrates the superiority of the three-factor model despite the high value of the RMSEA.

**Goal Clarity.** To assess the extent to which employees are clear about their goals and responsibilities at work, we used a 5-item scale by Sawyer (1992). Employees had to rate items like their “duties and responsibilities” or “the expected results of [their] work” on 7-point Likert scales ranging from “very unclear” to “very clear.” The Cronbach’s alpha of goal clarity was .94, indicating high reliability.

**Control Variables.** To control for age or gender effects—both correlate with individuals’ commitment (Meyer et al., 2002)—we recorded the participants’ Age and Gender (coded as 0 for males and 1 for females). Furthermore, we controlled for the time that the participant worked together with the entrepreneur because over time, the entrepreneur’s influence on the focal employee may change. This variable was labeled Time with entrepreneur and was dummy coded in the following manner: 0 denotes that the employee and the entrepreneur worked together for up to 3 years, and 1 denotes that they worked together for more than 3 years. Further, we distinguished respondents who were more likely to perform research and development tasks from respondents who were less likely to perform such tasks because passion for inventing could be particularly influential on employees in the research and development field. As a proxy for job content, we used the participants’ educational background. To keep the number of variables to a manageable size and to form categories with similar sizes, we used a dichotomous variable to capture the respondents’ field of education. We differentiated between respondents with education in the fields of science, technology, or engineering (coded as 1) and respondents with education in the fields of business, social sciences, or humanities (coded as 0). This variable was labeled Science and technology (S&T) education. Finally, we also controlled for two venture characteristics. Because the importance of types of entrepreneurial passion could depend on the stage of venture development (Cardon, Wincent, et al., 2009), we included Venture age as a control variable. Further, we controlled for the number of employees because employees’ perceptions of their supervisor depend on the team size (Goldberg, Riordan, & Zhang, 2008). This variable was labeled Number of employees.

## Measurement Model and Common Method Variance

Before testing our hypotheses, we ran CFAs to check the distinctiveness of the measures and to assess the impact of common method bias. First, we specified one model in which all indicators loaded on their respective latent constructs. Despite a significant  $\chi^2$  test, the fit indices indicated an acceptable model fit,  $\chi^2(505) = 773.41$ ;  $p < .001$ ; CFI = .91; RMSEA = .07 (90% CI: .056–.075); SRMR = .07; PNFI = .70. All indicators loaded significantly ( $p < .001$ ) on their respective constructs (loadings ranged from .31 to .92).<sup>8</sup> To see whether the indicators could be subsumed under one general construct, we specified another model in which all indicators loaded on one latent variable. The fit indices showed that the model fit was poor,  $\chi^2(520) = 1,441.36$ ;  $p < .001$ ; CFI = .69; RMSEA = .12 (90% CI: .113–.127); SRMR = .11; PNFI = 0.55. Even if this indicates that there does not seem to be one strong underlying component that explains the variance in our data, we wanted to check whether common method variance had an additional influence. This is a legitimate concern when all of the variables were recorded with the help of a questionnaire,

8. We acknowledge that the cutoff for acceptable loadings has been postulated to be at least .50 (Hair et al., 2006). Therefore, as a robustness check, we eliminated the three indicators with suboptimal factor loadings (one in each passion subscale) and reran our analyses. The overall pattern of results was consistent with our results; however, the indirect effect of perceived passion for inventing on commitment via positive affect (hypothesis 3a) was not significant at a conventional level (indirect effect = .09,  $p = .12$ ).

as in our case (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Thus, we specified a third model in which all indicators were allowed to load on their respective factor. Additionally, we included a latent variable that was allowed to influence all indicators and represents the common method extracted from all items (cf. Podsakoff et al.). The fit indices indicated that this model was slightly better than the model without the common method variable,  $\chi^2(471) = 656.90$ ;  $p < .001$ ; CFI = .94; RMSEA = .06 (90% CI: 0.046–0.067); SRMR = .06; PNFI = .68. However, the PNFI, which takes into account a model's parsimony and hence helps compare models (Hair et al., 2006), was higher for the model without the common method factor, indicating a better model fit. Further, the variance that the common method factor extracted was only .01 and was not significant ( $p > .20$ ). This indicates that common method variance was not a major concern in our study.

## Results

Table 2 shows the means, SDs, and correlations of all of the variables. The perceived entrepreneurial passion variables are significantly correlated with affective commitment. The mediating variables—positive affect and goal clarity—are also significantly and positively correlated with affective commitment.<sup>9</sup>

To test our hypotheses, we used a macro developed by Preacher and Hayes (2008) that allows us to test our whole model, including the multiple mediators, at once and relies on bootstrapping to test the indirect effects of perceived entrepreneurial passion on commitment. This procedure does not rely on the assumption of normality for the indirect effects and can be used for rather small sample sizes (Preacher & Hayes). For example, studies using this procedure have had sample sizes of 60 (Cole, Walter, & Bruch, 2008), 124 (Johnson & Lord, 2010), and 91 (study 4 by Sullivan, Landau, & Rothschild, 2010), which is consistent with our study. We ran three analyses for each type of perceived entrepreneurial passion with the other types as covariates. Further, we entered our control variables—Age, Gender, Time with entrepreneur, S&T education, Venture age, and Number of employees—as covariates but did not find any significant effects ( $p > .20$ ). Table 3 and Figure 1 display the results for the direct effects of perceived entrepreneurial passion on employees' positive affect and goal clarity. Consistent with hypothesis 1a, b, and c, all types of perceived entrepreneurial passion show a significant positive (passion for inventing,  $b = .13$ ,  $p < .05$ , and developing,  $b = .33$ ,  $p < .001$ ) or negative (passion for founding,  $b = -.14$ ,  $p < .05$ ) relationship with employees' positive affect at work. Contrary to hypothesis 2a and b, perceived passion for inventing ( $b = .13$ , ns) and perceived passion for founding ( $b = -.09$ , ns) did not have a significant influence on goal clarity. However, we found support for hypothesis 2c, suggesting a positive relationship between perceived passion for developing and goal clarity ( $b = .64$ ,  $p < .001$ ).

We tested the significance of the indirect effects with a bias-corrected bootstrapping procedure with 10,000 bootstrap samples (Preacher & Hayes, 2008). Table 4 displays the indirect effects, their standard errors, and the 95% bias-corrected CIs. First, the indirect effect of perceived passion for inventing on commitment via positive affect was positive and significant (indirect effect = .12, 95% CI = .00<sup>10</sup>–.25), whereas the indirect effect via

9. As correlations among the passion variables are relatively high, we checked for potential multicollinearity problems by calculating variance inflation factors (VIFs) for all of the models. The highest VIF was 2.55 (for perceived passion for developing), which is clearly below the critical value of 10 (Hair et al., 2006) and indicates that multicollinearity was unlikely to be a concern in our study.

10. The lower limit of the CI was .0037. Thus, 0 was not included in the CI.

Table 2

## Means, Standard Deviations, Reliabilities, and Correlations

	M	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Affective commitment	4.84	1.35	.92										
(2) Perceived passion for inventing	4.97	1.28	.39***	.82)									
(3) Perceived passion for founding	4.58	1.30	.28***	.48***	.83)								
(4) Perceived passion for developing	4.94	1.25	.58***	.46***	.59***	.83)							
(5) Positive affect at work	3.78	.68	.75***	.37***	.22*	.52***	.84)						
(6) Goal clarity	5.56	1.41	.74***	.35***	.31***	.60***	.63***	.94)					
(7) Age	37.13	10.41	.17	.02	.04	.17	.12	.18*	(-)				
(8) Gender	0.51	.50	.15	.05	.12	.26**	.15	.20*	.24**	(-)			
(9) Time with entrepreneur	0.48	.50	.06	-.08	-.04	-.01	.02	.01	.35**	-.02	(-)		
(10) Science and technology education	0.51	.50	.04	.03	-.07	-.05	-.01	.03	.02	-.52***	.05	(-)	
(11) Venture age	9.52	5.95	.03	-.15	-.19*	-.04	.03	.02	.23**	-.03	.26**	.08	(-)
(12) Number of employees	11.94	16.64	-.08	-.12	-.13	.03	.00	-.04	-.05	.04	.01	.04	.39**

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Notes: n = 124; If applicable, reliabilities (Cronbach's alphas) are shown in the diagonal axis. SD, standard deviation; M, means.

Table 3

## Prediction of Mediating Variables

	Prediction of positive affect at work		Prediction of goal clarity	
	Coefficient	Standard error	Coefficient	Standard error
Constant	2.15	.33	1.55	.63
Age	-.00	.01	.01	.01
Gender	.04	.14	.24	.26
Time with entrepreneur	.06	.12	-.04	.23
Science and technology education	.06	.13	.27	.25
Venture age	.01	.01	.01	.02
Number of employees	-.00	.00	-.00	.01
Perceived passion for inventing	.13*	.05	.13	.10
Perceived passion for founding	-.14*	.06	-.09	.10
Perceived passion for developing	.33***	.06	.64***	.11
$R^2_{adj} = .28; F(9,114) = 6.40, p < .001$		$R^2_{adj} = .39; F(9,114) = 8.04, p < .001$		

\*  $p < .05$ ; \*\*\*  $p < .001$ .

Note: n = 124.

Table 4

## Indirect Effects of Perceived Entrepreneurial Passion (via Positive Affect at Work and Goal Clarity) on Affective Commitment

	Bootstrap-indirect effect	SE	Lower limit 95% CI	Upper limit 95% CI
Inventor passion → PA → AC	.12*	.06	.00	.25
Inventor passion → Goal Cl → AC	.05	.05	-.03	.17
Founder passion → PA → AC	-.13*	.06	-.27	-.03
Founder passion → Goal Cl → AC	-.03	.05	-.13	.05
Developer passion → PA → AC	.29**	.07	.16	.46
Developer passion → Goal Cl → AC	.23**	.08	.10	.41

\*  $p < .05$ , \*\*  $p < .01$ .Notes: n = 124. Adjusted  $R^2 = .69, F(11,112) = 26.37, p < .001$ . Confidence intervals are bias-corrected based on 10,000 bootstrap samples. Control variables: Age, Gender, Time with entrepreneur, S&T education, Venture age, and Number of employees.

CI, confidence interval; PA, positive affect at work; Goal Cl, goal clarity; AC, affective commitment; SE, standard error.

goal clarity was not significant (indirect effect = 0.05, 95% CI = −.03–.17). These findings support hypothesis 3a but not hypothesis 4a. Second, for perceived passion for founding, the indirect effect on commitment via positive affect was negative and significant (indirect effect = −.13, 95% CI = −.27−−.03), but the indirect effect via goal clarity was also not

significant (indirect effect =  $-.03$ , 95% CI =  $-.13$ – $.05$ ). This supports hypothesis 3b but not hypothesis 4b. Third, the indirect effects of perceived passion for developing on commitment via positive affect and goal clarity were both positive and significant (indirect effect =  $.29$ , 95% CI =  $.16$ – $.46$  and indirect effect =  $.23$ , 95% CI =  $.10$ – $.41$ , respectively). This provides support for hypotheses 3c and 4c. Finally, both positive affect and goal clarity showed a positive and significant relationship with participants' affective commitment ( $b = .89$ ,  $p < .001$  and  $b = .36$ ,  $p < .001$ , respectively). The model is significant, adjusted  $R^2 = .69$ ,  $F(11,112) = 26.37$ ,  $p < .001$ .<sup>11</sup>

Finally, there is the possibility that the effects depend on the stage of the venture. For example, when a venture is still in its infancy and products are still in early development stages, the entrepreneur's inventor passion might be most salient. As the venture matures and enters into a period of expansion and growth, goals and visions related to growth could be communicated more clearly and be more relevant for the employees. To test whether our results depend on the venture development stage, as a *post hoc* analysis, we ran a model with interactions between Venture age and all of the independent variables. All significant relationships in our original model (without interactions) were also significant in the interactions model with the exception of the indirect effect of passion for inventing on affective commitment via the participants' positive affect at work, which became marginally significant (indirect effect =  $.10$ ,  $p < .10$ ). Further, all but one of the six possible interactions were not significant, suggesting that the impact of perceived entrepreneurial passion does not substantially depend on the venture stage.<sup>12</sup>

## Discussion and Conclusion

Building on theories of emotional contagion (Epstude & Mussweiler, 2009; Hatfield et al., 1994; Platow et al., 2005) and goal setting (Colbert & Witt, 2009; Locke & Latham, 1990; Locke et al., 1994), we proposed that perceptions of the entrepreneurs' passion for inventing, founding, and developing a venture can have different impacts on employees' positive affect at work and their goal clarity, thereby affecting their commitment to entrepreneurial ventures. Our data show that first, perceived passion for *inventing* has a positive influence on employees' positive affect at work and, in turn, on employees' affective commitment. Second, perceived passion for *founding* has a negative influence on employees' positive affect and an indirect influence on their affective commitment. Third, perceived passion for *developing* has a positive effect on the employees' positive affect and goal clarity and thus has an indirect positive effect on their commitment.

Interestingly, the analysis of indirect effects suggests that employees' positive affect at work is a more important mediator for the perceived passion–commitment relationship than goal clarity (which mediates only the effect of passion for developing). One reason for this finding might be that passion is mainly affective in nature (Cardon, Wincent, et al., 2009),

11. To test the robustness of our results, we also ran a Structural Equation Model (SEM). Although our sample size is below the typical recommendations for SEM studies, we found similar patterns. The model fit was within accepted thresholds ( $\chi^2 (574) = 889.84$ ;  $p < .001$ ; CFI =  $.90$ ; RMSEA =  $.07$  (90% CI:  $.058$ – $.075$ ); SRMR =  $.08$ ). However, because of the small sample size, these results have to be taken with care. Thus, we decided to report in detail only results from the Preacher and Hayes (2008) procedure, which is more accurate for small sample sizes.

12. There is a significant negative interaction between venture stage and passion for developing in explaining employees' positive affect at work ( $b = -.03$ ,  $p < .01$ ), indicating that this type of passion is more influential on employees of younger ventures than those of older ventures. We discuss this finding in the future research section.

which also likely accounts for its displays and employees' perceptions of these displays. Hence, perceptions of entrepreneurial passion will be more closely connected to employees' affect (via affective transfer) than to more rational and cognitive interpretations of passionate displays that influence goal clarity. However, perceived passion for developing has a consistent positive relationship with goal clarity, which emphasizes that the communication of goals and visions by passionate entrepreneurs can also influence employees' motivation and commitment.

Further, the coefficients for the relationships between perceived passion for developing and the employees' positive affect, as well as their goal clarity, are more than twice as large as the coefficients for the relationships between perceived passion for inventing/founding and the mediating variables. This indicates that employees are likely to be more receptive to the entrepreneur's passion for developing than to his or her passion for inventing and founding. Perhaps employees also perceive entrepreneurs' passion for developing to be more enduring than the other types of passion because passion for developing relates to both the near and the more distant future of the venture. Future research can investigate this interesting finding and its explanations in more detail.

Existing research emphasizes that passion leads entrepreneurs to invest higher levels of energy and effort into new ventures and that entrepreneurial passion contributes to new venture success (Baum & Locke, 2004). However, this literature has neglected the importance of employees in new venture performance and the potential impact of (perceptions of) entrepreneurial passion on employees' motivation and behavior. Following Cardon's (2008) call for research on the impact of entrepreneurial passion on new venture employees, we explore this issue by focusing on how employees' perceptions of entrepreneurial passion influence their affect at work, goal clarity, and affective commitment. Supported by theories of emotional contagion and goal setting, we identified different effects for the three types of entrepreneurial passion. For passion for developing (and to a lesser extent, passion for inventing), we found that there might be a rather "indirect" path as to how entrepreneurial passion contributes to new venture success—specifically via triggering employee commitment—because employee commitment is crucial for organizational success (Baron & Hannan, 2002; Steyrer, Schiffinger, & Lang, 2008). Importantly, for passion for founding, this indirect effect might be negative. Thus, we would like to encourage future research on this issue. For example, in a mediation model, researchers could simultaneously investigate the "direct" impact of entrepreneurial passion on new venture success and the "indirect" path of perceived entrepreneurial passion via employee commitment in order to compare how much variance in entrepreneurial venture performance each path explains.

While research has shown that expressed affect can lead to affective reactions in the target person's surroundings (Epstude & Mussweiler, 2009), this issue has rarely been discussed in the entrepreneurship literature. This lack of discussion is surprising given that entrepreneurship is a highly emotional process (Baron, 2008), suggesting that entrepreneurs display a variety of different affects to employees. Importantly, our results indicate that it is not simply the positive affect accompanying entrepreneurial passion that spills over from entrepreneur to employee but that this process is contingent upon the goals and attitudes that are linked to the type of passion employees perceive. This finding is consistent with research showing that emotional contagion depends on social comparison processes and that concordant affective reactions depend on the ability to take the sender's perspective and on shared goals between the receiver and the sender of affect (Epstude & Mussweiler; Heider, 1958).

Although leadership is a major entrepreneurial task (Hmielecki & Ensley, 2007; Vecchio, 2003), this aspect has rarely been investigated in the entrepreneurship literature

so far. The few studies on the topic have typically focused on the relationship between leadership styles and organizational performance (Ensley et al., 2006; Hmieleski & Ensley), but they have typically not investigated how leading entrepreneurs' affective displays impact employees' motivation and behavior. As an exception, Brundin et al. (2008) used an experimental design to explore the relationship between entrepreneurs' affective displays and employees' motivation to engage in entrepreneurial action. Extending this work, we show that the different types of entrepreneurial passion differentially explain employees' positive affect at work, their goal clarity, and thus their affective commitment. This important role of entrepreneurs' passionate displays is consistent with the literature on emotional leadership, which suggests that leaders' affect can significantly impact their employees' behavior (Johnson, 2008; Lewis, 2000).

Finally, our study is subject to limitations that offer opportunities for future research. First, we relied on employees' subjective perceptions of entrepreneurs' passion and did not use more objective criteria (e.g., video recordings). Although employees' perceptions—rather than objective characteristics— influence their behavior (Newcombe & Ashkanasy, 2002), future research could assess how self-reported passion from the entrepreneur's perspective and third-person ratings of the entrepreneur's passionate displays translate into perceived passion from the employees' perspective.

Second, we postulated that perceived passion will influence employees' affect at work in addition to their goal clarity, which will, in turn, influence their affective commitment. However, it is also possible that employees who are highly committed to their organization will perceive the entrepreneur to be passionate for developing the venture but that less committed employees will perceive the entrepreneur as being passionate for founding a new firm. Thus, we cannot be sure of the causality implied by our model even if our theory supports it. Future research could longitudinally investigate these relationships and follow employees from their start in a new venture over a longer period of time.

Third, we only focus on two potential mediators in the perceived entrepreneurial passion–employee commitment relationship. However, other mediators might also play a role, and there might be mediators in the relationship between perceived passion and positive affect or goal clarity that could also be relevant. First, perceptions of passion could also trigger feelings of supervisory support and higher levels of self-efficacy in employees because passionate entrepreneurs believe (and convey this belief) that their goals can be achieved (Baum & Locke, 2004; Chen et al., 2009). In turn, perceptions of support and self-efficacy are related to higher levels of commitment (Meyer et al., 2002). Second, there could be mediators in the relationships that we postulate—that is, in the relationship between perceived passion and employees' positive affect or between perceived passion and goal clarity. For example, employees' perceptions of passion could result in perceptions of entrepreneurs' positive affect or in perceptions of more intensively communicated visions. These perceptions could, in turn, influence employees' positive affect and their goal clarity.

Finally, as the types of entrepreneurial passion relate to different phases of the entrepreneurial process (Cardon, Wincent, et al., 2009), their relevance for employees could depend on the stage of the venture. Even if our results were not substantially affected by an interaction between passion type and venture age and all but one interaction in our *post hoc* analysis were insignificant (see above), future research could investigate this effect. For example, perhaps the life cycle of a venture's product is a better proxy for venture stage than venture age, as was used in this study.

In conclusion, our study finds that employees' perceptions of entrepreneurial passion impact their commitment to ventures via influencing their affect at work and their goal clarity but that these results vary for different types of passion. While passion for inventing

and developing are conducive to employee commitment, passion for founding is detrimental. It appears that perceptions of entrepreneurial passion mainly impact employees via the affective path and less so via the cognitive path (goal clarity). We hope that these findings inspire further research on entrepreneurs' affective displays and leadership and how they impact new venture employees.

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