CHAPTER 4
The Influence of Entrepreneurial Passion in New Venture Teams: an Empirical Examination

4.1 ABSTRACT

This study advances and tests an integrative model of how entrepreneurial passion independently, and jointly with team human capital, impacts early new venture performance. Drawing on theoretical work by Cardon et al. (forthcoming), we distinguish between team entrepreneurial passion – the overall level of shared passion among team members – and passion separation – the dispersion in levels of passion among team members – and propose that the latter weakens the positive impact of the former and of team human capital. Finally, we introduce strategic consensus as a mediating mechanism that transmits the impact of these affective and rational inputs to new venture performance. Multi-source, multi-wave data collected from 64 early stage new venture teams participating in an accelerator program support our model. Together, our findings advance understanding of how entrepreneurial passion manifests itself and operates at the team level, and the mechanisms through which and conditions under which it does so. These findings have important implications for the literatures on passion, new venture teams and group affect.

Keywords: Entrepreneurial passion, new venture teams, diversity
4.2 INTRODUCTION

After decades of a scholarly focus on the more rational determinants of new venture performance (Unger, Rauch, Frese, & Rosenbusch, 2011; Stam, Arzlanian, & Elfring, 2014), such as human capital and social capital, feelings and emotions have increasingly become recognized as being inherent to entrepreneurial endeavors and as key drivers of new venture success (Baron, 2008; Cardon, Foo, Shepherd, & Wiklund, 2012; Foo, Uy, & Baron, 2009; Hayton & Cholakova, 2012). One affective state that is considered to be “at the heart of entrepreneurship” (Clarysse, Van Boxstael, Van Hove, 2015: 1) and that has increasingly gained the interest of a growing number of scholars is entrepreneurial passion, defined as “an intense positive emotion towards entrepreneurial tasks and activities important to the entrepreneur’s self-identity” (Cardon, Wincent, Singh, & Drnovsek, 2009: 517). Passion is believed to be particularly important in entrepreneurial contexts, given the effort required and challenges that need to be overcome by entrepreneurs when starting a new venture (Gielnik, Spitzmuller, Schmitt, Klemann, & Frese, 2015). Research into this phenomenon has so far shown entrepreneurial passion to be associated with a wide variety of benefits, such as greater persistence, efficacy, commitment to the venture, more entrepreneurial action, and greater financial and venture growth (Breugst, Domurath, Patzelt, & Klaukien, 2012; Cardon & Kirk, 2015; Ho & Pollack, 2014; Murnieks, Mosakowski, & Cardon, 2014).

While existing studies have significantly improved our understanding of entrepreneurial passion and its subsequent impact, insight into this topic remains limited in at least three ways. First of all, much of the research in this area tends to focus exclusively on entrepreneurial passion, at the expense of other, more rational factors that have also been shown to have a critical impact on entrepreneurial outcomes (Mayer-Haug, Read, Brinckmann, Dew, & Grichnik, 2013; Song, Podoyntsyna, Van Der Bij, & Halman, 2008), which has led to a lack of integration of entrepreneurial passion within existing theoretical frameworks (e.g., Klotz, Hmieleski, Bradley, & Busenitz, 2014), and a failure to account for the interplay between rational and affective determinants, such as passion, in predicting entrepreneurial outcomes (Grégoire, Dimov, Cornelissen, Van Burg, 2015; Hayton & Cholakova, 2012). Secondly, while there is a prevailing assumption in existing literature that entrepreneurial passion leads to beneficial outcomes, there is emerging evidence that passion may not always be functional (Chen, Yao, & Kotha, 2009), and that it can even be dysfunctional (Adomdza & Baron, 2013; De Mol, Ho, & Pollack, forthcoming; Ho & Pollack, 2014). However, so far, relatively
little is understood about the factors that explain how and when passion is functional or dysfunctional for entrepreneurs. Finally, while most new ventures are founded and led by teams rather than individuals (Kamm, Shuman, Seeger, & Nurick, 1990; Cooper, Woo, & Dunkelberg, 1989; Klotz et al., 2014), existing studies predominantly focus on entrepreneurial passion at an individual level, rather than examining the way passion manifests itself and operates at a team level. Not only does this approach fail to do justice to the team-based reality of many new ventures, it also limits our understanding of passion by overlooking important properties of passion that only manifest themselves at a team level (e.g., passion separation, Cardon, Post, & Forster, 2016).

With the aim of addressing these issues, we integrate entrepreneurial passion into Klotz et al.’s (2014) input-mediator-output model of new venture team effectiveness, and frame team entrepreneurial passion and team human capital as critical (affective and rational) inputs that, independently and jointly, affect new venture performance (see Figure 1). Drawing on recent work by Cardon et al. (2016), we further distinguish between team entrepreneurial passion – i.e., the overall level of shared passion among team members – and passion separation – the dispersion in levels of passion among team members, and propose that the latter property of passion is dysfunctional for teams, as it weakens the positive impact of both team entrepreneurial passion and team human capital. Finally, we introduce strategic consensus – i.e., the level of shared understanding between team members about the strategic priorities of the venture – as a mediating process that transmits the impact of these independent variables to new venture team performance. Our study represents one of the first empirical examinations of entrepreneurial passion at the team level, and offers insight into 1) the interplay between entrepreneurial passion and the more rational factor of human capital, 2) a dysfunctional property of passion that uniquely manifests itself in new venture teams, and 3) the team-level mechanisms through which the performance-related consequences of entrepreneurial passion and team human capital come about.

We empirically test our integrative model, using multi-source and multi-wave data obtained from 64 early stage new venture teams participating in an accelerator program designed for high technology ventures. Using this research context and sample has a number of benefits. Firstly, many of the activities to which entrepreneurial passion pertains – e.g., founding, inventing, and developing – are by definition the most relevant in the early stages of new ventures, makes our early stage new venture team sample ideally suited for examining the impact of entrepreneurial passion. Secondly, the accelerator context allowed us to obtain data on new venture performance (through the

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use of expert ratings), which is otherwise inherently difficult with regard to early stage new ventures (Chandler & Hanks, 1993; Foo, Sin, & Yiong, 2006). Finally, the fact that the teams participated in the same program and where all active in the same sector helped minimize contextual ‘noise’ that may otherwise distort our results.

4.3 THEORY AND HYPOTHESES

We use the term ‘new venture team’ to refer to “the group of individuals that is chiefly responsible for the strategic decision-making and on-going operations of a new venture” (Klotz et al., 2014: 288), which means that all members of the team contribute to the development and implementation of the venture’s strategy, as opposed to people who are not part of the new venture team, such as funders of the venture or external boards of advisors involved in strategy development but not in the firm’s implementation activities (Klotz et al., 2014). Moreover, at this early stage, the venture may not have any funders or other people involved the venture other than the initial team.

New venture performance is defined as team effectiveness (e.g., Amason, Shrader, & Tompson, 2006; Brinckmann & Hoegl, 2011; Chowdhurry, 2005). In trying to understand new venture performance, we draw on Klotz et al., who view new venture team outcomes (o) as the consequence of team inputs (i), and mediators (m) that determine them. Researchers have examined several new venture team inputs, such as demographic characteristics, composition, prior experience and social connections, which are related to the development and performance of new ventures. In this study, we build and extend the input–mediator–output model as proposed by Klotz et al. (2014). On the one hand, we remain consistent with the input, mediator, outcome categories as put forward in the model. However, on the other hand, we extend the work by Klotz et al. by introducing inputs and mediating processes that have so far not been investigated. Specifically, in this study, we examine team entrepreneurial passion and team human capital as inputs and strategic consensus as the team process that shapes new venture performance.

Team entrepreneurial passion is broadly defined as the average individual level of passion among team members for specific role identities, to form an overall ‘team’ level of entrepreneurial passion. We use the term new venture team human capital to refer to the team-level resource that stems from the skills and knowledge team members have acquired through investments in schooling, on-the-job training and other types of experience (Becker, 1964; Ployhart & Moliterno, 2011). Team human capital is
conceived as an additive construct and captures the average of the summed levels of individual level human capital (Chan, 1998). Strategic consensus refers to the level of shared understanding between team members regarding the strategic priorities of the venture (Kellermanns, Walter, Lechner, & Floyd, 2005). Earlier new venture team research has predominantly examined how behavioral processes, such as team conflict and new venture team membership, change (e.g., Klotz et al., 2014). Instead, strategic consensus represents the shared cognitions among group members about the goals of the venture, and has been associated with improved firm performance (e.g., Bourgeois, 1985; Pagell & Krause, 2002; Joshi, Kathuria, & Porth, 2003). Developing a strategic consensus within the team is one of the first steps in the strategy formation process. However, for a strategy to be implemented successfully, team members have to act on a collective set of strategic priorities. As the earliest stages of new venture development are associated with critical strategic decision-making processes, developing a strategic consensus is particularly relevant in the context of new ventures. Throughout the development of new ventures, the desired strategy for the initial product or service changes rapidly, and team members benefit in particular from engaging in constant dialogue about the changing strategic priorities to keep the firm’s strategy aligned.

**Entrepreneurial passion as a team-level construct**

To understand the emergence of team entrepreneurial passion, we first have to take a look at the function of entrepreneurial passion at an individual level. Passion is generally defined as attachment, love and longing for one’s work (Baum & Locke, 2004), or an intense positive emotion with a meaningful identity connection (Perrewe, Hochwarter, Ferris, McAllister, & Harris, 2014; Vallerand & Houlfort 2003). Within the entrepreneurial context, at the individual level, Cardon and colleagues (2009) define passion as an intense positive emotion towards entrepreneurial tasks and activities that is important to the entrepreneur’s self-identity (Cardon et al., 2009: 517), in which the feelings associated with work-related passion are directed toward specific activities and become a stable feature of one’s identity (Perrewe et al., 2014: 146). Entrepreneurial passion is a multifaceted concept in two ways. Firstly, “entrepreneurial passion is a combination of the identity-centrality of the activity or object to the individual, and the level of intensity of the feelings the individual experiences for that object” (Cardon et al., 2009: 517).

Secondly, these feelings of passion can be aimed at one or more specific sets of entrepreneurial activities. Three distinct and independent entrepreneurial activities
can be distinguished: inventing, founding and developing. While inventing focuses on identifying new opportunities or creating new products or services, founding is associated with setting up and nurturing the venture, and developing involves making the venture grow, such as expanding the business, hiring new employees and attracting new customers (Cardon et al., 2013, 2009). In our investigation, we focus explicitly on all three entrepreneurial activities, because we study new venture teams that are actively involved in the ongoing operations of the venture, as opposed to studies that examine the effects of passion during the pre-launch phase (Collewaert, Anseel, Crommelinck, De Beuckelaer, & Vermeire, 2016; Gielnik et al., 2015).

At the team level, researchers have identified team entrepreneurial passion and passion separation (Cardon et al., 2016; Drnovsek, Cardon, & Murnieks, 2009). In their theoretical framework, Cardon et al. define team entrepreneurial passion as a shared construct that embodies what the team is passionate about. Passion separation is a configurational construct, which means that it reflects the within-group variance or dispersion of passion, rather than the group’s aggregated level of passion. As such, separation represents the differences among team members “in their position along a single passion continuum attribute” (Harrison & Klein, 2007: 1203). Hence, in a situation of low passion separation, new venture team members would be homogeneous in their experience of entrepreneurial passion, while, in a situation of high passion separation, some new venture team members would be heterogeneous in their experience of passion, implying that some new venture teams are highly passionate, while others are less passionate (or not at all) (Harrison & Klein, 2007).

How these types of shared and configurational constructs emerge from the individual to the group-level is reflected in a comprehensive framework developed by Kozlowski and Klein (2000), in which team-level constructs are organized along a bipolar continuum, where one end is represented by shared group constructs and the other end by configurational group constructs. In particular, shared group constructs follow a composition model of emergence and derive their meaning from a shared quality, such as perceptions or attitudes. Configurational group constructs follow a compilational model of emergence, in which the meaning of the team construct derives from dispersion or distribution of individual characteristics among team members. These shared and configurational group constructs are referred to as ‘ideal’ forms of emergence, both representing extremes on a continuum (Kozlowski & Klein, 2000). In reality, however, most team-level constructs emerge through a combination of compositional and compilational processes (De Jong & Dirks, 2012), symbolizing the
fact that group-level constructs are “partly characterized by shared attributes and partly by dispersion attributes of team members” (De Jong & Dirks, 2012: 392).

In this study, we build on the framework developed by Cardon et al. (2016) and distinguish between team entrepreneurial passion and passion separation. At the same time, we extend Cardon et al.’s framework in two ways. Firstly, we integrate empirical work on teams confirming that within-team dispersion can function as a contingency factor moderating the relationship between mean-level constructs and team-level outcomes (e.g., Colquitt, Noe, & Jackson, 2002; De Jong & Dirks, 2012; Dineen, Noe, Shaw, Duffy, & Wiethoff, 2007; González-Romá, Fortes-Ferreira, & Peiró, 2009). Team entrepreneurial passion and passion separation thus potentially interact in predicting new venture team outcomes. Secondly, given that we are interested in finding out how within-team dispersion of passion affects team outcomes, we focus on the individual, rather than on the team, as a reference point in conceptualizing team entrepreneurial passion. Accordingly, we define entrepreneurial team passion as the average of the team members’ individual levels of passion for specific role identities, to form an overall ‘team’ level of entrepreneurial passion.

HYPOTHESES

Team entrepreneurial passion and strategic consensus

Recent theory on entrepreneurial passion in teams puts forward two important implications with respect to our investigation (Cardon et al., 2016). Firstly, team entrepreneurial passion promotes new venture team effectiveness through the improved quality of team-level processes. Secondly, the impact of team entrepreneurial passion can be understood through its defining elements of emotion and identity, which are both characterized by performance outcomes that operate through unique team-level processes. Consistent with this notion and drawing on earlier work on positive emotions and identity, we expect to find that these two defining elements of team entrepreneurial passion will influence new venture performance through strategic consensus within the team. Specifically, we argue that shared emotions improve the strategic priorities set under strategic cognition by promoting goal related cognitions, while shared identity promotes consensus building among team members. We discuss these two mechanisms below.

On the one hand, we predict intense positive emotions about entrepreneurial
activities to improve the quality of strategic priorities set in the new venture team. While it may not seem obvious to link emotions to strategy formulation, the intense positive emotions inherent in entrepreneurial passion relate to the intense positive emotions associated with entrepreneurial tasks and activities that are important to the new venture team members. These positive emotions are thus explicitly work-related and associated with team members’ passion for inventing, founding or developing activities within the venture.

We propose that team entrepreneurial passion contributes to strategic consensus through three goal-related cognitions which it inspires (Fredrickson, 1998; Cardon et al., 2009). Firstly, we expect team members with strong positive feelings about the venture to increase their goal-challenging behavior, thus improving strategy formulation under strategic consensus. For passionate team members, positive emotions are a confirmation of their own ability to accomplish the goal and, as a result, they are more confident about evaluating the possibility of a successful outcome of the goal they have set themselves (Locke & Latham, 2004; Cardon et al., 2009). Based on these feelings of confidence, passionate new venture teams are not only expected to set more ambitious strategic goals, they will also feel a stronger inclination to assemble and invest resources for the goals they aspire towards (Baum & Locke, 2004). Secondly, team entrepreneurial passion will inspire team members (Cardon et al., 2009; Smilor, 1997) and increase their persistence to pursue their strategic goals, and passionate new venture teams
will focus their attention on tackling strategic challenges or problems (Chen et al., 2009), persist in developing a strategic consensus, even when the odds of realizing their strategic objectives are not always in their favor (Schindehutte, Morris, & Allen, 2006). Thirdly, we argue that team entrepreneurial passion improves goal striving, ensuring that team members stick to the strategic goals and priorities (Seo, Barrett, & Bartunek, 2004; Baum & Locke, 2004; Cardon et al., 2009). Deep task involvement is particular important in the process of developing strategy in the early stages of a venture, when concrete actionable steps are required to get the team on track and be effective. On the other hand, having too many diverging goals and adjusting goals continuously will distract the team from focusing on strategic priorities and thus make it harder to reach a strategic consensus.

On the other hand, work on social identity (e.g., Fauchart & Gruber, 2011; Powell and Baker, 2014) leads us to predict that a shared identity will improve consensus-building within teams. Existing studies confirm that identity-related features drive important aspects of people’s behavior (Hogg, Terry, & White, 1995). Within an entrepreneurial context, several studies have confirmed that identities systematically shape key decisions in the creation of new firms (Fauchart & Gruber, 2011), as well as the their strategic responses (Powell & Baker, 2014), and that they are associated with higher levels of passion and more time being invested in building a venture. Drawing on social identity theory in relation to the team context, we expect that more passionate team members will have a strong feeling that they are part of the team and will therefore be more inclined to contribute to the group, by pursuing shared strategic goals rather than goals that are individually rewarding. Passionate team members will thus feel a strong responsibility when it comes to developing a strategic consensus out of a sense of “belonging” to the new venture team (Brewer & Gardner, 2008). Moreover, through the self-identification processes that occur in teams that are characterized by a strong collective identity, new venture team members will easily adapt their own behavior to the expected group norms. In other words, when a team member disagrees with certain strategic issues, social identity theory suggests that passionate team members will still be motivated to adhere to the group’s perspective, rather than trying to delay or block strategic agreement. Thus, even in a difficult situation, such as solving a strategic disagreement, passionate team members will tend to engage in mutual and collaborative interactions (Carmeli & Shteigman, 2010), and make an effort to reduce feelings of disagreement (Ensley, Pearson, & Amason, 2002), as they tend to persist in reaching a collective goal (Cardon & Kirk, 2015) and work towards a harmonious decision-
making process. Finally, strong feelings of team identity will also create attitudinal or psychological comfort, leading team members to believe that they are not only similar in their feelings of excitement for the venture, but in other ways as well (Janis & Mann, 1977). These feelings of comfort among team members lead to higher levels of cooperation, trust and social integration (e.g., Locke & Horowitz, 1990), improving the consensus-building process.

Based on the collective impact of the defining elements of team entrepreneurial passion, shared emotion and identity, we predict that team entrepreneurial passion positively relates to strategic consensus.

_Hypothesis 1: Team entrepreneurial passion is positively related to strategic consensus._

**Team entrepreneurial passion and strategic consensus: the moderating role of passion separation**

In addition, while we predict that team entrepreneurial passion enhances strategic consensus, we also argue that, to fully understand the effects of team entrepreneurial passion on strategic consensus, we need to take into account both team entrepreneurial passion (i.e., mean levels), and passion separation (i.e., dispersion levels) and their effect on strategic consensus. Although, to our knowledge, no studies to date have examined the joint impact of these two team-level properties of team entrepreneurial passion, the joint impact of mean and dispersion levels has received ample attention in the broader literature of dispersion-based constructs (e.g., De Jong, Bijlsma-Frankema, & Cardinal, 2014; Gonzales Roma, Peiro, Tordera, 2002; Lee & Dalal, 2011; Schneider, Salvaggio, & Subirats, 2002), where situational strength is often mentioned to explain how mean and dispersion-levels interact in explaining team outcomes.

Situational strength is defined as the “implicit or explicit cues provided by external entities regarding the desirability of potential behaviors” (Meyer, Dalal, & Hermida, 2010). In strong situations, individuals interpret things in the same way, leading them to develop collective beliefs as to how to appropriately respond to a situation. As a consequence, individuals respond in similar ways and act as a unit, incentivized to perform according to the expectations of their fellow team members, and encouraged to use the skills and knowledge required for optimal execution of tasks. On the other hand, in weak situations, team members have different ideas as to what constitutes appropriate behavior, in this case behavior that would be beneficial to the team, and
consequently respond in more diverging and less consistent ways to situations, which in turn has a negative impact on the team performance (De Jong et al., 2014; Hannah, Walumbwa, & Fry, 2011).

Based on the reasoning explained above, we theorize that, from a situational strength perspective, low passion separation represents a strong situation, while high passion separation represents a weak situation. In other words, low passion separation is associated with high within-unit agreement, implying that new venture team members interpret events in the same way and respond consistently to certain situations. We specifically argue that passion separation influences the consistency in team members’ incentives to develop a strategic consensus in two ways.

While we argued that team entrepreneurial passion contributes to strategic consensus through the improved goal-related behavior it inspires, on the other hand, drawing on situational strength theory, we argue that, under the condition of passion separation (i.e., a weak situation), team members will vary significantly in their perception as to what constitutes appropriate behavior, which has a negative impact on effort, commitment and performance (De Jong et al., 2014; Gonzales-Roma et al., 2002; Meyer et al., 2010). For example, whereas low passion separation implies high within-unit agreement, with all team members interpreting events in the same way and able to set challenging goals, under high passion separation, people can respond in very different ways, which in turn leads then to set diverging strategic goals. Secondly, through a similar mechanism, high passion separation reduces goal commitment among team members. Because team members feel a high degree of ambiguity towards the norm, i.e., the pursuit of the goals previously agreed upon, team members place less value to attaining and sticking to the venture’s strategic goals, hereby reducing strategic consensus. Thirdly, while in a strong situation, team members pursue goals to ensure that the team sticks to the venture’s strategy, high passion separation has a negative effect on this prescribed standard of behavior. Instead, there will be less of a common interpretation as to what kind of behavior is expected or rewarded (Bowen & Ostroff, 2004), with teams continuously adjusting their goals, which reduces the strategic consensus.

Secondly, we argued that the collective identity inherent in the strong feelings related to entrepreneurial passion helps build consensus in teams. However, in a situation of high passion separation, team members will be less inclined to contribute to the group membership, as separation implies diversity in the intensity with which they experience passion. That is to say, the expected course of action, putting effort into collective goals instead of focusing on individual rewards, is adhered to less due to the
variance in the experience of passion among new team members. Similarly, high passion separation will cause feelings of uncertainty among team members as to how to respond to disagreements emerging during the consensus-building process. Instead of focusing on reducing potential conflict, which presents the uniform expectancy concerning the most appropriate response pattern in this situation, high passion separation will fail to provide team members with adequate incentives to arrive at mutually agreed decisions. Based on the emotional and identity-related processes outlined above, we predict the following:

**Hypothesis 2:** Team entrepreneurial passion and passion separation interact, such that the positive relationship between team entrepreneurial passion and strategic consensus is weaker for high passion separation than for low passion separation.

**Team human capital and strategic consensus: the moderating role of passion separation**

While our primary focus is on team entrepreneurial passion as an affective determinant of new venture processes and outcomes, existing entrepreneurial team literature focuses predominantly on rational determinants (Klotz et al., 2014), one of which is team human capital, defined as the team-level resource that stems from the skills and knowledge team members have acquired through investments in schooling, on-the-job training and other types of experience (Becker, 1964; Ployhart & Moliterno, 2011). We view team human capital as an additional construct (Chan, 1998), in which the key theoretical construct reflects the average of the individual levels of the team member’s human capital. The dominant perspective is that team human capital is potentially functional for both new venture team processes and new venture team performance (Klotz et al., 2014). However, at the same time, team human capital is not functional by itself, but becomes valuable through the mobilization and integration of the knowledge and skills of the team members (e.g., Austin, 2003; Gardner, Gino, & Staats, 2012; Faraj & Sproull, 2000). That is to say, for team human capital to be functional, it has to be possible to mobilize the unique knowledge of each individual team member and to integrate that knowledge into a solution or decision (Kooij-de Bode, van Knippenberg, & van Ginkel, 2010; Stasser & Titus, 1985). Thus, the mere presence of team member human capital is insufficient to produce high-quality tasks, but knowledge must be managed and coordinated to leverage its potential (Faraj & Sproull, 2000; Gardner et al.,
Findings from entrepreneurship literature support this notion and demonstrate that new venture teams can only leverage their prior experiences when they successfully integrate the knowledge that stems from those experiences (Zheng, 2012).

Drawing on this notion, we suggest that team human capital has the potential to promote strategic consensus through the improved mobilization and integration of knowledge and skills. Increased human capital broadens the complementary scope of the team’s potential resource pool (Cronin & Weingart, 2007; Gardner et al., 2012;), which improves the relevance of strategic decision-making. Moreover, because team members with greater human capital tend to feel more confident about their own contributions, they are prone to share their knowledge more freely across the team (Bunderson & Sutcliff, 2002), as a result of which the unique knowledge of the various team members is easier to localize, which enhances the quality of the team’s strategic priorities. Moreover, with greater human capital, the ideas and perspectives of team members are often considered more ‘credible’ by fellow team members (Bunderson, 2003), making them more receptive to each other’s strategic input, which ensures a more equal consideration of the various team members’ knowledge and ideas, improving knowledge integration and consensus building within the team.

At the same time, challenging this dominant assumption, we argue that passion separation inhibits the potential impact of team human capital. Specifically, we predict that passion separation reduces the mobilization and integration of knowledge in a way that prevents the potential of human capital from being realized. Firstly, prior research into deep-level diversity indicates that, when team members have different perspectives (Harrison, Price, & Bell, 1998; Phillips & Loyd, 2006), for instance in terms of the intensity with which they experience entrepreneurial passion, information sharing among team members is reduced (Harvey, 2015), making it harder to locate specific strategic knowledge, which reduces the quality of strategic decision-making.

We further argue that, when team members vary in the intensity with which they experience entrepreneurial passion, they view each other as less compatible, reducing the extent to which their various ideas and perspectives receive equal consideration (Martins, Schilpzand, Kirkman, Ivanaj, & Ivanaj, 2012), which in turn constrains harmonious decision-making and reduces consensus around strategic priorities, and is likely to spark dysfunctional conflict, which inhibits teams from reaching strategic agreement. Particularly, as the type of conflict resulting from passion separation stems from the team members’ internalized identity as entrepreneurs, conflict becomes affect-laden, moving beyond task conflict and instead becoming about what the venture truly
means to team members and whether they are motivated enough to remain committed to the venture. Consequently, passion separation increases the difficulty for new venture team members to integrate their disparate perspectives deriving from their variation in the intensity with which they experience entrepreneurial passion (Jehn, 1995), weakening the capability of the team to reach strategic agreement. We expect this negative effect of passion separation on the teams’ information processing capacity to be particularly evident in new venture teams, where strategic tasks are complex and require higher levels of collaboration.

We thus hypothesize:

Hypothesis 3: Team human capital and passion separation interact, such that the positive relationship between team entrepreneurial passion and strategic consensus is weaker for high passion separation than for low passion separation.

Entrepreneurial passion, team human capital, and new venture performance: the mediating role of strategic consensus

Although it is enhanced by team entrepreneurial passion and team human capital, strategic consensus is itself a powerful driver of performance (Kellermans et al., 2005). Strategic consensus has been referred to as one of the most “notable aspects of management team processes” (Finkelstein & Hambrick, 1996), and many studies have emphasized and demonstrated the important role strategic consensus plays in firm performance (e.g., Dooley, Fryxell, & Judge, 2000; Knight, Pearce, Smith, Olian, Sims, Smith, & Flood, 1999; Rapert, Velliquette, & Garretson, 2002), particularly in the early stages of a new venture (Ensley & Pearce, 2001). Because new are likely to be faced with many unforeseen situations, for which no strategic decision has been articulated in the strategic plan yet, team members will have to act in an ad hoc way that is “consistent with the actions of others and consistent with the spirit of the decision” (Amason, 1996: 125). Especially in these situations, there is a strong need for collective recognition of the motivation behind the strategic actions that are required. Strategic consensus thus serves as a shared mental model with implicit coordinating mechanisms that provide goal clarity. For example, as strategic consensus clarifies the venture’s needs, team members are better able to coordinate the acquisition of resources in the search for external network contacts (Vissa & Chacar, 2009). To summarize, strategic consensus enhances the ability of new team members to coordinate and act on the strategic
priorities of the venture, which in turn improves the venture’s performance.

Moderated mediation model

Figure 1 depicts our theoretical model. Hypothesis 1 predicts that team entrepreneurial passion relates positively to strategic consensus. Hypothesis 2 and 3 predict that passion separation moderates the relationships between team entrepreneurial passion, team human capital and strategic consensus. Hypothesis 4 states that strategic consensus has a positive impact on new venture performance. Together, these four hypotheses specify a moderated mediation model (Edwards & Lambert, 2007), in which the interaction between passion separation and team entrepreneurial passion and team human capital indirectly influences new venture performance by contributing to strategic consensus. Consequently, we propose two final hypotheses:

Hypothesis 4: Strategic consensus mediates the relationship of team entrepreneurial passion and passion separation with new venture performance.
Hypothesis 5: Strategic consensus mediates the relationship of team human capital and passion separation with new venture performance.

4.4 METHODS

Research setting and sample

Our study was conducted among 64 early stage new venture teams participating in an accelerator program designed for high technology ventures, which we will call Venture Forward. Venture Forward is a cohort-based, 10-month program, which includes mentorship and educational components and which culminates in a public pitch event or demo day. The primary value for new venture teams to participate in the program is derived from the mentoring, network connections and brand recognition. Unlike many other accelerator or incubator initiatives, Venture Forward was not entitled to venture equity in exchange for participation in the program. Every three months, a distinguished committee of experienced entrepreneurs, angel investors and venture capitalists evaluate the teams and their business models according to a structured evaluation system, and the five most promising teams of each cohort receive a monetary price. In addition, all teams are entitled to connect with a mentor with experience in the field in which the ventures operate. We contacted the new venture teams using a list of accepted teams
compiled by Venture Forward and verified whether they met two inclusion criteria: the new ventures could not be older than two years and all the team members had to be involved in the strategic decision-making and ongoing operations of their new venture. Furthermore, entrepreneurs were considered to be part of the new venture team only if they formally indicated as such during the programs’ application process. Once this verification was completed, an online survey was sent out to all team members. The survey included measures for our independent, mediator, and control variables, and was sent within a first month after a team being accepted into Venture Forward. After several reminders, the response rate for the survey was 40%, representing an initial sample of 485 individual responses among 186 teams. Because the teams were relatively small – 2.6 members on average, ranging from 2 to 5 members – within-team non-response would introduce considerable measurement error in our team-level variables and, in several cases, even made it impossible to generate a meaningful score for passion separation at all. We therefore excluded teams with incomplete responses, resulting in a final sample of 157 individuals residing in 64 teams. Of these individuals, 75 percent was male, with an average age of 34 and an average of eight years of working experience. The average education level was a Master’s degree. Forty-four percent of the participants had prior start-up experience. Of the participants with prior start-up experience, 54% had worked in a new venture team in the past. Team size varied from 2 to 5 members, with an average of 2.4 members. These figures closely mirror the demographic profile of the new venture teams participating in acceleration programs, according to statistics provided by Venture Forward.

Measures

See the Appendix for all items and measurement scales.

**Entrepreneurial passion.** We used the 13-item scale developed by Cardon, Gregoire, Stevens, & Patel (2013) to measure entrepreneurial passion. Consistent with Cardon et al.’s multi-faceted conceptualization of the construct, this scale consists of three to four-item subscales that each capture positive emotions regarding one of the three entrepreneurial activities (inventing, developing and founding). In addition, the scale includes three single items that each capture the identity centrality with regard to one of the entrepreneurial activities. Sample items for the positive emotions subscales include “It is exciting to figure out new ways to solve unmet market needs that can be commercialized”, “Establishing a new company excites me” and “Assembling the right people to work for my business is exciting”. A sample item for identity centrality is
“Inventing new solutions to problems is an important part of who I am”. Respondent indicated their level of agreement with these items on a five-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5). Consistent with recent applications of this scale (Cardon & Kirk, 2015), we first created a composite score for each sub-scale by averaging the positive emotions items and then multiplying it by its corresponding identity centrality score (the Cronbach’s Alpha’s for the founding, inventing and developing subscales were 0.76, 0.71 and 0.74, respectively). We then calculated the average across the three composite scores to obtain an overall entrepreneurial passion score for each individual respondent.

Consistent with our conceptualization of team entrepreneurial passion as a consensus-based construct, we mean-aggregated entrepreneurial passion scores across members of the same team, to capture the overall level of entrepreneurial passion within that team. Analyses of inter-rater agreement and reliability statistics (mean $r_{wg} = .80$, $ICC[2] = 0.68$, $ICC[1] = .18$, $F = 1.58$, $p < .01$) indicated that this data aggregation to the team level was appropriate and meaningful (James, Demaree, & Wolf, 1993; Klein & Kozlowski, 2000). Consistent with our conceptualization of passion separation as a dispersion-based construct, and with best practice recommendations (Harrison & Klein, 2007; Roberson, Sturman, & Simons, 2007), we calculated the standard deviation across team members’ entrepreneurial scores, to capture passion separation at a team level. Specifically, we used Biemann and Kearney’s (2010) unbiased standard deviation estimator ($SD_N$), which corrects for differences in group size. The $SD_N$ is calculated as:

$$SD_N = \frac{\sum_{i=1}^{N} (M_i - \bar{M})^2}{q},$$

where $N$ is number of team members, $M_i$ is team member’s scale score, $\bar{M}$ is the group mean, and $q$ is the $q$ statistic as specified by Cureton (see Biemann & Kearney, 2010).

**Team human capital.** In line with earlier human capital studies (e.g., Marvel and Lumpkin, 2007; Unger et al., 2011), we used both general and specific indicators to capture respondent’s human capital. In particular, we asked respondents to indicate their education level, whether or not they had prior start-up experience, and their level of expertise in four specific entrepreneurial domains (i.e., customers, markets, technology and products). Because these three indicators had different response formats, item scores were standardized prior to averaging them, to create a composite score for each respondent. Team members completed these items as a larger set of demographic
questions in the survey. The individual composite scores were subsequently averaged to create a team-level measure of team human capital. Note that this team-level construct follows an additive model, which does not assume that the scores of the team members necessarily converge, which means that it does not require justification in the form of aggregation statistics.

**Strategic consensus.** We used Vissa and Chacar’s (2009) three-item measure to capture strategic consensus among team members. Specifically, respondents were asked to indicate the extent to which the team members agreed on: (i) the long-term strategic goals of the company, (ii) the short-term business objectives that should be considered the most important and (iii) the best ways to ensure the company’s survival. These items were rated on a five-point Likert scale ranging from ‘strong disagreement’ (1) to ‘strong agreement’ (5). The scores were subsequently mean-aggregated across respondents of the same venture team, to obtain a team-level score for strategic consensus. The Cronbach’s Alpha for the scale was .70, which indicates a very reasonable reliability given the small number of items involved (Cortina, 1993). Inter-rater agreement and reliability statistics furthermore indicated that mean-aggregation to team level was warranted (mean $r_{WG} = .88$, $ICC[2] = 0.71$, $ICC[1] = .34$, $F = 2.23$, $p < .01$).

**New venture performance.** To minimize common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012), data regarding team performance was obtained through expert ratings at the end of the accelerator program, during the public pitch (i.e., about nine months after the team member survey) by a distinguished group of 41 experienced entrepreneurs, angel investors and venture capitalists, who were uninvolved in the day-to-day operations of the participating teams. They were randomly assigned to one or more teams and evaluated their business plans on five dimensions: innovation in products and services, customer satisfaction, cost control and expected sales growth. Each dimension was measured using three to five items. A sample item for innovation respectively is “does this product, service, or technology, truly fulfill a customer need.” A sample item for customer satisfaction is “has this team distinguished and depicted its potential customer groups and specific needs.” A sample item for cost control is “are the product price, costs, and prospective revenue realistic and appealing”, and a sample for expected sales growth is “are the price, costs, and expected revenues depicted in the business plan realistic and appealing?”. These items were rated on a five-point scale, ranging from “not applicable to this team at all” (1) to “very much applicable to this team” (5).

**Controls.** While it is quite common in new venture team studies to control for a
variety of factors, such as industry type, team size, prior experience of the founding team and venture age (Klotz et al., 2014), after careful consideration we decided only to control for venture age in our analyses. Venture Forward’s strict policy only to accept teams operating in the high-technology sector eliminated the need to control for industry type, while a team’s prior experience is already captured in our team human capital measure. Furthermore, although we initially controlled for both venture age and team size in our analyses, the results showed that only venture age is a significant predictor of new venture performance. Consistent with best practice recommendations regarding the use of control variables (Bernerth & Aguinis, 2015), we therefore removed team size from our analysis and only retained venture age. To capture the latter construct, respondents were asked to indicate how long they had been actively involved in their venture on a five-point scale (1= “0-2 months”; 2= “2 to 6 months”; 3= “7 to 12 months”; 4= “1 to 2 years”; 5= “more than 2 years”). The individual responses to this question were then averaged to create a team-level measure of venture age.

4.5 RESULTS

Table 1 presents the means, standard deviations and correlations for all team-level variables. To test Hypotheses 1 to 3, we used OLS regression. We first regressed strategic consensus on our control variable and our lower-order terms, and then added cross-product terms between our independent variables to the model. The lower-order terms were mean-centered prior to creating the cross-product terms to reduce non-essential multi-collinearity (Cohen, Cohen, West & Aiken, 2003).

Hypothesis 1 predicted that team entrepreneurial passion would be positively related to strategic consensus. The results of our analyses shown in Table 2 support this hypothesis, indicating a significant and positive relationship between the two hypothesized constructs (Model 2: _ = .28, p < .05). Hypothesis 2 proposed that passion separation would weaken the relationship between team entrepreneurial passion and strategic consensus. The findings confirm this hypothesis, showing a significant interaction effect between team entrepreneurial passion and passion separation (Model 3: _ = -.40, p < .05). Plotting the simple slopes of team entrepreneurial passion at low and high levels of passion separation (± 1 SD) further supports the proposed pattern of effects, showing the relationship between team entrepreneurial passion and strategic consensus to be weaker for high than for low levels of passion separation (see Figure 2). In addition, we also analyzed the significance of team entrepreneurial simple slopes
across the full range of passion separation — the so-called regions of significance — using statistical routines developed by Preacher, Curran and Bauer (2006). These analyses confirm the presence of significant simple slopes only for low levels of passion separation ($p < .05$), but not for high levels of passion (see Figure 2).

Hypothesis 3 posited that passion separation would weaken the relationship between team human capital and strategic consensus. In support, the analyses show a significant interaction between team human capital and passion separation (Model 3: $\beta = -.51, p < .05$). The interaction plot confirms that the relationship between team human capital and strategic consensus is indeed weaker for high than for low levels of passion separation (Figure 3). Interestingly, while the analyses involving the regions of significance provides further support for significant positive simple slopes of team entrepreneurial passion for low levels of separation that become non-significant as separation increases to moderate levels, they also indicate the presence of significant negative simple slopes for high levels of separation (this finding is addressed in greater detail in the discussion section). In final support of both Hypotheses 2 and 3, the OLS regression analysis indicates a significant increase in explained variance when the two cross-product terms are added to the model ($\Delta R^2 = 0.21, p < 0.01$).

Hypotheses 4 and 5 propose a moderated mediation model, in which the interactive effects of passion separation with team entrepreneurial passion and team human capital

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Team entrepreneurial passion</td>
<td>3.99</td>
<td>0.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Passion separation</td>
<td>0.79</td>
<td>0.39</td>
<td>-0.67**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Team human capital</td>
<td>0.02</td>
<td>0.67</td>
<td>0.29*</td>
<td>-0.27*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Strategic consensus</td>
<td>4.11</td>
<td>0.42</td>
<td>0.31*</td>
<td>-0.15</td>
<td>0.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. New venture performance</td>
<td>3.60</td>
<td>0.94</td>
<td>0.34**</td>
<td>-0.29*</td>
<td>0.05</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>6. Venture age</td>
<td>2.60</td>
<td>1.12</td>
<td>-0.05</td>
<td>-0.05</td>
<td>-0.11</td>
<td>0.02</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Table 4.1 | Descriptive statistics and correlations

\(n = 64\)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).
on new venture team performance is mediated by strategic consensus. We tested these hypotheses using Preacher, Rucker and Hayes’ (2007) statistical routines, which essentially estimates the mediated path of team entrepreneurial passion and team human capital on new venture team performance through strategic consensus at different values of passion separation. In addition, it produces bootstrapped standard errors, allowing researchers to determine whether these mediated paths differ significantly from zero. Because Preacher et al.’s routine can only handle one independent variable at a time, we tested the moderated mediated effect of team entrepreneurial passion and team human capital separately, while controlling for the other independent variable in our analysis. As predicted by Hypothesis 4, the results of the moderated mediation analysis shows that the mediated relationship between team entrepreneurial passion and new venture performance via strategic consensus is stronger and significant for low levels of passion separation (z = .36, boot SE = 0.15) and becomes weaker and non-significant for high levels of separation (z = .15, boot SE = 0.13). Likewise, the results confirm Hypothesis 5, showing the mediated relationship of team human capital to be stronger and significant for low levels of passion separation (z = .19, boot SE = 0.09) and weaker and non-significant for high levels of separation (z = -.13, boot SE = 0.14).
Table 4.2 | Regression results for strategic consensus and new venture performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venture age</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.22*</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Team entrepreneurial passion (TEP)</td>
<td>0.20</td>
<td>0.28*</td>
<td>0.68**</td>
<td>0.83*</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.14)</td>
<td>(0.2)</td>
<td>(0.24)</td>
</tr>
<tr>
<td>Team human capital (THC)</td>
<td>0.10</td>
<td>0.11</td>
<td>0.44</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>(0.08)</td>
<td>(0.15)</td>
<td>(0.16)</td>
</tr>
<tr>
<td>Passion separation (PS)</td>
<td>0.15</td>
<td>1.48*</td>
<td>-0.30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.18)</td>
<td>(0.70)</td>
<td>(0.40)</td>
<td></td>
</tr>
<tr>
<td>TEP x PS</td>
<td>-0.40*</td>
<td>-0.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.18)</td>
<td>(0.07)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THC x PS</td>
<td>-0.51*</td>
<td>0.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.19)</td>
<td>(0.11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic consensus</td>
<td></td>
<td></td>
<td>0.27**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.16)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.19**</td>
<td>2.75**</td>
<td>1.24</td>
<td>2.58</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.10</td>
<td>0.12</td>
<td>0.34</td>
<td>0.28</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>0.06</td>
<td>0.07</td>
<td>0.28</td>
<td>0.19</td>
</tr>
<tr>
<td>( \Delta R^2 )</td>
<td>0.01**</td>
<td>0.21**</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>( F )</td>
<td>2.29**</td>
<td>1.87</td>
<td>4.83**</td>
<td>4.42**</td>
</tr>
<tr>
<td>Df</td>
<td>60</td>
<td>59</td>
<td>57</td>
<td>56</td>
</tr>
</tbody>
</table>

*a Models are ordinary least squares regressions, n = 64.
* p < .05
** p < .01
Figure 4.2 | Interaction and regions of significance plot team entrepreneurial passion x passion separation
Figure 4.3 | Interaction and regions of significance plot new venture team human capital x passion separation

![Graph showing strategic consensus with interaction and regions of significance for low and high passion separation.](image-url)
Table 4.3 | Interpreting the passion separation interaction coefficients

<table>
<thead>
<tr>
<th>Test</th>
<th>Team entrepreneurial passion x passion separation</th>
<th>Team human capital x passion separation</th>
</tr>
</thead>
<tbody>
<tr>
<td>95% region of significance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower bound</td>
<td>1.04</td>
<td>0.56</td>
</tr>
<tr>
<td>Upper bound</td>
<td>22.88</td>
<td>1.73</td>
</tr>
<tr>
<td>Percentage of projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below the lower bound</td>
<td>84.1%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Between the bounds</td>
<td>15.9%</td>
<td>68.8%</td>
</tr>
<tr>
<td>Above the upper bound</td>
<td>0%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Simple slopes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low passion separation</td>
<td>Significant, $p &lt; 0.01$</td>
<td>Significant, $p &lt; 0.01$</td>
</tr>
<tr>
<td>High passion separation</td>
<td>Significant, $p &lt; 0.05$</td>
<td>Significant, $p = 0$</td>
</tr>
</tbody>
</table>

*The values included above were calculated using the Johnson–Neyman technique, following the approach proposed by Preacher et al. (2006). These results suggest that the coefficient in each column is significant and negative when passion separation is less than the lower bound, not statistically significant when passion separation has values between the lower and upper bound, and significant and positive when passion separation has a value greater than the upper bound.

Table 4.4 | Moderated mediation tests

<table>
<thead>
<tr>
<th>Passion separation</th>
<th>Team entrepreneurial passion</th>
<th>Team human capital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Effect size</td>
<td>SE</td>
</tr>
<tr>
<td>Strategic consensus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>0.36**</td>
<td>0.15</td>
</tr>
<tr>
<td>Average</td>
<td>0.25**</td>
<td>0.13</td>
</tr>
<tr>
<td>High</td>
<td>0.15</td>
<td>0.13</td>
</tr>
</tbody>
</table>

** $p < .05$

*The values included above were calculated following the approach proposed by Preacher et al. (2007), using a bootstrap technique to test the magnitude of each moderator (plus and minus one standard deviation, respectively). If the magnitude of the indirect relationship differs significantly from zero, mediation has occurred.
4.6 DISCUSSION AND CONCLUSIONS

Implications for the (entrepreneurial) passion literature

Together with Cardon et al. (2016), our study is among the first studies to use the phenomenon of entrepreneurial passion in a team level analysis, and it is (to our knowledge) the first to provide empirical evidence of its importance to teams. Firstly, it shows that team entrepreneurial passion has an independent (indirect) impact on new venture performance, above and beyond the more traditional and rational determinant of human capital. In addition, our study shows that passion separation helps explain the conditions under which human capital is more or less beneficial to team performance. As such, our results contradict earlier studies that suggest that passion has no meaningful impact on venture outcomes when other, more rational factors are taken into account (Chen et al., 2009), demonstrating that entrepreneurial passion is worthy of examination as a substantive variable of interest in its own right. At the same time, we show that including passion increases our understanding of the way human capital affects performance, and demonstrates the importance of studying the interplay among these affective and rational determinants (Grégoire, et al., 2015; Hayton & Cholakova, 2012), as an exclusive focus on one over the other results in an incomplete understanding of how either of them operate.

Secondly, our study underlines the importance of Cardon et al.’s (2016) distinction between team entrepreneurial passion and passion separation. Our findings suggest that team entrepreneurial passion and passion separation are not only complementary and conceptually distinct, in the sense that they capture different properties of team-level passion, but that they are functionally distinct as well, in the sense of playing different causal roles in our model (i.e., independent variable versus moderator) and exerting opposing effects in relation to team processes and outcomes (i.e., positive versus negative). At the same time, while Cardon et al. conceptualized these variables as discrete ideal typical forms of passion that manifest themselves at different points in time, we show that, in reality, team-level manifestations of entrepreneurial passion are often characterized by both shared levels and dispersion in levels of passion among team members. Moreover, in demonstrating that team entrepreneurial passion and passion separation interact in impacting strategic consensus and new venture performance, our results show that examining these properties of passion together increases our understanding of the way passion operates in teams that goes beyond what we can learn by examining them independently.
Finally, our finding that passion separation weakens the impact of team entrepreneurial passion and human capital contributes to the growing recognition that passion is not universally positive, but can be dysfunctional as well (Adomdza & Baron, 2013; De Mol, Ho, & Pollack, forthcoming; Ho & Pollack, 2014). Previous work has distinguished between obsessive passion and harmonious passion (e.g., Ho, Wong, & Lee, 2011; Vallerand & Houlfort, 2003), suggesting that the differential effects of passion can be explained by distinguishing between functional and dysfunctional types of passion. Our research, however, suggests that, at a team level, dysfunctional outcomes can be explained even for functional types of passion by including separation in passion among team members. Given that passion separation is a property of passion that only exists at a team level, our finding of its negative moderating effect highlights a specific dysfunction of passion at uniquely occurs within entrepreneurial team contexts.

Implications for the new venture team literature

In their recent review of new venture team literature, Klotz et al. (2014: 244) noted that, while that literature has progressed with regard to more rational inputs and cognitive processes, affective states have received relatively little attention, suggesting that more research is needed into this topic. Our study responds to their call by examining the role of entrepreneurial passion and integrating it within their input-mediator-output model, by framing passion as an input that, together with team human capital, affects new venture performance through the mediating process of strategic consensus. In doing so, our findings demonstrate, among other things, that entrepreneurial passion adds to our understanding of well-known input-mediator-output relationships by showing that passion separation helps explain why team human capital is more beneficial in some cases than it is in others. Moreover, examining the role of passion separation provided an unexpected insight into how human capital acts as a double-edged sword, being functional under certain conditions, but dysfunctional under others. This suggests that examining passion not merely increases our understanding as to how rational inputs relate to mediators and output in an incremental sense, but also has the potential to challenge directly the prevailing scholarly assumption that such inputs are universally beneficial. Our study therefore complements the dominant rational perspective that prevails in new venture team research (De Mol, Khapova, & Elfring, 2015; Klotz et al., 2014) and shows the value added by investigating the interplay between rational and affective inputs.

Our study also contributes to existing new venture team literature by opening up...
the ‘black box’ between new venture team inputs and outputs (Klotz et al., 2014), by identifying strategic consensus as an important mediating process that transmits the impact of human capital and entrepreneurial passion to new venture performance. This finding creates a more substantive understanding of how these inputs influence performance and complements research into the mediating role of teamwork behaviors by highlighting the importance of entrepreneurial team cognition for understanding the link between these inputs and outputs (De Mol, Khapova, & Elfring, 2015; Klotz et al., 2014). However, our study goes beyond merely opening the black box, by not only providing insight into how inputs affect performance, but also by showing when (i.e., under which conditions) these effects occur, by examining the moderator role of passion separation, as discussed above. In doing so, we empirically demonstrate the need to move beyond main effects models and examining conditional indirect effect models in order to advance our understanding of new venture team performance (Klotz et al., 2014).

Implications for the group affect literature
Our findings also have important implications for the bourgeoning literature on group affect and emotions (Collins, Lawrence, Troth, & Jordan, 2013; Knight & Eisenkraft, 2015). Firstly, despite multiple calls for more research into the role of affective diversity in groups (Barsade & Gibson, 2012; Barsade & Knight, 2015; Collins et al., 2013), most studies in this area continue to focus exclusively on mean affective states (or traits), assuming this to be the only relevant property of group affect and/or the best predictor of group outcomes. Our study challenges this notion by showing that affective diversity plays an important role in explaining the effect size magnitude of other, more rational predictors of performance (i.e., team human capital). Furthermore, our finding that passion separation interacts with team entrepreneurial passion to predict strategic consensus and performance highlights the importance of examining affective diversity and mean affective state in combination in order to create a complete understanding as to how group affect manifests itself and operates in team contexts. Finally, our finding that passion separation weakens the impact of both team entrepreneurial passion and human capital challenges the dominant notion that ‘positive affect is good’ (Knight & Eisenkraft, 2015), showing that positive group affect can actually be harmful when team members vary in their affective states.

Secondly, our study contributes to existing group affect literature by introducing entrepreneurial passion and providing empirical evidence of its importance to group
functioning and performance. While most studies into group affect have focused on very germane and diffuse affective states (e.g., positive and negative affectivity), entrepreneurial passion represents a discrete affective state that focuses specifically on work-related activities. Furthermore, while we examine passion with respect to entrepreneurial activities, we agree with Cardon et al. (2016) that passion is an affective state that is relevant as well to other types of teams operating under similar circumstances. As such, the construct of passion opens up many exciting new avenues for research into affect in groups.

Thirdly, in identifying strategic consensus as a mediating mechanism between entrepreneurial passion and new venture performance, our study complements other recent studies with regard to the processes through which group affect impacts performance (Jones & Kelly, 2009; Knight & Eisenkraft, 2015; Kooij-De Bode, Van Knippenberg, & Van Ginkel, 2010). Together, the mediators identified in our study and in earlier studies suggest the possibility that group affect operates along multiple pathways, indicating that examining them simultaneously may be a fruitful way to advance our understanding in this area (cf. De Jong & Elfring, 2010). At the same, the fact that we found strategic consensus to mediate the impact of a specific affective state (i.e., entrepreneurial state) within a specific context (i.e., new venture teams) also suggests that researchers need to be sensitive to the idiosyncrasies of their study and model, in order to determine which of these mediating processes is likely to provide the most powerful explanation for the way group affect impacts the performance of the teams they study.

**Study limitations and future research directions**

Despite these contributions we also acknowledge several limitations of our work. We restricted ourselves to a specific context, which raises two questions of generalizability. Firstly, in our study, we focused on early stage venture performance. Although this is an advantage, considering that, in many existing entrepreneurship studies, the results are affected by a survival (Clarysse et al., 2015), our findings do not speak to venture performance in the long run. While there are a number of studies that show that rational new venture team inputs do impact performance in the long run (Klotz et al., 2014), researchers have only very recently started to examine how and when entrepreneurial passion changes over time (Collewaeart et al., 2016, Gielnik et al., 2015). For example, Collewaeart et al. suggest that, while an entrepreneur’s founding identity remains stable over time, intense positive feelings with regard to founding activities decrease over
time. The suggestion that entrepreneurial passion changes over time has important implications for our research, as it implies that the configuration of team member passion is subject to change, and so are its consequences. Therefore, we would argue that future studies should examine the function of team entrepreneurial passion over time, and carefully access how changes in the configuration of team member passion diversity might structurally influence new venture team outcomes. Additionally, our study was conducted within the high-technology sector, which raises the issue of whether or not our findings can be generalized to other industries or sectors. However, existing does suggest that affect and passion are universally important across a wide area of industries, including the hospitality, leisure, nursing, sports, education and tourism industries (e.g., Ho, Wong, & Lee, 2011; Carbonneau, Vallerand, Fernet, & Guay, 2008; Vallerand, Blanchard, Mageau, Koestner, Ratelle, Léonard, Gagné, & Marsolais, 2003). Having said that, in our view, future studies should explore our findings among new venture teams across different industries.

Secondly, while our moderated-mediator model involves a causal sequence, we cannot make assumptions about the causality of effects investigated in our study. Regardless, the results of our study are consistent with the causal understanding of investigated relationships, which provides initial support for the mediated effects of strategic consensus on new venture performance. Additionally, we mitigated the issue of causality as much as possible through the temporal separation of our mediator and dependent variable. We call upon future research to take a critical look at the causal directionality implied in our mediated model, for example by adopting an experimental or a cross-lagged panel design.

A third limitation involves our measure of team human capital, which we use as a single construct. To capture team human capital, we combined two indicators of team members’ general human capital (i.e., prior start-up experience and level of education), and one indicator of team members’ specific human capital (i.e., the extent to which team members regard themselves as experts regarding four specific entrepreneurial dimensions, Marvel & Lumpkin, 2007). However, our measure does incorporate the multiplicity of the human capital construct, hereby following recent calls (e.g., Nyberg & Wright, 2015; Coff & Raffiee, 2015) to recognize that human capital is not one-dimensional, but instead is determined by the factors associated with the context in which the construct is measured.

Finally, we focused on one type of diversity at the expense of others. Recent theoretical work has introduced a second property of passion diversity, that of passion
focus variety, referring to the variety of passion roles (i.e., founding, developing, inventing) represented in the new venture team (Cardon et al., 2016). While both types of diversity are assumed to influence the emergence of a ‘collective passion identity’, they do so in different ways. Whereas high passion focus variety influences the heterogeneity of the collective passion identity, high passion separation affects the speed with which the collective identity emerges (Cardon et al., 2016). Future research should empirically explore the different effects of passion focus variety and passion separation on new venture team outcomes and examine how the two interact in predicting these outcomes.

Concluding remarks
Integrating entrepreneurial passion into an input-mediator-output model of new venture team effectiveness, we have shown that team entrepreneurial passion and team human capital serve as critical (affective and rational) inputs that, independently and together, affect new venture performance. Moreover, while existing studies have predominantly conceptualized entrepreneurial passion as a positive force, we have shown how and when entrepreneurial passion is functional or dysfunctional within the context of new venture teams.