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Treffers, Theresa; Klyver, Kim; Nielsen, Mette Søgaard; Uy, Marilyn A.

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Feel the Commitment — From Situational Emotional Information to Venture Goal Commitment

Theresa Treffers  
Technical University Munich, TUM School of Management, Germany  
T: +49 89 289 24800, E: theresa.treffers@tum.de  
and  
Seeburg Castle University, Austria  
T: +43 6212 26260, E: theresa.treffers@uni-seeburg.at

Kim Klyver  
University of Southern Denmark, Kolding, Denmark  
T: +45 6550 1463, E: kkl@sam.sdu.dk  
and  
University of Adelaide  
Entrepreneurship Commercialisation and Innovation Centre (ECIC), Adelaide, Australia

Mette Søgaard Nielsen  
University of Southern Denmark, Kolding, Denmark  
T: +45 6550 1479, E: mesn@sam.sdu.dk

Marilyn A. Uy  
Nanyang Business School, Nanyang Technological University, Singapore  
T: +65 6790 6926, E: muy@ntu.edu.sg

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ABSTRACT

An individual’s commitment stimulates action, but we know little about how entrepreneurial commitment initially emerges. Utilizing affect-as-information and the appraisal theory, our objective is to investigate the influence of situational emotional information on individuals’ venture goal commitment, defined as commitment to the goal of starting a new venture. Based on a correlational pilot study and an experimental scenario approach, we first link encouragement and discouragement provided by the individual’s parents and friends to venture goal commitment and test the mediating role of opportunity evaluation. Second, we find that emotional intelligence plays a moderating role in the relationship between situational emotional information and venture goal commitment as mediated through opportunity evaluation. Overall, our research underscores the emotional and cognitive mechanisms that shape venture goal commitment by explaining how and under which conditions situational emotional information is internalized and venture goal commitment emerges.

Keywords: venture goal commitment, emotional information, opportunity evaluation, emotional intelligence
INTRODUCTION

Why are some individuals more committed than others to the goal of starting a new venture? Venture goal commitment, which is a type of entrepreneurial commitment, can be described as the degree or intensity of determination of an individual to his/her goal of starting a business venture (Uy, Foo & Ilies, 2015). The importance of commitment has been argued particularly in goal-directed behaviors (Austin and Vancouver, 1996; Klein et al., 1999), including starting a business venture (Baron, 2008; Packard, Clark & Klein, 2017; Sommer, Loch & Dong, 2009). Despite the importance of venture goal commitment, its emergence has not been given sufficient empirical attention (Fayolle et al., 2011). In particular, existing research has regarded venture goal commitment as a given (e.g., Davidsson and Gordon, 2016) and has treated commitment itself as an antecedent or a moderator. However, to our knowledge, less attention has been given to the antecedents of venture goal commitment. Hence, the first objective of our study is to elucidate the emergence of venture goal commitment by examining the role of emotional information as a situational predictor.

Prior research suggests that emotional support—the act of providing an individual with access to emotional resources (Hanlon & Saunders, 2007)—positively impacts different steps in the entrepreneurial process (e.g., Brüderl and Preisendörfer, 1998; Hanlon and Saunders, 2007; Kim, Longest & Aldrich, 2013). The emotional support received represents an individuals’ perceptions about the emotional resources given (Tardy, 1985; Zimet, Dahlem, Zimet & Farley 1988) and can vary across situations and people in one’s network (Klyver, Honig & Steffens, 2018). Thus, we examine the role of individuals’ perceptions of emotional information provided by their parents and friends in a venture situation. However, while extant studies mainly focus on encouragement as
a type of emotional support, it is unclear how other types of situational emotional information, e.g., discouragement, or the expression of worries and concerns by parents and friends regarding one’s venture start-up plans, could dampen venture goal commitment or whether it could potentially have an opposite effect because of its challenging character. Therefore, our study considers different forms of providing individuals with emotional information: encouragement and discouragement.

Our second objective is to unravel the mechanisms that clarify how situational emotional information shapes venture goal commitment. Building on insights from affect-as-information hypothesis (Clore, Gasper, & Garvin, 2001; Forgas & George, 2001) and the appraisal theory (Lerner & Keltner, 2000; Smith & Ellsworth, 1985; Tiedens & Linton, 2001), we theorize that the different types of situational emotional information form the basis for an evaluation of a particular venture opportunity. This evaluation elicits an emotional response that subsequently affects venture goal commitment. In addition, we theorize that the means by which different emotional information shapes opportunity evaluation and subsequent venture goal commitment depends on a person’s ability to understand, express, and regulate his/her emotions related to emotional information provided in a venture situation (Mayer & Salovey, 1997). This ability is encapsulated in a person’s emotional state and influences entrepreneurial behavior and success (Ahmetoglu, Leutner, & Chamorro-Premuic, 2011). Hence, we theorize that emotional intelligence would serve as a meaningful boundary condition in the relationship between different forms of situational emotional information and venture goal commitment.

Building on a correlational pilot study, we use an experimental scenario approach in our main study to test our research model (see Figure 1). Taken together, our objective
is to make the following contributions. First, as venture goal commitment is a central component of the entrepreneurial process (Uy, Foo, & Ilies, 2015), our study shows how individuals’ venture goal commitment can be influenced by contextual factors such as receiving encouragement or discouragement from parents and friends. Our study complements extant research that has mainly regarded venture goal commitment as a given (e.g., Davidsson and Gordon, 2016; Uy et al., 2015) by demonstrating that venture goal commitment is malleable and can be affected interpersonally. Second, our study offers a nuanced perspective of emotional support (Zellars & Perrewe, 2001) by examining differential effects of encouragement and discouragement on individuals’ venture goal commitment, thus complementing previous research that has mainly looked at the positive effects of emotional support (Brüderl and Preisendörfer, 1998; Davidsson and Honig, 2003; Edelman et al., 2016; Gudmunson et al., 2009). Third, our study contributes to research on venture goal commitment not only by exploring the direct effects of situational emotional information on venture goal commitment, but also by understanding how (i.e., through opportunity evaluation) and when (i.e., emotional intelligence) encouragement and discouragement influences venture goal commitment.

– Insert Figure 1 here –

TOWARDS A MODEL OF VENTURE GOAL COMMITMENT

The Relationship between Emotional Information and Venture Goal Commitment

The support received by individuals in the early stages of the start-up process in the form of intangibles such as emotional support is important (Brüderl & Preisendörfer, 1998; Gudmunson, Danes, Werbel and Loy, 2009; Edelman, Manolova, Shirokova and Tsukanova, 2016; Klyver et al. 2018). Emotional support is described as the act of
providing an individual with access to emotional resources (Hanlon & Saunders, 2007), and individuals in the start-up process most heavily rely on support from their close networks including family and friends instead of support from their larger network (Arregle et al., 2015; Birley, 1986; Hanlon & Saunders, 2007; Fielden & Hunt, 2011). In general, we know from the extant research that emotional support helps reduce stress levels (Cohen & McKay, 1984; Schaefer, Coyne, & Lazarus, 1981; Thoits, 1985) and that it is helpful in sustaining emotional stability (Brüderl & Preisendörfer, 1998; Klyver, 2007), both elements being highly important particularly during the early stage of the entrepreneurial process. Furthermore, emotional support from family increases the propensity to become an entrepreneur (Davidsson and Honig, 2003), influences the level of start-up activities for a young entrepreneur (Edelman et al., 2016), promotes the survival and growth of new businesses (Brüderl and Preisendörfer, 1998), and improves the entrepreneurs’ work-family balance (Gudmunson et al., 2009).

Because emotional support plays a critical role at various points of the entrepreneurial process, we theorize that emotional support provided by parents and best friends would solidify venture goal commitment. We utilize affect-as-information theory in building our arguments because emotional support contains emotional information, thereby influencing different cognitive and behavioral elements in the entrepreneurial process. Affect-as-information theory suggests that people use their emotional state as information for their judgments, decisions, and actions (Clore et al., 2001; Forgas & George, 2001), particularly in complex and uncertain situations such as the entrepreneurial process (Baron, 2008). According to this theory, people generally use their feelings as if asking themselves “How do I feel about it?”, and in so doing influence
their attitude toward whatever is in focus at that particular moment in time (Schwarz & Clore, 1988).

Providing emotional support is multifaceted and can involve a number of different behaviors, such as talking, listening, and expressing opinions to the person (Zellars & Perrewé, 2001; Neergaard, Shaw, & Carter, 2005; Anderson, Park, & Jack, 2007). In addition, encouragement could include the facilitation of a person’s inner resources and motivation to move forward. Building on affect-as-information theory (Clore et al., 2001; Forgas & George, 2001), we suggest that encouragement from parents and friends increases venture goal commitment because of the positive emotional information embedded in encouragement, thereby assuring individuals that they are on the right track. Affect-as-information theory states that emotional information leads to emotion-congruent cognitive and behavioural outcomes. Accordingly, we argue that positive emotional information from encouragement is likely to lead to positive attitudes towards venture goal commitment. Such positive emotional information may also be regarded as feelings of efficacy which could effectively increase one’s own favourable beliefs, expectations, and inclinations towards a particular task on hand (Clore & Storbeck, 2006). Hence, the positive emotional information perceived from the encouragement from parents and friends likely increases one’s venture goal commitment in a positive manner.

Hypothesis 1a: Encouragement from parents and friends has a positive impact on venture goal commitment.

Besides encouragement, we are also interested in examining the impact of discouragement. We regard encouragement and discouragement as separate constructs instead of opposite ends of the same pole because zero encouragement does not equal
discouragement. This line of thinking is analogous to the theorizing that positive and negative substrates (e.g., positive affect and negative affect; trust and distrust; satisfaction and dissatisfaction, etc.) should be regarded as distinct rather than a unidimensional bipolar factor (Cacioppo & Berntson, 1994).

Compared to situations in which a person receives encouragement, we know very little about how emotional information impacts a person’s venture goal commitment in situations where she receives “negative emotional information” or discouragement from parents and friends. While discouragement may have a positive effect on venture goal commitment if the focal person considers such discouragement as a challenge to overcome or a means to prove their parents and friends wrong, we argue that the immediate reaction to discouragement would decrease venture goal commitment. We focus on the immediate reaction to discouragement because we regard discouragement as situational emotional information. As described earlier, the emotional information from discouragement varies across situations and is thus – just as an emotional experience – short-lived.

Drawing on the core assumption of affect-as-information theory that emotional information leads to emotion-congruent outcomes, we suggest that the negative emotional information embedded in discouragement could negatively influence venture goal commitment. Such negative emotional information is used by the focal individual as a feedback that s/he does not have sufficient resources and competencies to engage in starting a new venture (Clore, Wyer, Dienes, Gasper, Gohm, & Isbell, 2011) thus decreasing venture goal commitment. Furthermore, addressing the negative emotional information contained in discouragement requires energy in the form of time and personal
attention that could distract the individual’s focus away from start-up efforts (Muraven & Baumeister, 2000) and consequently reduce one’s venture goal commitment.

*Hypothesis 1b: Discouragement from parents and friends has a negative impact on venture goal commitment.*

**Opportunity Evaluation as Mediator in the Relationship between Situational Emotional Information and Venture Goal Commitment**

In addition to considering situational emotional information’s direct effect on venture goal commitment, we are also interested in the underlying mechanism that explains the link between situational emotional information and venture goal commitment. To better understand the mechanism behind this relationship, we theorize that encouragement and discouragement form an individual’s evaluation about the opportunity and that this evaluation influences his/her venture goal commitment. This argument is based on appraisal theory, which states that people’s cognitive appraisals of situations generate specific emotional responses which can affect judgement, decision making, and behaviour (Lerner & Keltner, 2000; Smith & Ellsworth, 1985; Tiedens & Linton, 2001). Extant entrepreneurship research has already built on appraisal theories showing that emotions and cognitive appraisals can influence opportunity desirability and feasibility beliefs as micro-foundations of entrepreneurial action (Ivanova, Treffers, & Langerak, 2018), opportunity evaluation and exploitation (Welpe et al. 2012), risk preferences (Foo, 2011; Podoynitsyna, Van der Bij, & Song, 2012).

Initially, opportunity evaluation was conceptualized as the second stage between opportunity recognition and opportunity exploitation in the seminal paper by Shane & Venkataraman (2000). The recent research defines opportunity evaluation as assessing
the first-person attractiveness (i.e., for me or my firm) of introducing new goods or services (Haynie, Shepherd & McMullen, 2009). Furthermore, scholars argued that opportunities are evaluated based on specific environmental or situational cues (Williams & Wood, 2015, Wood & McKelvie, 2015). Hence, we regard opportunity evaluation as an immediate subjective assessment about the personal attractiveness of a venture opportunity based on its situational characteristics.

Since opportunity assessments have been suggested as direct antecedents of opportunity exploitation or venture implementation (Sarason, Dean, & Dillard, 2006; Shane & Venkataraman, 2000), we assume that opportunity evaluation plays a mediating role in translating situational emotional information into venture goal commitment. In detail, we propose that individuals use the emotional information provided by parents and friends for a venture opportunity to inform their venture goal commitment. The emotional information contained in encouragement and discouragement represents situational characteristics of one’s venture opportunity (Welpe et al. 2012). According to appraisal theory (Lerner & Keltner, 2000), this situational emotional information forms the basis for the cognitive evaluation (appraisal) of the venture opportunity. The cognitive evaluation of the venture opportunity will evoke emotional responses that, in turn, influence venture goal commitment. When receiving encouragement in a venture situation, a person’s cognitive evaluation of this venture situation will be more positive, because the positive emotional information contained in encouragement is conveyed into a more positive evaluation of the opportunity as a positive situational characteristic.

A more positive opportunity evaluation will then prompt a positive emotional response. Building again on affect-as-information (Clore et al., 2001; Forgas & George, 2001), we posit that the focal person will use this positive emotional response to inform
her venture goal commitment. A positive emotional response stimulated by a more positive opportunity evaluation will thus lead to an emotion-congruent outcome, namely higher venture goal commitment.

In contrast, also building on appraisal theory (Lerner & Keltner, 2000), when receiving discouragement, the negative emotional information contained in discouragement will lead to judging (appraising) the venture opportunity as being less attractive. The negative emotions elicited as a response to a less positive opportunity evaluation will then lead to a negative emotion-congruent outcome, i.e., less motivation to engage in the venture goal, thereby reducing one’s venture goal commitment. Hence,

*Hypothesis 2a*: Opportunity evaluation will mediate the link between encouragement from parents and friends and venture goal commitment.

*Hypothesis 2b*: Opportunity evaluation will mediate the link between discouragement from parents and friends and venture goal commitment.

**Emotional Intelligence as Moderator of the Relationship between Situational Emotional Information and Venture Goal Commitment**

In the previous section, we utilized affect-as-information (Clore et al., 2001; Forgas & George, 2001) and appraisal theories (Lerner & Keltner, 2000; Smith & Ellsworth, 1985; Tiedens & Linton, 2001) to propose that the emotional information contained in encouragement and discouragement influences venture goal commitment through opportunity evaluation. In this section, we theorize that the way in which different types of emotional information shape subsequent venture goal commitment via opportunity evaluation depends on a person’s level of emotional intelligence. Mayer and Salovey defined emotional intelligence as “the ability to perceive emotions, to access and generate
emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth” (1997, p. 5), and emotional intelligence is often conceptualized to include four distinct branches (Wong & Law, 2002): (1) appraisal and expression of emotion in the self, (2) appraisal and recognition of emotion in others, (3) use of emotion to facilitate performance, and (4) regulation of emotion in the self.

The positive effects of emotional intelligence have been well established in the literature; individuals with high emotional intelligence have better mental and physical health and show higher job performance (e.g., Ashkanasy & Humphrey, 2011; O’Boyle, Humphrey, Pollack, Hawver, & Story, 2010; Wong & Law, 2002). The role of emotional intelligence in entrepreneurship, however, has only recently been explored for its role in entrepreneurial behavior and success (Ahmetoglu et al., 2011; Cross & Travaglione, 2003; Rhee & White, 2007; Zampetakis et al., 2009). Hence, we introduce emotional intelligence as a vital competence that could alter the strength of the relationship between situational emotional information, opportunity evaluation, and venture goal commitment.

Following Jordan, Ashkanasy, and Hartel (2002), we hypothesize that all four dimensions of emotional intelligence would jointly exert a moderating impact. We anchor on Mayer and Salovey’s (1997) theorizing on emotional intelligence to posit that an individual high in emotional intelligence would be (1) aware of the positive (negative) emotional information embedded in the encouragement (discouragement) received from parents and friends; (2) assess and ascertain the emotional information they perceive from the encouragement (discouragement); (3) leverage or make use of the emotional information to one’s advantage; (4) manage and regulate one’s emotions based on the
positive (negative) emotional information received from the encouragement (discouragement).

Specifically, when receiving encouragement, people with high levels of emotional intelligence will tend to recognize and use the positive emotional information to form a more positive evaluation about the opportunity (Baron, 2008; Bower, 1981; Isen, 2002) than will people with lower levels of emotional intelligence who do not have the same abilities to use their emotions effectively. Because highly emotionally intelligent people are more likely to evaluate and use the positive emotions to facilitate their actions (Wong & Law, 2002), having high emotional intelligence will increase the strength of an individual’s positive evaluation of an opportunity and his/her commitment to the venture goal. Consistent with Mayer and Salovey’s (1997) theorizing of what a person with high emotional intelligence would experience, past research has shown that people with high emotional intelligence are able to benefit more from the positive effect of social support on well-being (Gallagher & Vella-Brodrick, 2008). In a similar vein, employees with high emotional intelligence are also able to experience stronger positive links between perceived organizational support and engagement (Mahon, Taylor, & Boyatzis, 2014). Taken together, these studies suggest that emotionally intelligent individuals are able to benefit more from the encouragement received in relation to one’s goal of starting a venture.

In contrast, when receiving discouragement, emotionally intelligent people could be more effective at constructively using the negative emotional information to evaluate the opportunity. Additionally, emotionally intelligent people may be better at regulating the negative emotions by reflecting on the causes, appropriateness, and changeability of the opportunity based on discouragement (Mayer & Salovey, 1995). Hence, emotionally
intelligent people can remain committed to their venture goal despite a less positive opportunity evaluation and a related negative response when having received discouragement. Parallel to this line of reasoning, emotional intelligence has been argued to serve as a coping resource that could mitigate the consequences of job insecurity stress on affective commitment (Jordan et al., 2002) and empirically shown to buffer the impact of stress on well-being (Davis & Humphrey, 2012). Consequently, we argue that people with higher emotional intelligence can decrease the negative relationship between opportunity evaluation and venture goal commitment when receiving discouragement.

Hypothesis 3a: The positive indirect effect of encouragement on venture goal commitment through opportunity evaluation will be stronger if emotional intelligence is high.

Hypothesis 3b: The negative indirect effect of discouragement on venture goal commitment through opportunity evaluation will be weaker if emotional intelligence is high.

METHOD

 Experimental Design

We conducted a scenario experiment to test our hypotheses. We asked participants to imagine they had recently begun thinking about starting their own venture and to write a few sentences to describe their venture opportunity, considering the industry, potential customers, or product and service features. A wide variety of opportunities were described, such as social ventures, restaurants, consultancies, healthcare ventures, biotech, retail, IT, service industry, farming, and telecommunications. Similar types of scenarios have previously been used in entrepreneurship research (e.g., Grégoire &
Shepherd 2012; Shepherd, Patzelt, & Baron 2013; Welpe, Spörrle, Grichnik, Michl & Audretsch, 2012). We applied this approach in our study because we wanted participants to think about a situation where they would start a new venture and not recall a situation where they have actually started a new venture (Uygur, 2017). We thus avoid retrospective bias by studying “live” decisions (Dimov, 2004). After the scenario, we randomly presented participants with an emotional information scenario for their venture opportunity. Thereafter, participants indicated their opportunity evaluation, venture goal commitment, and emotional intelligence.

Participants

We used a sample from the US population ($N = 451$) recruited via a web-based survey handled by a private research company (e.g., Buhrmester, Kwang, & Gosling 2001; Casler, Bickel & Hackett, 2013). Participants who sign up with private research companies agree to the terms and conditions which contain by default that every survey ensures full anonymity and confidentiality of participants’ answers. In addition, participants could stop with the experiment at any time without any consequences, thus meeting the requirement of voluntary participation. We stated all authors’ names and contact details at the beginning and at the end of the experiment with the offer to contact us with any questions or comments that participants may have. In addition, the last question in the experiment gave participants the opportunity to state any questions or comments about the study that they have. We have not applied for a formal ethical vote from an IRB board as our study does not raise any ethical concerns.

The sample consisted of 60% women and had an average age of 31 years ($SD = 10.65$, $min = 19$, $max = 65$). Participants could indicate more than one occupation, resulting in most participants being employed (60%), 32% students, 6% unemployed, and
9% as having other occupations (participants chose this category if they felt that none of the given categories applied to them). Approximately 42% of the respondents have a Bachelor’s degree; 22% have post-graduate degrees (master and/or doctorate degrees), and 25% have a secondary degree. The remaining 10% have some secondary schooling or ‘other’ educational background.

The composition of our sample closely represents people who would be most likely to engage in start-up activities. Thus, we can best isolate the relationships of interest using this sample (Falk & Heckman, 2009), i.e., when are some individuals more committed to a venture goal than others. A sample consisting of actual entrepreneurs would have been less appropriate because entrepreneurs are all high in their entrepreneurial intentions and are currently committed to working on their venture. To obtain sufficient variance in venture goal commitment (our dependent variable) without selection bias, it was necessary to sample a general population. This sampling strategy is in accordance with current studies that investigate the antecedents of entrepreneurial intentions (e.g., Kuckertz & Wagner, 2010; Lee, Wong, Foo & Leung, 2011; Wilson, Kickul & Marlino, 2007).

**Dependent variable**

We measured venture goal commitment by asking participants to focus on the venture goal that they described previously and to rate the extent to which they agreed or disagreed with the 10 items measuring venture goal commitment on a 5-point scale (from 1 “strongly disagree” to 5 “strongly agree”) (Brunstein, 1993; Uy et al., 2015). Based on factor loading in an exploratory factor analysis, we selected four items. These items were originally negatively worded, but were reverse coded in a way that a high score reflects high venture goal commitment. All four items refer to different dimensions of venture
goal commitment as developed by and adapted from Brunstein (1993), i.e., determination, urgency, willingness, and opportunity: “I sometimes doubt whether I shall definitely accomplish this startup”, “I think I will wait a while until I begin working on this startup”, “If the startup implies lots of difficulties, I am willing to postpone it for a while”, “I don't have much time in my everyday life to work on this startup” ($\alpha = 0.78$).

Imagination of commitment to a goal is not unusual or uncommon, but rather a natural part of decision-making for most individuals, especially in entrepreneurship (Sarasvathy, 2002), even without intentions to pursue the goal (Shackle, 1961; 1979). Before making a decision or taking action, individuals imagine how committed they are and anticipate how committed they would be and use this information in their decision-making process. We argue that even people who do not have an intention to start their own venture can imagine and indicate whether they would be committed to their own venture; just as they are capable of imagining their potential commitment to a diet, to a parental role, or to joining a soccer team, without real intentions to go on diet, become a parent or join the soccer team.

**Independent variables: Emotional information scenarios**

We pretested the emotional information scenarios for our experiment in a pilot study, using a different sample ($N = 400$) than in the main study which was again handled through a web-based survey by a private research company. In the pilot study, we asked respondents to imagine that they were in the process of starting their own venture with a venture opportunity they have described. Then, we presented respondents with an emotional information scenario that we based on the existing literature on emotional support (Neergaard et al., 2005; Toegel et al., 2013), i.e., encouragement and discouragement provided by parents or friends. In addition to encouragement and
discouragement, we also presented the respondents to a neutral or mixed emotional information scenario. This scenario was used to nuance our manipulation with an additional comparison (please see Appendix 1 for the emotional information scenarios). We prepared a 3 (two different types of emotional information plus one comparison) x 2 (parents and friends as two different sources) between-subjects design, resulting in $3^2 = 9$ different emotional information scenarios. One of these scenarios was randomly distributed to respondents. After the scenario presentations, respondents indicated how they perceived the emotional information from parents and friends in the scenarios provided (manipulation check: emotional information); therefore, we were able to determine whether the inductions were successful.

In the experiment, we used the same scales as in the pilot study to measure emotional information to check if the induction of the emotional information scenarios was successful. All scales of the manipulation check measures in the pilot study were reliable: $MC \text{ parents encour, } \alpha = 0.96; MC \text{ friends encour, } \alpha = 0.95; MC \text{ parents discour, } \alpha = 0.97; MC \text{ friends discour, } \alpha = 0.97$. In the experiment, again all scales were reliable: $\text{parents encour, } \alpha = 0.93; \text{friends encour, } \alpha = 0.90; \text{parents discour, } \alpha = 0.94; \text{friends discour, } \alpha = 0.95$.

**Mediation and moderation variables**

We measured opportunity evaluation with three items on a scale from 0, “not at all”, to 10, “extremely” (Welpe et al., 2012) by asking participants to focus on their venture goal and on the emotional information that they would expect from their parents and friends. A sample item is “How positively do you judge your described venture opportunity?” ($\alpha = 0.90$).
The moderating variables are the four branches of *emotional intelligence*, which we measured with 16 items on a scale from 1, “strongly disagree,” to 7, “strongly agree” (Wong and Law, 2002). Sample items are as follows: “I have a good sense of why I have certain feelings most of the time” for *self-emotion appraisal* ($\alpha = 0.90$); “I always know my friends’ emotions from their behavior” for *other-emotion appraisal* ($\alpha = 0.92$); “I am a self-motivated person” for *use of emotions* ($\alpha = 0.86$); and “I have good control of my own emotions” for *regulation of emotion* ($\alpha = 0.91$).

**Control variables**

The existing literature suggests that entrepreneurs’ demographic characteristics, including their sex (Moore, 2010; Klyver and Terjesen, 2007) and age (Moore, 2010; Greve and Salaff, 2003), impact what type of support and information they are likely to receive from their social surroundings. Therefore, we control for *sex* (1 = female, 0 = male) and *age* (in years). We also controlled for respondents’ initial entrepreneurial intentions, which we measured before they were exposed to the emotional information scenarios because, from a theoretical perspective, venture goal commitment depends on some level of entrepreneurial intentions (Bird, 1988). While entrepreneurial intentions describe the general intent to become an entrepreneur, venture goal commitment captures an individual’s commitment to founding a particular new venture. We measured entrepreneurial intentions with six items on a scale from 1, “not at all,” to 7, “very much” (Liñán and Chen 2009). A sample item is “I am ready to do anything to be an entrepreneur” ($\alpha = 0.96$).

We also asked participants if they knew the *purpose* of the study (1 = yes, 0 = no). If they answered yes, we asked them to describe the purpose. We also asked participants how well they understood the instructions and how well they could imagine the scenarios.
provided (1 = not at all; 2 = a little; 3 = quite a bit; 4 = extremely well). We also asked if the participants had been previously self-employed (1 = yes, 0 = no) to control for prior entrepreneurial experience. All variables were standardized with a mean of 0 and standard deviation of 1, except the dependent variable, the treatment variables and the sex variable.

RESULTS

Model fit, reliability and validity

All Cronbach’s alpha scores are above the minimum threshold of 0.7 (Nunnally and Bernstein, 1994) indicating that our scales are reliable. A confirmatory factor analysis confirms that our seven constructs measurement model ($\chi^2 = 919$, df = 356, RMSEA = 0.06, TLI = 0.95, CFI = 0.95) better fits our data compared to a single construct measurement model ($\chi^2 = 7383$, df = 377, RMSEA = 0.20, TLI = 0.28, CFI = 0.33). We examine convergent validity estimating whether the items’ estimated path coefficients related to its underlying construct are significant (Anderson and Gerbing, 1988). Each path loading was greater than twice its standard error (ranging from 0.03 to 0.09) providing support for convergent validity. To supplement this analysis, we also computed the average variance extracted (AVE) (Fornell and Larcker 1981) that were all above the threshold of 0.50 with the lowest being 0.56 for use of emotions. This demonstrates that the measures are responsible for a larger proportion of the explained variance compared to the variance explained due to measurement error. Comparing the square root of the average variance extracted (AVE) for each construct with any off-diagonal correlations in the correlation matrix (Table 2) provided evidence of adequate discriminant validity (Fornell and Larcker, 1981). All square roots of the AVE for each construct were greater than any off-diagonal correlations.
**Manipulation checks: Emotional information**

Table 1 shows the means and standard deviations (in brackets) of the manipulation check measures of emotional information for all emotional information scenarios in the pilot study and in the experiment. One-way analysis of variance (ANOVA) with least significant differences (LSD) post hoc tests for both our pilot study and experiment showed that all means of the manipulation checks were significantly higher in the emotional information scenarios that they were intended to induce than the other means of the manipulation checks in the other emotional information scenarios. Hence, our emotional information scenarios successfully induced the corresponding emotional information in our experiment (e.g., Göritz 2007, Göritz and Moser 2006).

– Insert Table 1 here –

**Descriptions and correlations**

Table 2 shows the descriptive and correlational results for our experiment. We found a moderate correlation between opportunity evaluation and venture goal commitment ($r = 0.57$, $p < 0.01$), between entrepreneurial intentions and venture goal commitment ($r = 0.40$, $p < 0.01$), between opportunity evaluation and the four dimensions of emotional intelligence (0.25 $< r < 0.39$), and among the four dimensions of emotional intelligence (0.34 $< r < 0.61$). All other correlations are small. All variance inflation factors (VIFs) of variables are below 2, except one (self-emotion appraisal: VIF = 2.17). We thus can reject multicollinearity among our independent variables, because all correlations and variance inflation factors (VIFs) are below the critical threshold (Knoke, Borhnsted & Mee, 2002). In addition, our design does not allow multicollinearity among
the emotional information variables as they were orthogonally induced in different experimental scenarios.

– Insert Table 2 here –

**Mediation analysis**

In our experiment, we investigated the influence of encouragement and discouragement on venture goal commitment and whether these relationships are mediated by opportunity evaluation. We applied Model 4 of PROCESS (Hayes 2013) to test our hypotheses and report our regression results with unstandardized coefficients in Table 3. Encouragement from parents ($\beta = 0.30; p = 0.05; R^2 = 0.09; R^2_{\text{change significance}} = 0.02$) and friends ($\beta = 0.26; p = 0.05; R^2 = 0.09; R^2_{\text{change significance}} = 0.04$) has a significant positive influence on venture goal commitment, supporting Hypothesis 1a. Discouragement from parents ($\beta = -0.24; p = 0.10; R^2 = 0.09; R^2_{\text{change significance}} = 0.06$) has a negative effect while discouragement from friends ($\beta = -0.14; p = \text{n.s.}; R^2 = 0.08; R^2_{\text{change significance}} = 0.27$) was insignificant, thus providing partial support for Hypothesis 1b. We ran separate regression analyses for the effect of opportunity evaluation on venture goal commitment in all six scenarios for parents and friends and find positive significant effects ranging between $0.38 \leq \beta \leq 0.39, p = 0.001$.

To test whether opportunity evaluation mediates the relationship, we use the Sobel test to minimize Type I errors, i.e., claiming that an indirect effect exists when it does not (Hayes 2013: 115-116). The direct effects and the Sobel tests in Table 3 show that opportunity evaluation significantly mediates the relationship between encouragement from parents ($z = 2.00; \text{indirect } \beta = 0.07; p = 0.04$) and friends ($z = 3.23; \text{indirect } \beta = 0.13; p = 0.00$) and venture goal commitment, providing support for Hypothesis 2a. We observe
a significant mediation through opportunity evaluation in the relationships between discouragement from parents and venture goal commitment ($z = -2.83; \text{indirect } \beta = -0.11; p = 0.00$) but no total effect between discouragement from friends (total effect $\beta = -0.14; n.s.$) and venture goal commitment, providing partial support for Hypothesis 2b. We applied bootstrap confidence intervals as a robustness test to our Sobel tests (Hayes 2013), and our mediation results remain unchanged (parents positive: $\beta = 0.07; 95\% \text{ CI} = 0.01 – 0.16$; friends positive: $\beta = 0.13; 95\% \text{ CI} = 0.06 – 0.23$; parents discouragement: $\beta = -0.11; 95\% \text{ CI} = -0.21 – (-0.03)$)

– Insert Table 3 here –

**Moderated mediation analysis**

To test our hypotheses that emotional intelligence moderates the indirect effects of emotional information on venture goal commitment through opportunity evaluation, we applied Model 58 of PROCESS (Hayes 2013). None of the four models in Table 3 indicated a significant moderation effect of any of the four branches of emotional intelligence in the relationship between emotional information and opportunity evaluation. However, we found significant positive moderation effects of emotional self-emotion appraisal ($\beta = 0.10, p < 0.10$), other-emotion appraisal ($\beta = 0.13, p < 0.05$), and regulation of emotion ($\beta = 0.09, p < 0.10$) in the relationships between opportunity evaluation and venture goal commitment for parent encouragement, parent discouragement, friends encouragement, and friends discouragement.

Figure 2 shows that the relationship between opportunity evaluation and venture goal commitment increases with higher levels of self-emotion appraisal, other-emotion appraisal, and regulation of emotion. The positive indirect effect of encouragement from
parents and friends on venture goal commitment through opportunity evaluation increases with higher emotional intelligence, while the negative indirect effect of discouragement from parents decreases with higher emotional intelligence. Hence, we obtain partial support for Hypotheses 3a and 3b.

– Insert Figure 2 here –

**Robustness tests**

We completed two tests to verify the robustness our results. First, we included other control variables that could impact the results. Past research indicated significant effects of knowledge, abilities, and skills in the start-up process (e.g., DeClercq and Arenius, 2006; Haynie et al., 2009; McKelvie, Haynie, & Gustavsson, 2011; Wood & Williams, 2014). We therefore controlled whether our results are robust when controlling for the effects of current occupation (student, employed, self-employed, unemployed, housewife/househusband, and other), past entrepreneurial experience (i.e., if participants had been self-employed before their current occupation, 1 = yes, 0 = no), and their highest educational attainment (education, 1 = some secondary schooling, 2 = secondary schooling, 3 = Bachelors, 4 = Masters, 5 = PhD, and 6 = other). We also controlled for how well the participants understood the purpose of the study (1 = yes, 0 = no), how well they understood the instructions (1 = not at all to 4 = extremely well) and how well they could imagine the scenarios provided in the questionnaire (1 = not at all to 4 = extremely well). Our results are robust when additionally including these variables in our analyses.

Second, we particularly explored how entrepreneurial intentions impact our results. As a first test, we ran the models without controlling for entrepreneurial intentions and found robust results; only with discouragement from parents slightly above a 0.10 significance level. We also performed a median split of entrepreneurial intentions (Med
= 2.83) and ran the models for participants above and below the median. For the sample with low entrepreneurial intentions, the results were robust for encouragement and discouragement from parents but not for encouragement from friends. For the sample with the high entrepreneurial intentions, the results were robust with regards to friend encouragement while the results for parents were insignificant but with coefficient in similar directions. Overall, these analyses suggest that results related to parent emotional information are driven mainly by individuals with low entrepreneurial intentions while results related to emotional information from friends are driven by individuals with high entrepreneurial intentions.

**DISCUSSION**

Our study examined the effects of different types of situational emotional information provided by parents and friends on a person’s venture goal commitment. We present findings from a scenario experiment that was pilot tested with a correlational design. Overall, our findings indicate that differences in venture goal commitment are a consequence of receiving encouragement and discouragement. Furthermore, the interplay of opportunity evaluation and emotional intelligence underlies the relationship between encouragement and discouragement and venture goal commitment. Our study thus addresses the emotional and cognitive mechanisms that shape venture goal commitment by explaining how and under which conditions situational emotional information is internalized into venture goal commitment.

**Implications for research**

Our study addresses venture goal commitment as a central component of the entrepreneurial process (Uy, Foo, & Illies, 2015; Foo, Uy, & Baron, 2009). In particular,
we examine how individuals’ commitment to their venture can be influenced by external factors such as receiving encouragement or discouragement from parents and friends, thereby underlining that venture goal commitment is not given (e.g., Davidsson and Gordon, 2016), but is instead malleable. While we find encouragement from parents and friends lead to higher venture goal commitment, we only find a significant effect of discouragement from parents on venture goal commitment. Hence, it appears that discouragement from friends is perceived as less important to individuals for their venture goal commitment. This finding challenges extant research that has often considered family and friends together when studying emotional support (e.g., Davidsson and Honig, 2003; Klyver et al., 2018). Our study indicates that parents’ and friends’ encouragement and discouragement have different relevance in the entrepreneurial context and that the cognitive and emotional mechanisms leading to venture goal commitment may be different depending on an individuals’ perception of the senders’ closeness to the context.

Indeed, our post-hoc analyses further suggest differences between parents and friends’ effects on venture goal commitment. Results related to parent emotional information are driven mainly by individuals with low entrepreneurial intentions while results related to emotional information from friends are driven by individuals with high entrepreneurial intentions. Negative emotional information appears to play an important role in the early stages of entrepreneurship, supporting recent research showing that negative emotions exert an influence on the transition from latent to nascent entrepreneurship (Hatak & Snellmann, 2017) and in the process of transforming entrepreneurial intentions into actions (van Gelderen, Kautonen, & Fink, 2015). Interestingly, however, these studies show that certain negative emotions can encourage entrepreneurial action, which is counterintuitive and challenges extant research that has
examined the negative effects of negative emotions in the entrepreneurial context (e.g., Shepherd, 2003; Shepherd, Welpe et al., 2012).

Moreover, our study takes an initial step in providing a nuanced perspective of emotional support (Zellars & Perrewe, 2001) by examining differential effects of encouragement and discouragement on individuals’ venture goal commitment compared to previous research that has mainly looked at the positive effects of emotional support (Brüderl and Preisendörfer, 1998; Davidsson and Honig, 2003; Edelman et al., 2016; Gudmunson et al., 2009). Our findings show that encouragement generally has a positive effect, while discouragement has a negative effect on venture goal commitment. These findings are in line with affect-as-information theory stating that emotional information leads to emotion-congruent outcomes (Clore et al., 2001; Forgas & George, 2001). However, the finding about discouragement also adds to the upcoming stream of research on the dark side of social networks, with a focus on the constraining effect of entrepreneurial networks (e.g., Klyver, Evald and Hindle 2011).

Guided by affect-as-information hypothesis (Clore et al., 2001; Forgas & George, 2001) and the appraisal theory (Lerner & Keltner, 2000; Smith & Ellsworth, 1985; Tiedens & Linton, 2001), we also explored the mediating effect of opportunity evaluation in the relationships between encouragement and discouragement and venture goal commitment. Our results show significant mediation effects of opportunity evaluation between encouragement from parents and friends and venture goal commitment, but only a significant mediation effect between discouragement from parents, but not from friends, and venture goal commitment. Hence, it appears again that also the indirect effect of discouragement from friends on venture goal commitment through opportunity evaluation is less influential than the indirect effect of discouragement from parents. This
corroborates our earlier argument that our findings challenge existing research by showing how effects from parents and friends’ emotional information can differ in the entrepreneurial context.

With this finding, we further our knowledge about opportunity evaluation and contribute to the appraisal theory in entrepreneurship (e.g. Foo, 2011; Podoynitsyna, van der Bij, & Song, 2012; Welpe et al., 2012) by extending previous research that has shown how appraisals emerge based on discrete emotions in the start-up process (Ivanova, Treffers, & Langerak, 2018); our study shows that evaluations of an opportunity can also emerge when different types of emotional information are provided and by showing how they influence venture goal commitment. In addition, this finding relates to Lazarus appraisal theory (Lazarus, Kanner, & Folkman, 1980) that states that the evaluation of an object – in this case the venture opportunity – is only informed by appraisals if the given information is of compelling personal value. In other words, individuals appear to prescribe less value to their friends’ discouragement which is thus not included as a situational factor in their opportunity evaluation and thus does not impact their venture goal commitment.

Finally, our study draws from and gives back to extant research on the emotional intelligence of entrepreneurs (Ahmetoglu et al., 2011; Cross & Travaglione, 2003; Rhee & White, 2007; Zampetakis et al., 2009). In particular, we find that three, namely self-emotion appraisal, other-emotion appraisal, and regulation of emotion, branches of emotional intelligence moderate the relationship between opportunity evaluation and venture goal commitment. For individuals with higher emotional intelligence, the positive indirect effect of encouragement on venture goal commitment through opportunity evaluation is larger, and the negative indirect effect of discouragement is smaller.
Surprisingly, use of emotions was no significant moderator in the relationship between opportunity evaluation and venture goal commitment. In addition, we did not find significant moderation effects in the relationship between the emotional information scenarios and opportunity evaluation indicating that the effect of emotional information on opportunity evaluation is not contingent on an individual’s emotional abilities. Nonetheless, as entrepreneurship studies argue that emotional intelligence is related to entrepreneurial success (Ahmetoglu et al., 2011, Cross & Travaglione, 2003) and is important for entrepreneurial leaders (Rhee & White, 2007), we can provide an initial explanation of these findings with our study demonstrating that a more positive opportunity evaluation leads to a higher venture goal commitment, particularly for individuals high in emotional intelligence.

**Limitations and suggestions for future research**

The following points must be considered when interpreting our results, but can offer valuable guidelines for future studies. To start, one may critique the use of hypothetical scenarios when participants described their own business idea in our study as lacking realism. Experiments such as ours are naturally limited in their external validity, although enhancing internal validity (Aguinis and Bradley 2014). From a methodological perspective, extant research on goal commitment has mostly been experimental in nature. Meta-analytic studies on goal commitment predominantly comprised experimental studies which involved goals that are “manipulated” in terms of difficulty, incentives, publicness, and framing (Klein et al., 2001; Wofford et al., 1992). Based on the notable prevalence of laboratory experiments—which typically use relatively mundane, trivial, and often impersonal tasks—in goal commitment research, we believe that research on goal commitment has attained significant progress particularly because experiment is the
only approach that allows us to establish causality. Our experiment is one of the first attempts to show how a causal mechanism, i.e. from situational emotional situational via opportunity evaluation and emotional intelligence, can lead to the emergence of venture goal commitment. In addition, participants in our experiment had to think about a situation where they would start a new venture instead of recalling a situation where they have actually started a new venture (Uygur, 2017). We thus avoid retrospective bias by studying “live” decisions (Dimov, 2004). Finally, we asked participants at the end of the experiment how well they could imagine the scenario and participants reported that they could imagine the hypothetical scenario very well ($M = 3.2, SD = 0.75$ on a scale from 1 “not at all” to 4 “extremely well”). Nevertheless, we recommend future studies to validate our findings using a different sample, e.g., nascent entrepreneurs, but with the awareness that other samples such as nascent entrepreneurs have certain attributes (i.e., they are already in the entrepreneurial process and their venture goal commitment may not vary significantly) that have to be taken into account when interpreting results.

Furthermore, our conceptualization of venture goal commitment may be limited, but provides directions for future research at the same time. Consistent with extant literature that underscored the role of human agency in entrepreneurship and highlighted the importance of perseverance in entrepreneurship (Bullough et al., 2014; Shane et al., 2003; Uy et al., 2015), our paper on venture goal commitment regards entrepreneurship as a purposeful and motivated behavior. Interestingly, recent papers have presented conceptual frameworks that regarded entrepreneurial behavior as something that could also result from impulsivity (Wiklund et al., 2017; Lerner et al., 2018). While beyond the scope of our paper, future research could extend our study by examining how impulsivity could potentially alter the role of commitment in the entrepreneurial process.
While we believe we took an important initial step in examining the effects of different forms of emotional support, particularly discouragement, there are also some limitations to this. For instance, it is possible that under different conditions, discouragement may also lead to higher venture goal commitment – such as negative emotions can have positive effects on entrepreneurial behaviour (Hatak & Snellmann, 2017; van Gelderen et al., 2015) – for example, when taking a longer period of time into account or when considering discouragement from a different source than from parents. Therefore, despite the negative implications of discouragement as we found in our study, it is possible that discouragement from parents and friends may have a positive effect under certain boundary conditions, for instance, whether the parents and friends are self-employed or employed. In addition, future studies could dig deeper into different content of discouragement, for instance, constructive vs inadequate criticism, and their effects on venture goal commitment. In fact, constructive feedback may be valuable in decreasing the likelihood to fail in a venture because of socially constructed confidence (Hayward, Shepherd & Griffin, 2006) or in diminishing overconfidence that is related to underperformance in ventures (Hmieleski & Baron, 2009). As a result, future studies may follow our study as one of the first presenting initial empirical evidence about the impact of situational emotional information in the entrepreneurial context, a claim that has frequently been made but rarely empirically demonstrated (Hanlon & Saunders, 2007).

Finally, we encourage future research to further explore other types of emotional information or experienced emotions. For example, relating to research on mixed emotions (Podoynitsyna, van der Bij, & Song, 2012) or affective shifts (Bledow, Schmitt, Frese, & Kuehnel, 2011), it would be promising to investigate mixed types of emotional information such as the combination of encouragement and discouragement from parents...
and friends or as shifts between phases of encouragement and phases of discouragement. Another interesting type of emotional information could be negligence or the information that someone does not care. Examining more deeply different types of emotional information appears particularly important since it is likely that parents and friends may not be constantly encouraging or discouraging, but could change their emotional information depending on which specific situation of the entrepreneurial process the individual is in. Similarly, it appears promising to further explore the role of negative emotions in the early stages of entrepreneurship, such as regret (Hatak & Snellmann, 2017), fear, doubt and aversion (van Gelderen et al., 2015), or negative emotions that are related to different appraisals (Ivanova et al., 2018).

**Implications for practice**

We believe our study has several implications for entrepreneurial practice. First, it appears that particularly parents’ encouragement and discouragement have an influence on their children’s venture goal commitment through opportunity evaluation. Hence, people in the process of starting a new venture should be aware that this is not an isolated process, but that the emergence of their commitment to the venture goal is malleable and open to external influences. Similarly, friends, and in particular parents, need to be aware that the emotional information they provide to their friends or children in the process of starting a new venture has meaningful effects on their venture goal commitment because individuals include this emotional information when evaluating their venture opportunity.

Second, when experiencing negative emotional responses and subsequently evaluating the venture opportunity as less positive, people would still be able to maintain the commitment to their venture if they are emotionally intelligent. More specifically, emotionally intelligent people are better able to focus on using the emotional response
generated from the evaluation of the opportunity constructively to inform their venture goal commitment. Particularly, the three branches of emotional intelligence, self-emotion appraisal, other-emotion appraisal, and regulation of emotion, appear to play an important role and this is important to know because education and training can specifically develop these three branches of emotional intelligence (Schutte & Malouff 2013).

CONCLUSION

Our study addresses venture goal commitment based on emotional and cognitive factors by explaining why and under which conditions situational emotional information is internalized into venture goal commitment. Overall, our findings suggest that differences in venture goal commitment are a consequence of different types of situational emotional information, i.e., encouragement and discouragement, and that the interplay of opportunity evaluation and emotional intelligence underlies the relationship between situational emotional information and venture goal commitment.
Appendix 1: Protocol and Scenarios for the Induction of Emotional Information

Regardless of the real situation, please imagine that you are in the process of starting your own venture with a self-chosen venture idea. You will start your venture under the current political, economic, and societal circumstances. Please take some time to think about a venture idea that you would like to pursue. Then, please describe very shortly what kind of venture this would be.

In the process of starting your own venture, please imagine that you will receive the following information from your social network - your parents and your best friends. The following scenarios may be different than the actual feedback you would expect or receive from your social network during that time, but we would like you to imagine the following scenarios as real as possible.

Table A1: Summary of the Emotional Information Scenarios

<table>
<thead>
<tr>
<th></th>
<th>Parents</th>
<th>Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouragement</td>
<td>Your parents are carefully listening to your intention to start a venture. They are very enthusiastic and excited about your idea. They understand your passion, trust your entrepreneurial abilities, and fully support you in becoming an entrepreneur.</td>
<td>Your best friends are carefully listening to your intention to start a venture. They are very enthusiastic and excited about your idea. They understand your passion, trust your entrepreneurial abilities, and fully support you in becoming an entrepreneur.</td>
</tr>
<tr>
<td>Discouragement</td>
<td>Your parents are very concerned about your plans to start a venture and strongly try to advise you against it. They do not trust your entrepreneurial abilities and are afraid that you will fail. They prefer you find a normal job as employee and do not want you to start your own venture.</td>
<td>Your best friends are very concerned about your plans to start a venture and strongly try to advise you against it. They do not trust your entrepreneurial abilities and are afraid that you will fail. They prefer you find a normal job as employee and do not want you to start your own venture.</td>
</tr>
<tr>
<td>Mixed emotional information</td>
<td>Your parents are carefully listening to your intention to start a venture. They are very enthusiastic and excited about your idea. They understand your passion for becoming an entrepreneur. At the same time, they are very concerned about your plans to start a venture and are afraid that you will fail. They can also imagine you very well as an employed worker.</td>
<td>Your best friends are carefully listening to your intention to start a venture. They are very enthusiastic and excited about your idea. They understand your passion for becoming an entrepreneur. At the same time, they are very concerned about your plans to start a venture and are afraid that you will fail. They can also imagine you very well as an employed worker.</td>
</tr>
</tbody>
</table>
REFERENCES


Figure 1: Research Model describing the Influence of Encouragement and Discouragement on Venture Goal Commitment mediated by Opportunity Evaluation and moderated by Emotional Intelligence

Note: emotional information in the grey boxes is theoretically described but has not been operationalized in our studies.
Figure 2: Moderation of three Emotional Intelligence Branches in the Relationship between Opportunity evaluation and Venture Goal Commitment
Table 1: Means and Standard Deviation (in brackets) for manipulation checks of emotional information in the emotional information scenarios in the Pilot Study ($N = 400$) and in the Main Study ($N = 451$)

<table>
<thead>
<tr>
<th>Emotional information scenarios</th>
<th>Pilot study</th>
<th>Main study</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Manipulation check: emotional information</td>
<td>Manipulation check: emotional information</td>
</tr>
<tr>
<td>Parents encour</td>
<td>Friends encour</td>
<td>5.25(1.60)</td>
</tr>
<tr>
<td>Parents encour</td>
<td>Friends discour</td>
<td>5.77(1.53)</td>
</tr>
<tr>
<td>Parents encour</td>
<td>Friends mixed</td>
<td>5.69(1.31)</td>
</tr>
<tr>
<td>Parents discour</td>
<td>Friends encour</td>
<td>2.55(1.45)</td>
</tr>
<tr>
<td>Parents discour</td>
<td>Friends discour</td>
<td>2.49(1.58)</td>
</tr>
<tr>
<td>Parents discour</td>
<td>Friends mixed</td>
<td>3.08(1.55)</td>
</tr>
<tr>
<td>Parents mixed</td>
<td>Friends encour</td>
<td>4.59(1.31)</td>
</tr>
<tr>
<td>Parents mixed</td>
<td>Friends discour</td>
<td>5.13(1.30)</td>
</tr>
<tr>
<td>Parents mixed</td>
<td>Friends mixed</td>
<td>4.88(1.31)</td>
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**Model Diagnostics**

<table>
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<th>F(8, 400)</th>
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<th>F(8, 400)</th>
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<th>F(8, 400)</th>
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<th>F(8, 451)</th>
<th>F(8, 451)</th>
<th>F(8, 451)</th>
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<td>38.21</td>
<td>19.89</td>
<td>26.03</td>
<td>30.11</td>
<td>26.58</td>
<td>14.97</td>
<td>43.75</td>
<td>27.76</td>
<td>38.33</td>
<td>43.81</td>
<td>32.28</td>
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<tr>
<td>p = 0.00</td>
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<td>0.44</td>
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<td>0.35</td>
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</table>

**Notes:** Emotional information scenarios were induced between-subjects. Model diagnostics report results from one-way ANOVAs. Least significant differences (LSD) post-hoc tests (not reported in table) show that mean differences between treatment groups are significant. Detailed results from post-hoc comparisons are available upon request.
Table 2: Means (M), Standard Deviations (SD), Cronbach’s Alphas (α), Pearson Correlations, Average Variance Extracted of variables in the Main Study (N = 451)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>6</th>
<th>8</th>
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<th>11</th>
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<tbody>
<tr>
<td>1. Venture goal commitment</td>
<td>3.98</td>
<td>1.05</td>
<td>0.78</td>
<td>(.59)</td>
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<tr>
<td>2. Parents encour</td>
<td>0.33</td>
<td>0.47</td>
<td>0.93</td>
<td>.07</td>
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<tr>
<td>3. Parents discour</td>
<td>0.33</td>
<td>0.47</td>
<td>0.94</td>
<td>-.04</td>
<td>.50**</td>
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<tr>
<td>5. Friends encour</td>
<td>0.33</td>
<td>0.47</td>
<td>0.90</td>
<td>.11*</td>
<td>.00</td>
<td>.00</td>
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<tr>
<td>6. Friends discour</td>
<td>0.33</td>
<td>0.47</td>
<td>0.95</td>
<td>-.11*</td>
<td>.00</td>
<td>.00</td>
<td>.50**</td>
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<tr>
<td>8. Opportunity evaluation</td>
<td>6.25</td>
<td>2.06</td>
<td>0.90</td>
<td>.57**</td>
<td>.08</td>
<td>-.09*</td>
<td>.16**</td>
<td>-.14**</td>
<td>(.69)</td>
<td></td>
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<tr>
<td>9. Self-emotion appraisal</td>
<td>5.28</td>
<td>1.22</td>
<td>0.90</td>
<td>.16**</td>
<td>.04</td>
<td>-.05</td>
<td>-.01</td>
<td>-.01</td>
<td>.32**</td>
<td>(.60)</td>
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<tr>
<td>10. Other-emotion appraisal</td>
<td>5.07</td>
<td>1.24</td>
<td>0.92</td>
<td>.14**</td>
<td>-.03</td>
<td>-.01</td>
<td>-.03</td>
<td>-.02</td>
<td>.25**</td>
<td>.61**</td>
<td>(.70)</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>11. Use of emotions</td>
<td>5.09</td>
<td>1.25</td>
<td>0.86</td>
<td>.25**</td>
<td>.03</td>
<td>.03</td>
<td>.08</td>
<td>-.04</td>
<td>.38**</td>
<td>.58**</td>
<td>.44**</td>
<td>(.56)</td>
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<td></td>
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<tr>
<td>12. Regulation of emotion</td>
<td>5.03</td>
<td>1.34</td>
<td>0.91</td>
<td>.15**</td>
<td>-.03</td>
<td>.06</td>
<td>.01</td>
<td>-.03</td>
<td>.30**</td>
<td>.48**</td>
<td>.34**</td>
<td>.56**</td>
<td>(.69)</td>
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<tr>
<td>13. Entrepreneurial intention</td>
<td>3.11</td>
<td>1.82</td>
<td>0.96</td>
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<td>-.03</td>
<td>.08</td>
<td>-.04</td>
<td>-.01</td>
<td>.39**</td>
<td>.05</td>
<td>.14**</td>
<td>.17**</td>
<td>.13**</td>
<td>(.82)</td>
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</tr>
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<td>14. Age</td>
<td>31.21</td>
<td>10.65</td>
<td>(-)</td>
<td>.20**</td>
<td>-.05</td>
<td>.04</td>
<td>.08</td>
<td>-.06</td>
<td>.20**</td>
<td>.20**</td>
<td>.08</td>
<td>.14**</td>
<td>.15**</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>15. Sex</td>
<td>0.59</td>
<td>(-)</td>
<td>(-)</td>
<td>.04</td>
<td>-.04</td>
<td>.00</td>
<td>-.04</td>
<td>.02</td>
<td>.03</td>
<td>.19**</td>
<td>.20**</td>
<td>.11*</td>
<td>.01</td>
<td>-.15**</td>
<td>.00</td>
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<table>
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<th>Mean</th>
<th>SD</th>
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<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
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<tbody>
<tr>
<td>16. Self-employed before</td>
<td>0.33</td>
<td>(-)</td>
<td>(-)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>17. Purpose</td>
<td>0.31</td>
<td>(-)</td>
<td>(-)</td>
<td>.20**</td>
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<td>18. Instructions</td>
<td>3.46</td>
<td>0.59</td>
<td>(-)</td>
<td>.12*</td>
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<tr>
<td>19. Imagine Scenario</td>
<td>3.19</td>
<td>0.75</td>
<td>(-)</td>
<td>.25**</td>
<td>0.09</td>
<td>.46**</td>
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Notes: * p < 0.05, ** p < 0.01. p-values are two-tailed. Average variance extracted (AVE) is presented within main diagonal in brackets.
Table 3: Total and Direct Effects of Emotional Information on Venture Goal Commitment in the Main Study (N = 451)

<table>
<thead>
<tr>
<th></th>
<th>Model 1: Parents encouragement</th>
<th>Model 2: Parents discouragement</th>
<th>Model 3: Friends encouragement</th>
<th>Model 4: Friends discouragement</th>
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<tbody>
<tr>
<td></td>
<td>OE</td>
<td>VGC</td>
<td>OE</td>
<td>VGC</td>
</tr>
<tr>
<td><strong>Mediation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total effect</td>
<td>0.19*</td>
<td>0.30*</td>
<td>-0.28***</td>
<td>-0.24+</td>
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<tr>
<td>Direct effect</td>
<td>0.23+</td>
<td></td>
<td>-0.13</td>
<td></td>
</tr>
<tr>
<td>Sobel test of</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>mediation</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>p</td>
<td>0.04</td>
<td></td>
<td>0.01</td>
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<tr>
<td><strong>Moderated Mediation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ IV] * SEA</td>
<td>-0.03</td>
<td>0.05</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>OA * SEA</td>
<td>0.10+</td>
<td></td>
<td>0.10+</td>
<td></td>
</tr>
<tr>
<td>[ IV] * OEA</td>
<td>-0.13</td>
<td>0.08</td>
<td>-0.07</td>
<td>0.06</td>
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<tr>
<td>OA * OEA</td>
<td>0.13*</td>
<td></td>
<td>0.13*</td>
<td></td>
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<tr>
<td>[ IV] * UOE</td>
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<td>0.07</td>
<td>0.00</td>
<td>0.05</td>
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<tr>
<td>OA * UOE</td>
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<td>0.06</td>
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<tr>
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<td>0.07</td>
<td>0.15+</td>
<td>0.04</td>
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<tr>
<td>OA * ROE</td>
<td>0.09+</td>
<td></td>
<td>0.09+</td>
<td></td>
</tr>
</tbody>
</table>
| **Notes:** + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001. p-values are two-tailed. Table reports unstandardized regression coefficients. Control variables included in the models are age, sex, and entrepreneurial intentions (and the four sub-dimensions of emotional intelligence are used for the mediation model). OE = Opportunity evaluation, VGC = Venture Goal Commitment, SEA = Self-emotion appraisal, OEA = Other-emotion appraisal, UOE = Use of emotions, ROE = Regulation of emotion. Results are robust when additionally including the following control variables: occupation, education, self-employed before, know purpose, instructions, and imagine scenario. Detailed results from robustness checks are available upon request.