Article

International Small Business Journal:
Researching Entrepreneurship
2019, Vol. 37(6) 642–663

DOI: 10.1177/0266242619838936
journals.sagepub.com/home/isb
SAGE

Following in parental footsteps? The influence of gender and learning experiences on entrepreneurial intentions

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Abstract

This study focusses on the influence of the family context on the development of entrepreneurial intention (EI) among young adults with entrepreneurial parents. It extends the EI literature by drawing on social cognitive career theory to study the interaction between entrepreneurial parents and their children. We introduce the learning experiences 'vicarious learning' and 'social persuasion' as antecedents of EI and found significant empirical support for the influence of social persuasion. In addition, we study the relationship between gender and EI. Our results not only confirm the direct effect of gender on EI but also reveal a significant mediating effect of parental preference – one of the social persuasion factors studied – on the gender–EI relationship.

Keywords

entrepreneurial intentions, gender, learning experiences, social cognitive career theory

Introduction

The topic of entrepreneurial intention (EI) and its antecedents has been widely explored in entrepreneurship and family business research. Most studies on EI draw upon the theory of planned behaviour (TPB) and investigate antecedents, such as personality characteristics, background factors, gender and perceived barriers (Ajen, 1991; Liñán and Fayolle, 2015). Although TPB has contributed profoundly to our understanding of the antecedents of EI, this theory seems less appropriate for investigating the effect of the interaction between entrepreneurial parents and their

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children on EI (Liguori et al., 2018). Studies on subjective norms, which are defined in TPB as social pressures from important others to behave in a certain way, reveal inconclusive results (Krueger et al., 2000; Kolvereid, 1996; Liñán and Chen, 2009; Souitaris et al., 2007). Although prior research suggests that entrepreneurial parents serve as important career role models (Hoffmann et al., 2015; Sørensen, 2007), expose their children to their business (McCann and McCann, 2017; Zapkau et al., 2015) and transfer intangible knowledge and values while nurturing their children in the family context (Laspita et al., 2012; Lindquist et al., 2015), we still have little understanding of which social mechanisms lie beneath EI (Daspit et al., 2016). Social mechanisms can be seen as processes between important others and individuals that influence certain ways of thinking and acting (Hedström and Swedberg, 1996; Merton and Merton, 1968). In our study, we demonstrate those things that parents do or say influences the entrepreneurial intent of children. Given these observations, we contribute to this field by investigating these social mechanisms from a different theoretical perspective (Liñán and Fayolle, 2015; Fayolle and Liñán, 2014; Krueger, 2007; Wang et al., 2017).

More specifically, building on social cognitive career theory (SCCT) (Lent et al., 1994), we aim to advance understanding in this area by investigating the influence of 'vicarious learning' and 'social persuasion' on the career intentions of young adults with entrepreneurial parents. We study young adults as parental career influence is more powerful at this life stage (Lent et al., 1994). SCCT stipulates that intentions are the result of the interaction between individuals and their environment; proposes that learning experiences may help to explain complex social processes, such as the development of EI in the family context (Brown, 2002). We focus on vicarious learning and social persuasion as learning experiences are both dynamic and situation-specific. Vicarious learning can be defined as learning by observing how others succeed or fail in a certain activity (Lent et al., 1994) and social persuasion as the level of encouragement an individual receives to perform a certain behaviour (Brown, 2002). Vicarious learning and social persuasion are fuelled by support, opportunities and barriers in a person's context and background (Bryant et al., 2006; Ferry et al., 2000). In addition, SCCT stipulates that gender may influence career intentions as they are related to social-cultural context and the opportunities or barriers it generates (Lent et al., 1994). Gender can be defined as "social practices and representations associated with femininity or masculinity" (Ahl, 2006: 596). In particular, this study examines the role of learning experiences as a mediator of the relationship between gender and EI.

Our study contributes theoretically to the EI literature by using SCCT (Liguori et al., 2018) as a different theoretical lens through which to provide insight into the interaction between parents and children. By focusing on vicarious learning and social persuasion and studying their mediating influence on the relation between gender and EI, our study helps to improve understanding of how the family context influences the EI of young adults with entrepreneurial parents. In this study, entrepreneurial parents are self-employed and own one or more businesses. In addition, an entrepreneurial career includes the intent to start a new business (Krueger et al., 2000; Lanero et al., 2016), and the intent to engage in entrepreneurial activity within existing companies (Fayolle and Liñán, 2014). Although attention has been devoted to predicting and explaining the intent to start a new business (Krueger et al., 2000; Lanero et al., 2016), only a few studies have taken a broader scope and included the intent to engage in entrepreneurial activity within existing companies, including succession intent (Fayolle and Liñán, 2014). Using a binary logistic regression analysis on survey data of 305 Dutch university students, we investigate learning experiences and gender as antecedents of EI and present the results of a causal mediation analysis on the gender - learning experiences - EI relationship. Our results show that social persuasion and gender have a strong, direct impact on EI and that parental preference - as an antecedent of social persuasion - mediates the relation between gender and EI. This article adds to the EI literature by empirically explicating

the influence of parents on EI. In the next section, we discuss SCCT, elaborate on the concepts of vicarious learning, social persuasion and gender, and propose our hypotheses. We continue by presenting our method and explaining our findings. We conclude with a discussion.

Theoretical considerations

Social cognitive career theory

SCCT is based on Bandura's social cognitive theory, which 'assumes that behaviour results from the interaction of person and environment' (Lent et al., 1994: 81). SCCT defines an intention as a choice goal, or 'the intention to engage in a particular action or series of actions' (Lent et al., 1994: 94). Intentions are not static but are continually redefined in a complex process of exploring and decision making. SCCT focuses on young adults who are considering their first career steps (Lent et al., 1994). Studies drawing on SCCT often focus on the cognitive person constructs of 'self-efficacy, outcome expectations and choice goals' (Lanero et al., 2016). First and foremost, research suggests that personal and psychological characteristics are important contributors to intentions (Lent and Brown, 1996). However, SCCT also offers a second theoretical layer for a more comprehensive understanding of phenomena. This layer consists of experiential, contextual and individual factors that influence EI as antecedents, mediators, facilitators or deterrents (Lent et al., 1994).

Career interests, self-efficacy beliefs and outcome expectations reflect cognitive processes and are influenced by learning experiences derived from personal and contextual variables (Brown, 2002). Therefore, learning occurs in social contexts where response consequences are conceived as a cognitive process (Bandura, 1977). Early behaviourists, such as Thorndike, Pavlov and Skinner, view learning as conditioning resulting from the consequence of an action (Schunk, 2012). Social cognitivists however, such as Bandura (1977), view learning as an act of information processing, in which people process and synthesise information feedback arising from an action. Hence, cognitive theories acknowledge the role of environmental conditions as sources of learning (Schunk, 2012). For example, parents offer their children experiences through family interaction and opportunities that support their learning (Bandura, 1977). Self-efficacy beliefs and outcomes derive from four principal sources of information: performance accomplishments, physiological states, vicarious learning and social persuasion (Bandura, 1977; Lent et al., 1994). Personal performance accomplishments and psychological states are authentic and personal experiences, and relate to individual beliefs about their own abilities to perform certain tasks and behaviours. Vicarious learning and social persuasion are experiences based on situational factors that influence individual expectations about the possible outcome of their efforts (Bandura, 1977; Liguori et al., 2018). In this study on social mechanisms, we focus on the two situational learning experiences that may affect individual EI.

SCCT builds on Vondracek et al. (1986) who suggest that environments can not only offer opportunities and support, but also provide barriers to career development. In general, parental careers influence the home environment and as a consequence, career interests of children are deeply rooted in the family environment. Prior research has shown that parental occupation, family economic status, family and parental support, family hobbies, social class, parental verbal encouragement and career modelling affect the career intentions of children (Dabney et al., 2013; Ferry et al., 2000; Metheny and McWhirter, 2013; Navarro et al., 2007; Raque-Bogdan et al., 2013; Whiston and Keller, 2004). In the entrepreneurship literature, prior research produces similar results confirming that parental occupations and role modelling increase the EI of their children (Hoffmann et al., 2015; Carr and Sequeira, 2007; Sørensen, 2007; Zapkau et al., 2015). Despite the evidence of parental influence, few studies go beyond traditional exposure to

entrepreneurial role models. Having entrepreneurial role models does not necessarily explain how these role models exert their influence, what they actually do, or whether or not they encourage learning experiences. Therefore, we posit what entrepreneurial parents do (vicarious learning) and say (social persuasion) determines the nature of children's learning experiences influencing their EI in young adulthood. In the next sections, we further elaborate on vicarious learning and social persuasion and present our hypotheses.

Vicarious learning

Vicarious learning is a broad concept that has a different understanding in several theories. For example, social learning theory views vicarious (observational) learning as copying or imitating the behaviours of others within a social and cultural context (Marsick, 2009; Aoki and Feldman, 2014) whereas the theory of informal and incidental learning considers vicarious learning to be learning `en passant', in a context with triggers for learning, resources and environmental influences (Marsick, 2009; Boekaerts and Minnaert, 1999). In addition, socialisation theory defines vicarious learning as learning through practices and social actions (Keisanen et al., 2017; Forrester, 2013; Keel, 2016; Gottfredson, 2002). These theories and their concepts of vicarious learning have evolved over time and are used in different contexts, for instance, in studies on the role of informal learning in formal education. In this study, vicarious learning is based on the definition in SCCT, that is, learning by 'observing important others succeed or fail in a particular activity' (Lent et al., 1994: 102). By observing their entrepreneurial parents, children process and weigh new information and behaviours. As a consequence, they learn that if their parents can or cannot do something, they themselves will also be (un)successful (Bandura, 1977; Bandura and Barab, 1973). Among all potential key persons from whom children can learn, parents are the most influential primary role and career models; parents who perform well produce a greater positive effect on behaviour of their children than those who work hard but without the evident consequences (Kazdin, 1979).

If children have the opportunity to observe additional successful role models, such as other family members, this effect is even stronger (Bandura and Menlove, 1968). Specifically, models' characteristics, the similarity between models and observers, the diversity of models, the difficulty of the task and the circumstances appear to impact vicarious learning (Bandura, 1977). For example, Gibson (2004) argues that the characteristics of the role model, as well as its actions, not only serve as an example to learn from, but also provide motivation and inspiration, and help young adults to define their self-concept. Identification with others and the consequent social comparison process constitute the core of the role model relationship (Byrne et al., 2019). While observing similar role models, young adults create their own identity and form their own career intentions (Singh et al., 2006). However, a lack of similar role models in gender, age and race/ethnicity, reduces the opportunity to benefit from role modelling. In their study, Byrne et al. (2019) conclude that a sufficiently diverse range of role models is needed for proper identification for all young adults.

The most appropriate manner for children to attain insight into parental careers is through observation in the workplace (Barling et al., 1998). Growing up within an entrepreneurial family offers children ample opportunities to observe how their parents work and so, assess the entrepreneurial career and life style (Hoffmann et al., 2015; Sørensen, 2007; Zapkau et al., 2015). This is particularly evident if the family home is in proximity to the business (Lentz and Laband, 1990) as this facilitates closer observation of the consequences of the entrepreneurial career upon family life. Although the information acquired from observations could be biased and incomplete, young adults seem to interpret the work experiences of their parents in quite an accurate way (Barling et al., 1998). These interpretations have an impact on how they form ideas about their future life and work (Lent et al., 1994; Mungai and Velamuri, 2011). Criaco et al. (2017) reason that children consider their entrepreneurial parents to be career role models because they represent an image of

their possible future and are easily accessible. As a consequence, children of entrepreneurial parents are more likely to become self-employed (Hoffmann et al., 2015).

Prior research on vicarious learning in the EI literature focuses on exposure to entrepreneurial role models (Scherer et al., 1989; ellweger et al., 2011; Zapkau et al., 2015; Sørensen, 2007), the performance of entrepreneurial parents (McCann and McCann, 2017; Pablo-Lerchundi et al., 2015; Krueger, 1993; Mungai and Velamuri, 2011) and other aspects of an entrepreneurial career, such as economic opportunities, challenges, status, respect and self-realisation (Souitaris et al., 2007; Lanero et al., 2016). These studies confirm that positive vicarious learning experiences increase EI, whilst negative experiences decrease it. Specifically, Mungai and Velamuri (2011) show that parental failure decreases the positive effect of parental self-employment. As one of few related studies (Dunn and Holt-Eakin, 2000; Lent and Laband, 1990; Schröder et al., 2011), Sørensen (2007) examines the impact of parental entrepreneurial role models on the EI of children and studies entrepreneurial skills, aspirations, financial and social capital as underlying mechanisms. Sørensen (2007) posits that children's aspirations and values are influenced by parental career backgrounds and acquired in the family context. As such, entrepreneurial parents increase children's awareness of entrepreneurship as a viable career option through their role modelling (Hoffmann et al., 2015; Sørensen, 2007). Children with entrepreneurial parents appreciate the autonomy and self-direction of an entrepreneurial career more so than children of parents with lower levels of autonomy and self-direction in their careers (Kohn, 1969; Sørensen, 2007; Spenner, 1988) hence, stimulating the intent to become an entrepreneur. In our study, we continue the discussion by studying the effect of children's perceptions of their parent's entrepreneurial careers, as antecedents of vicarious learning, on children's EI (Neblett and Cortina, 2006; Wang et al., 2017). Therefore, we hypothesise the following:

H1. Higher levels of vicarious learning increase the probability that young adults with entrepreneurial parents choose an entrepreneurial career.

Social persuasion

Social persuasion, conceptualised as an important learning experience in SCCT, is theoretically rooted in social persuasion theory, which stipulates that persuasion aims to change the mental states of individuals, with the ultimate goal of behavioural change (O'Keefe, 2004; Reardon, 1981). To achieve this behavioural change, persuasion is used to stimulate interests or passions (O'Keefe, 2012). In this study, social persuasion is defined as the level of encouragement given by parents to their children regarding a specific career path. Thus, parents learn and then tell/persuade their children that they possess the capabilities to become an entrepreneur (Bandura, 1977). Communication between generations is mostly driven by mutual trust, obligations and expectations (Bryant et al., 2006). Open communication lines between parents and children enable the former to act as a valuable source of information about careers (Young et al., 1997). Nevertheless, parents may have certain preferences for their children that bias their communication. Although parents may aim to treat their children equally, children do perceive parental preferences (Suitor et al., 2006). Parents can encourage and support preferences and interest by stimulating their children to develop specific interests and competences (Eccles et al., 1993). Moreover, when parents express their preference to their children, they respond to this preference (Juang and Vondracek, 2001). In addition to explicit parental preference, implicit persuasion activities can encourage career intentions (Dabney et al., 2013). Young et al. (2006) observe that parents use intentional, goal-directed and career-related activities that are subtly brought to the fore. Therefore, given implicit and explicit forms, social persuasion has diverse forms of articulation.

In the broader field of entrepreneurship, previous research on social persuasion is rather limited and shaped by controversy. In their conceptual paper, Boyd and Vozikis (1994) propose that social persuasion, as a form of social support, increases self-efficacy beliefs and ultimately EI. When the source of persuasion is a trusted and successful role model, such as entrepreneurial parents, the effect of social persuasion is more profound. Based on Bandura (1982), Boyd and Voikis (1994) nevertheless, argue that the effect of social persuasion on EI is less powerful than vicarious learning. Although not all studies find empirical support for this argument (Gatewood et al., 2002), the majority show that parents can encourage, discourage, ignore or mandate career options (Eccles, 1994). In their study on small and newly founded businesses, Zapkau et al. (2015) confirm that entrepreneurial parents include their children in work- and career-related conversations, giving insight into their careers and other career options. Hence, entrepreneurial parents are powerful persuaders to the extent that their children tend to perceive social pressure to become entrepreneurs themselves (Zapkau et al., 2015). Furthermore, parents who encourage their children to work in the business, strongly and positively influence their EI (Menaghan and Parcel, 1995; Dyer and Handler, 1994; Krueger, 1993). In the family business context, Schröder et al. (2011) confirm that explicit parental preferences for their children to pursue a similar career to their own encourages them to follow in their occupational footsteps. Furthermore, the influence of prior family business exposure on EI is well established (Carr and Sequeira, 2007). Helping in the business enables children to experience entrepreneurship (Murphy and Lambrechts, 2015). In this study, we aim to add to the discussion by studying social persuasion and including parental preference as well as parental encouragement through work and talk as antecedents of social persuasion. In conclusion and drawing on the above findings, we hypothesise the following:

H2. Higher levels of social persuasion increase the probability that young adults with entrepreneurial parents choose an entrepreneurial career.

Gender

As an individual difference factor in SCCT, gender is deemed as masculine or feminine ascriptions and reflects socialisation and social interaction (Lent et al., 1994). Gender is a social construction instead of what people are (West and Zimmerman, 1987) positioning people in different social categories, that is, those with shared characteristics and social relationships. Gender offers insight in socially constructed similarities and differences between groups of men and women (Liberman et al., 2017). During childhood, individuals form preferences regarding their social group and their own gender. Social categories help us organise our knowledge about people and navigate life (Fiske and Neuberg, 1989). However, categorisation may also lead to prejudice, discrimination and stereotyping (Liberman et al., 2017).

Studies have been conducted at the intersection of gender and careers indicating that male and female careers differ (Sabelis and Schilling, 2013). Male careers are often considered traditional, that is, linear, upwards and fulltime, while female careers are more often fragmented (Clerc and Kels, 2013; LaPointe, 2013; Sabelis and Schilling, 2013). As women still do the majority of care work, in the course of their lives, they face a greater need for flexibility to accommodate family responsibilities and tasks; these factors can make it difficult to pursue a traditional career path for some women (McKie et al., 2013). However, male and female careers are the consequence of traditional gender roles, which result in the stereotyping of both types of careers (Roos, 2013). As such, societal, cultural, family and individual norms and perceptions determine what is perceived as a male- or a female-oriented career (Martin, 2001; Hamilton, 2013a). Young men and women seem to prefer to engage in careers they perceive as fitting their identity and to refrain from those

that contravene gender expectations (Kessels et al., 2014). Therefore, gender has a direct effect on career intentions as a consequence of gendered sociocultural norms, traditional expectations and values (Duberley and Carrigan, 2013). When studying career intentions, it is therefore, important to acknowledge gender.

In the gender oriented entrepreneurship literature, entrepreneurship is considered a male-gendered concept and phenomenon (Ahl, 2006; Henry et al., 2016; Jennings and Brush, 2013; Shinnar et al., 2017) and stereotyped as a male career (Gupta et al., 2009). In addition, men outnumber women as entrepreneurs with the latter being less visible and encountering more barriers to than men (Anderson and Warren, 2011; Braches and Elliott, 2016; Hamilton, 2006; Harrison et al., 2015). As a consequence, men more often opt for an entrepreneurial career than women (Wilson et al., 2007). Studies mainly focus on the different traits and behaviours of men and women, gender as a social construct and gender as a performance variable (Hamilton, 2013a). Male traits, that is, rational thinking and competitiveness, are associated with entrepreneurship, while female traits, that is, intuition and sensitivity, are associated more with domestic life than with entrepreneurship (Hamilton, 2013a). In addition, entrepreneurship as an activity is seen as a social construct, embedded in gendered social orders with male domination and female subordination (Ahl, 2006; Ahl and Marlow, 2012). As a consequence, women entrepreneurs are often portrayed in the media as flawed entrepreneurs (Taylor and Marlow, 2009; Hamilton, 2013a; Marlow and McAdam, 2013), even it is argued that women entrepreneurs do not perform any worse than their male peers (Marlow and McAdam, 2013). Daughters have the opportunity to take up powerful leadership roles in family businesses (Hamilton, 2006; Ahrens et al., 2015; Smith, 2014) indeed, when they are positioned early as successors, they benefit from long-standing relationships and staff support (Constantinidis and Nelson, 2009). However, the gendered construction of a successor as well as the successor gender 'identity' can lead to the exclusion of daughters in the succession process (Byrne and Fattoum, 2014). In addition, when a son is available, daughters are less likely to be considered as successors, regardless of their ability to lead (Constantinidis and Nelson, 2009). Furthermore, studies on gender as a performance variable emphasise that gender is produced through every day practices and social interactions (Butler and Ferrier, 2006).

Gender as a social construct has a pervasive power to influence men, women, families, businesses, language and competition (Nelson and Constantinidis, 2017). Language and social practices in particular have a central role in the formation of assumptions of dominant male entrepreneurs and subordinate women (Ahl, 2006; Hamilton, 2006; Hamilton and Smith, 2003; Ahl, 2002). These assumptions might bias the perceptions of young adults regarding their ability to become entrepreneurs (Henry et al., 2015; Nwankwo et al., 2012). Drawing on the discussion above, we propose that the gendered nature of entrepreneurship influences entrepreneurial intent and hypothesise the following:

H3. Male young adults with entrepreneurial parents are more likely to choose an entrepreneurial career than female young adults with entrepreneurial parents.

However, the causal mechanisms behind this relationship are still not clear. Greater understanding on these mechanisms would enhance our knowledge of the impact of gender on EI (Liguori et al., 2018). SCCT is suitable for studying causal mechanisms as it posits that the effect of gender upon career intentions operates through differential learning experiences based on the reactions within the social–cultural environment and related opportunity structures (Brown, 2002; Lent et al., 1994). Parents, as sociocultural agents and important career advisors for their children, are pivotal in this process. Based on culturally shared beliefs, parents tend to treat their sons and daughters differently in terms of exposure to career models and activities

and career-related expectations (Arbona, 2000; Eccles, 1994; Lent et al., 1994; Schoon and Duckworth, 2012). Indeed, parents can create different learning opportunities and barriers for sons and daughters while exposing them to vicarious learning and social persuasion activities (Gupta et al., 2009). These gender-role socialisation processes may lead to different forms of access to learning experiences for young adults (Brown, 2002). Alternatively, young adults, as products of their environment, perceive learning experiences through a 'gender filter', which may enhance or constrain their career intent (Lent et al., 1994; (Lent et al., 1994; Brown, 2002; Ferry et al., 2000; Zapkau et al., 2015). Due to biased access to, and a biased filter of, opportunities we propose that learning experiences function as mediating paths through which gender influences career intent.

In the field of entrepreneurship, the indirect influence of gender on EI has received some attention (Kolvereid, 1996; Liguori et al., 2018; Shook et al., 2003). Biased access to entrepreneurial role models seems to be extremely relevant for children with entrepreneurial parents. The more evident presence of fathers, rather than mothers, as observable, entrepreneurial role models might explain why gender affects EI (Hoffmann et al., 2015). As fathers outnumber mothers as entrepreneurs, sons have more numerous and purposeful opportunities to observe than daughters, which subsequently increase their EI (Dunn and Holt-Eakin, 2000; Fairlie and Robb, 2007; Shinnar et al., 2017). Although daughters may draw inspiration from their entrepreneurial father, the effect of having an entrepreneurial father is higher for males, whereas the effect of having an entrepreneurial mother is higher for daughters (Hoffmann et al., 2015; Markussen and Røed, 2017). In addition, fathers seem to struggle with their dual role as business owner and father, and tend to shelter their daughters from their business (Vera and Dean, 2005; Henry et al., 2016). In the family business context, fathers are hesitant to include their daughters in daily operations and provide their daughters little opportunity to observe operations (Glover, 2014). Despite this biased access to daily practice, daughters appear to assess their father's job as more rewarding than sons, but still do not consider the family business as a viable career path (Humphreys, 2013; Schröder et al., 2011; Smythe and Sardeshmukh, 2013; Zellweger et al., 2011). Hence, a gendered outlook on entrepreneurship may hinder female young adults from taking the opportunity to observe their parents performing their career roles and may constrain their EI development. Hence, we suggest that vicarious learning can explain the relationship between gender and EI, and we hypothesise the following:

H4a. Vicarious learning mediates the relationship between gender and EI such that vicarious learning is stronger for male than for female young adults with entrepreneurial parents.

In addition, prior research on social persuasion has shown that the nature of parental reactions to children's career-related issues or activities can influence EI (Welter, 2011). In the family context, young women receive different levels of parental support than their male counterparts in regard to entrepreneurship (Roos, 2013; Sabelis and Schilling, 2013; Hao et al., 2005). For example, parents can encourage and discourage certain behaviour and express different expectations for sons and daughters (Eccles, 1994; Lent and Lope, 2002; Lent et al., 1994). Parents may use gendered vocabulary to confirm gender roles about who can be an entrepreneur or a successor (Nelson and Constantinidis, 2017). Verbal messages that contain gender-neutral or no gender information have a stronger impact on males than on females, suggesting that the wording of the message activates stereotypes (Gupta et al., 2013). Thus, parents may nurture gender differences by voicing gender-stereotypical information (Gupta et al., 2013, 2014). By doing so, parents create expectations of what both sons and daughters can and should do so, enforcing gender socialisation. EI is therefore, constructed between parents and children in daily interaction with the

'heroic male' and the 'invisible woman' in mind (Byrne et al., 2018; Hamilton and Smith, 2003; Ogbor, 2000). As such, parental transmissions may affect the development of the identity and career interests of sons and daughters differently (Gupta et al., 2008, 2009). In family business research, studies have pointed towards an explicit parental preference for male successors (Haberman and Danes, 2007; Otten-Pappas, 2013). From an early age, sons are considered to become potential successors and leaders: 'Their mind-set is reinforced by explicit or indirect messages received from within the family that they are expected to follow in their father's footsteps' (Kubíček and Machek, 2018: 13). As potential successors, sons may receive more encouragement to work in the family business than daughters who may face lower expectations and preferences. A daughter is considered as a successor primarily in the case of critical events such as the lack of a male successor (Ahrens et al., 2015). In addition, women who receive negative feedback from their parents develop low levels of self-efficacy constraining EI (Dempsey and Jennings, 2014). Therefore, we hypothesise the following:

H4b. Social persuasion mediates the relationship between gender and EI such that social persuasion is stronger for male than for female young adults with entrepreneurial parents.

Data and method

Data

We collected survey data among bachelor students at a university in the Netherlands. This university has approximately 18,000 students. The survey was conducted among full-time students enrolled in bachelor programmes in business administration, commerce and communication. The data were collected in class during spring 2014. The questionnaire covered a range of topics including intentions regarding career status after graduation, parental career background, perceptions of careers of parents and parental preference and persuasion. Personal and background questions were also included. To increase the response rate, the respondents were eligible to participate in a raffle. Of the 1730 students invited, 1173 participated in the research. Thirty-nine cases were removed from the dataset because these respondents answered only the introduction questions. This led to a total of 1134 participants, for a response rate of 65%. The remaining missing values (0.029%) were imputed using multiple regression imputation as implemented in the R-package mice (Buuren and Groothuis-Oudshoorn, 2011). The analyses in this study are based on a subsample of students (305 out of 1143) with parents who own a business. The mean age of students in this subsample is 19 years, ranging from 17 to 26 years, and 63% of the students are male. Most of them come from small businesses with 11–50 employees (60%), while 31% come from micro businesses (1–10 employees) and 9% from businesses with more than 51 employees.

Dependent variable

The dependent variable, 'entrepreneurial intent', is based on the question 'What are your intentions with respect to your career after graduation?' for which there were two possible choices: 'employee' and 'entrepreneur'. Thus, entrepreneurial intent is coded as a dummy variable with the value 1 for an answer for '*entrepreneur*' and 0 for '*employee*'.

Independent variables

Vicarious learning is operationalised with two variables 'perceived rewards of parental careers' and 'perceived self-direction of parental careers', which are based on Likert-type scales developed by

Neblett and Cortina (2006). Perceived career rewards are measured with eight items; an example is 'My mother (father) has a job with interesting and challenging things to do'. Occupational self-direction is measured with four items; an example is 'My mother (father) does not have the chance to develop their own special skills, abilities, and interests at work'. The scales range from 1 '*not true at all'* to 6 '*very true'*. Cronbach's α for these scales in our sample is 0.89 for rewards (eight items) and 0.76 for self-direction (four items). A low score on either scale indicates that learning by observing parents in their work has a negative effect on EI, and a high score has a positive effect on EI.

Social persuasion is measured in three ways: through 'parental preference', 'parental encouragement by talk' and 'parental encouragement by work'. Questions are based on the questionnaire by Schröder et al. (2011), but it targets the children instead of the parents. Parental preference is measured with the question 'To what extent do your parents want you to pursue a similar career? ' using a Likert-type scale of 1 '*not at all*' to 5 '*very much*'. Parental encouragement is measured by asking students with entrepreneurial parents whether their parents prepared them for a career in entrepreneurship. If the students responded affirmatively, they were asked how, that is, by working part-time at their business of parents (holiday jobs) and/or talking about work. We then collapsed these questions into two dummy variables: encouragement by work (1 = *yes*, 0 = *no*) and encouragement by talk (1 = *yes*, 0 = *no*).

Gender is coded in accordance with previous gender studies (Shinnar et al., 2012) as a dummy variable with the values of 1 for male and 0 for female.

Control variables

As career intentions are often congruent with vocational interest in different academic areas (Lanero et al., 2016), we control for field of study to account for a possible impact of being enrolled in a bachelor programme that specifically focusses on becoming entrepreneur (1 = *entrepreneurial field of study*, 0 = *all others*).

Results

The relation between EI and the independent variables is examined through a binary logistic regression analysis.

Table 1 provides summary statistics for the variables in the study. Almost 40% of the students in the sample intend to become an entrepreneur after graduation. EI is more prevalent among male (46.1%) than female (28.1%) students. The means, standard deviations and Pearson correlations of all variables included in the analyses are shown in Table 2. Looking at the effect of the variables on EI, we see some preliminary support for our hypotheses. First, the data show a significant correlation between the outcome variable EI and the predictor variables 'parental preference' (0.31), 'encouragement by work' (0.26), 'encouragement by talk' (0.33) and 'gender' (0.18). Second, the data show a weak correlation between the variable 'self-direction' (0.13) and EI, but no significant correlation between 'rewards' (0.05) and EI. This univariate analysis provides preliminary support for our hypotheses on social persuasion and gender but not for vicarious learning. Furthermore, the correlation between the predictor variables is well below the threshold of 0.70. The tolerance is greater than 0.10 and the variance inflation factors are less than 5, suggesting that multicollinearity is not an issue in our study. We conduct binary logistic regression analyses to test our hypotheses 1, 2 and 3. In Table 3, we include the predictor variables 'vicarious learning', 'social persuasion' and 'gender' as well as the control variable 'field of study'.

H1 predicts that higher levels of vicarious learning increase the probability that young adults with entrepreneurial parents choose for an entrepreneurial career. However, neither of the two

Table 1. EIs of male and female students with entrepreneurial parents.

EIs	Choice of student (%)	
	Entrepreneurship	Employment
Students with entrepreneurial parents ($n = 305$)	39.3	60.7
Male students ($n = 191$)	46.1	53.9
Female students ($n = 114$)	28.1	71.9

Table 2. Means, standard deviations and Pearson correlations.

	M	*SD*	1	2	3	4	5	6	7	8
1. EIs	0.39	0.49								
2. Perceived rewards	4.65	0.78	0.05							
3. Perceived self-direction	4.25	0.78	0.13*	0.34**						
4. Parental preference	2.35	1.25	0.31**	0.13*	0.17**					
5. Parental encouragement by work	0.24	0.43	0.26**	0.05	0.11	0.51**				
6. Parental encouragement by talk	0.28	0.45	0.33**	0.16**	0.12*	0.58**	0.73**			
7. Gender	0.63	0.48	0.18**	−0.05	−0.08	0.11*	0.06	0.08		
8. Entrepreneurial field of study	0.21	0.41	0.23**	0.04	0.07	0.06	0.03	0.08	0.08	

M: mean; *SD*: standard deviation.
$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

variables (perceived rewards and self-direction) that we include to test this hypothesis shows a significant effect on EI (Table 3). Therefore, we find no support for H1.

H2, which predicts that higher levels of social persuasion lead to a higher EI, is supported by empirical results. Of the three variables included, the variables 'parental preference' and 'encouragement by talk' show positive, significant signs in the regression of Table 3 ($p < 0.05$). This indicates that when parents articulate a preference for their children to pursue a similar career and include them in conversations about work, young adults are more likely to opt for an entrepreneurial career. The variable 'encouragement by work' seems to have no effect on EI.

Young male adults with entrepreneurial parents are expected to opt for an entrepreneurial career more often than young women with entrepreneurial parents (H3). The coefficient of gender (Table 3) shows the expected positive sign ($p < 0.05$). The odds ratio indicates that male students with entrepreneurial parents are almost two times more inclined to choose an entrepreneurial career than female students with entrepreneurial parents, supporting H3.

In addition, strong significant effects are found for our control variable 'entrepreneurial field of study'. The variable shows a statistically significant effect on EI. The odds ratio is at a 2.90 level, indicating that students enrolled in entrepreneurial studies are nearly three times more inclined to pursue an entrepreneurial career than students who have chosen another field of study.

To test the hypotheses 4a and 4b, we perform causal mediation analyses to estimate the role of learning experiences that transmit the effect of gender on EI (Hicks and Tingley, 2011; VanderWeele, 2015). We empirically test these causal mechanisms to explain why a relation exists between gender and EI. For this purpose, we follow the procedures described by Hicks and Tingley (2011) and

Table 3. Results of binary logistic regression analyses to explain EIs among students with entrepreneurial parents with linear effects of vicarious learning, social persuasion and gender ($N = 305$).

Predictor variables	*B*	*SE B*	OR
Vicarious learning			
Perceived rewards parental careers	−0.11	0.18	0.90
Perceived self-direction of parental careers	0.28	0.18	1.33
Social persuasion			
Parental preference	0.27**	0.13	1.31
Parental encouragement by work	0.16	0.43	1.18
Parental encouragement by talk	0.95**	0.44	2.58
Gender	0.72**	0.28	2.06
Control variable			
Entrepreneurial field of study	1.06***	0.31	2.90
Constant	−2.82**	1.01	0.06
χ^2	61.53		
R^2 (Nagelkerke)	0.25		
Df	7		
% correctly classified	72.1%		

Note: OR = odds ratio. Perceived rewards and self-direction are scored from 1 for '*not true at all*' to 6 for '*very true*'. Parental preference is scored from 1 for '*not at all*' to 5 for '*very much*'. Parental encouragement by work is coded as 1 and no encouragement as 0. Encouragement by talk is coded as 1 and no encouragement as 0. Gender of students is coded as 1 for male and 0 for female. Field of study is coded as 1 for an entrepreneurial field of study and 0 for no entrepreneurial study.
$^{\dagger}p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

use the *medeff* command in STATA to produce the statistical analyses, including the 'average causal mediation effect' (ACME), 'average direct effect' (ADE) and 'total average effect'. In addition, we use the *medsens* command to conduct a sensitivity analysis in order to check the robustness of our results (Hicks and Tingley, 2011). In Table 4, we show our findings.

H4a is not supported by our empirical results. We expected a mediating effect of vicarious learning on the relationship between gender and EI. The ACME of the variable 'perceived rewards' is negative (−0.002), with a 95% confidence interval ranging from −0.017 to 0.009. The ACME of the variable 'perceived self-direction' is also estimated to be negative (−0.011), with a 95% confidence interval of −0.032 to 0.003. Zero is included in these confidence intervals, which means that vicarious learning has no significant mediating role in transmitting the effect of gender on EI. In the reward analyses, the ADE, which represents all other possible mechanisms, is 0.162, with a 95% confidence interval of 0.044–0.266. For the self-direction analyses, the ADE is 0.170, with a 95% confidence interval of 0.053 to 0.276. The *average total effect* of the mediation analyses of both variables is negative and weak. Overall, our analyses confirm that being male increases EI. However, this effect cannot be explained by vicarious learning.

H4b (social persuasion mediates the relationship between gender and EI) is supported by our empirical results through the variable 'parental preference'. The average total effect is estimated to be 0.173, with a 95% confidence interval ranging between 0.106 and 0.626. Thus, gender increases the percentage chance of EI by just over 17 points, with a statistically significant margin. The portion of the average total effect that is transmitted through parental preference is reflected in the ACME. Here, we find that a substantial portion of the average total effect is due to changes in parental preference. The ACME of parental preference is estimated to be approximately 0.028, with a 95% confidence interval ranging from 0.002 to 0.056. In addition, the ADE is 0.130, with a

Table 4. Results of causal mediation analyses ($N = 305$).

Y = EIs (entrepreneurial intentions)	Perceived rewards	Perceived self-direction	Parental preference	Encouragement by work	Encouragement by talk
	B (*SE B*)	*B* (*SE B*)	*B* (*SE B*)	*B* (*SE B*)	*B* (*SE B*)
Predictor variables					
Vicarious learning					
Perceived rewards parental careers	0.14 (0.16)				
Perceived self-direction parental careers		0.37* (0.15)			
Social persuasion					
Parental preference			0.51*** (0.10)		
Parental encouragement by work				1.27 *** (0.35)	
Parental encouragement by talk					1.49*** (0.36)
Gender	0.75** (0.26)	0.81** (0.26)	0.66* (0.27)	0.73* (0.30)	0.70* (0.30)
Control variable					
Entrepreneurial field of study	1.08*** (0.29)	1.05*** (0.28)	1.10*** (0.32)	1.12*** (0.29)	1.07*** (0.30)
Y = mediator					
Gender	−0.08 (0.11)	−0.15 (0.09)	0.27* (0.12)	0.28 (0.35)	0.36 (0.27)
Control variable					
Entrepreneurial field of study	0.08 (0.10)	0.15 (0.12)	0.17 (0.16)	0.13 (0.36)	0.38 (0.27)
Mediation analyses = effect	Mean (95% conf. interval)	Mean (95% conf. interval)	Mean (95% conf. interval)	Mean (95% conf. interval)	Mean (95% Conf. Interval)
ACME	−0.002 (−0.017, 0.009)	−0.011 (−0.032, 0.003)	0.028 (0.002, 0.056)	0.015 (−0.020, 0.055)	0.020 (−0.013, 0.057)
ADE	0.162 (0.044, 0.266)	0.170 (0.053, 0.276)	0.130 (0.018, 0.227)	0.145 (0.019, 0.258)	0.136 (0.014, 0.245)
% of average total effect	−0.014 (−0.051, −0.008)	−0.070 (−0.249, −0.041)	0.173 (0.106, 0.626)	0.093 (0.053, 0.471)	0.125 (0.071, 0.603)

Note: ACME: average causal mediation effect; ADE: average direct effect. Perceived rewards and self-direction are scored from 1 for '*not true at all*' to 6 for '*very true*'. Parental preference is scored from 1 for '*not at all*' to 5 for '*very much*'. Parental encouragement by work is coded as 1 and no encouragement as 0. Encouragement by talk is coded as 1 and no encouragement as 0. Gender of students is coded as 1 for male and 0 for female. Field of study is coded as 1 for an entrepreneurial field of study and 0 for no entrepreneurial study.

$^{\dagger}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

95% confidence interval of 0.018 to 0.227. Overall, the analyses confirm that being male increases EI. In addition, the mediation analysis suggests that a significant portion of this effect can be explained by the level of parental preference.

Because unconfoundedness, exogeneity and an absence of omitted variable bias are key assumptions in causal mediation analysis for which violations cannot be directly tested, we perform a sensitivity analysis, as recommended by Hicks and Tingley (2011), using the *medsens* command in STATA. The sensitivity analyses show that our results are moderately robust to possible unobserved confounders. The ACME is guaranteed to be positive as long as an unobserved confounder explains less than 30% of the variance in the mediator or outcome that is left unexplained by gender alone. This level of sensitivity is in line with findings of existing empirical studies (Imai et al., 2010, 2011). The direction of the original estimate is maintained if the unobserved confounder explains less than approximately 30% of the variance (= square root of 0.09 which is the product of the R^2 of both mediator and outcome models) in the mediator and outcome assuming that the confounder affects the mediator and outcome in the same direction.

Looking at the other two variables of social persuasion, we find no significant mediating results. The ACME of the variable 'encouragement by work' is 0.015, with a 95% confidence interval ranging from −0.020 to 0.055. The ACME of the variable 'encouragement by talk' is also estimated to be positive (0.020), with a 95% confidence interval of −0.013 to 0.057. This implies that these proposed causal mechanisms have no significant role in transmitting the effect of gender on EI. In the encouragement by work-analyses, the ADE is 0.145, with a 95% confidence interval of 0.019 to 0.258 and the total average effect is 0.093, with a 95% confidence interval of 0.053 to 0.471. For the encouragement by talk analyses, the ADE is 0.136, with a 95% confidence interval of 0.014 to 0.245 and the total average effect is 0.125, with a 95% confidence interval of 0.071 to 0.602. Overall, the analyses confirm that being male increases EI. However, this change can be explained only by parental preference as one of the causal mechanisms of social persuasion.

Discussion

Our article contributes to the EI literature when illustrating that social persuasion has a powerful influence on the EI of young adults with entrepreneurial parents. By taking a different theoretical lens (SCCT) and investigating experiential mechanisms (vicarious learning and social persuasion) and an individual difference variable (gender) in the context of entrepreneurial families, we open up an additional path for studying EI. We show that SCCT offers opportunities to study the interaction between individuals and their environment and advances a more comprehensive understanding of the influence of parents on the EI development of young adults (Liñán and Fayolle, 2015; Fayolle and Liñán, 2014).

We acknowledge that the family context is an important arena whereby career intentions are developed. In social processes, parents offer learning experiences that have consequences for the career intentions of their children. In this study, we show that parental preferences and encouragement when talking about entrepreneurship significantly enhances the EI of young adults with entrepreneurial parents. Building on general career theory, we suggest that parents use these verbal messages to stimulate the interest of their children in an entrepreneurial career (Juang and Vondracek, 2001; Dabney et al., 2013; Eccles et al., 1993; O'Keefe, 2012). In particular, the effect is strengthened as these verbal messages are voiced by entrepreneurial parents, who are deemed as trusted career role models by their children (Schröder et al., 2011). Furthermore, our study confirms the persistence of the image of entrepreneurship as a male-gendered career (Wilson et al., 2007). We identify parental preference – an antecedent of social persuasion– as an explanatory

factor in the relationship between gender and EI. We suggest that parents send messages whereby the content may be perceived as gender-stereotypical (Gupta et al., 2013, 2014; Nelson and Constantinidis, 2017; Overbeke et al., 2013). As a consequence, sons seem to assess, interpret and label parental preferences in relation to the feasibility and desirability of an entrepreneurial career more so than daughters (Fletcher, 2007).

We are among the first to investigate parental influence on EI; however, its limitations provide a path for interesting future lines of research. First, although our results on social persuasion are encouraging, more scientific attention is required to further develop the concept. Future work could focus on qualitative research that might be helpful in understanding the social processes between parents and their children. Social interaction, as a theoretical lens, may prove useful because it 'seeks to understand the behaviours of individuals through the creation of meaning that comes through interactions with others' (Blumer, 1969; Jennings et al., 2014: 38). In addition, ethnographic research could provide a better understanding of the social mechanisms and processes in families (Van Maanen, 2011). Second, we encourage gender and EI scholars to advance the study on social persuasion to better understand its effect on the career interests of young adults. We suggest a narrative approach to investigate the nature of parental preferences and encouragement through speech towards sons and daughters. In line with Hamilton (2013a) and Gartner (2007), we argue that narratives provide a promising, and rather unexplored, research method in the field of entrepreneurship. Narratives emphasise social and relational rather than individual learning (Hamilton, 2013b). In this case, it could be useful to investigate the content of the verbal messages between parents and children to capture the vocabulary and language used. The study by Larty and Hamilton (2011) can inspire scholars to use a narrative approach to grasp the complex and subtle phenomenon of social persuasion. Third, although our study shows interesting results, some hypotheses are not supported by the data. In particular, the direct and mediating effect of vicarious learning had no significant impact on the EI of the young adults in our study. Our results suggest that the influence of parental role models on the EI of their children may not be transferred via the underlying mechanisms of perceived rewards and self-direction of parental careers. This may be the result of the Dutch cultural context in which individuality and independent decision making is prevalent. It would be interesting to conduct similar studies in other parts of the world to fully understand the impact of the societal and cultural norms on the learning experiences and consequent career intentions of individuals. Another explanation might be that, at this point in their lives, children may perceive their parental entrepreneurial careers as too intimidating. To take the step to follow in parental footsteps would require more parental support. This would reflect our findings on the impact of social persuasion on EI which show that high levels of parental social preference and parental encouragement through speech increase the probability that young adults with entrepreneurial parents choose an entrepreneurial career. Future research could, for example, focus on the causal effects of vicarious learning and social persuasion. Although quantitative research could examine this effect, we suggest that qualitative research would be appropriate because it allows an in-depth study of the underlying social mechanisms. Fourth, although our proxy for gender (a dummy variable) is generally accepted in the field, future research may develop a more fine-grained measure for the concept from a social construction perspective. Fifth, as our study focusses on the second theoretical layer of SCCT, that is experiential, contextual and individual factors, future studies could connect social persuasion to the first layer and study it as a driver of self-efficacy and outcome expectations that ultimately influences EI (Boyd and Voikis, 1994).

Our results have important implications for practice and policy. Going beyond the more well-known exposure to parental entrepreneurial role models, this study provides compelling evidence for the impact of social persuasion. In the family context, parents may be more aware of the verbal

messages they send their children when discussing careers. This awareness could be stimulated by informing parents that their messages may contain gender-stereotypical information, which can activate the choice for gender-stereotypical careers by their children, enhancing the EI of their sons and constraining that of their daughters. With regard to policy makers, our results can initiate a next step in the development of EI among young adults. While entrepreneurial educational programmes are directed towards the growth of EI among young adults in general, our results give way to further inquiry on the gendered nature of these programmes. Gupta et al. (2013) suggest using gender-specific messages to attract female young adults to entrepreneurial educational programmes. This does not necessarily imply special programmes for males and females, but rather, it suggests a screening of the language used in the propositions, the programmes and the courses. By opening up entrepreneurship as a viable career for young women, a larger pool of future entrepreneurs might be encouraged. Thus, we hope that our study inspires scholars to consider the family context as influential upon career behaviour and to include social mechanisms in their research to gain a richer understanding of the development of EI.

Funding

The authors received no financial support for the research, authorship and/or publication of this article.

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