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I am passionate therefore I am: The interplay between entrepreneurial passion, gender, culture and intentions

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ABSTRACT

We investigate the role of gender and culture on the relationship between entrepreneurial passion and entrepreneurial intentions, using social cognitive theory as the underlying theoretical framework. We place our research in two culturally different nations, namely, the United Kingdom, which belongs to the Anglo cluster and Greece, which belongs to the Mediterranean cluster. Our results demonstrate the direct (positive) effect of entrepreneurial passion on entrepreneurial intentions, but also unveil that despite the correlational relationship between passion and gender suggesting that women have greater passion than men, it is men's passion that is a marginally stronger predictor of entrepreneurial intentions. We also find that cultural context plays an important moderating role in the relationship between passion and entrepreneurial intentions. But contrary to our expectations, we find that Greece compared to the UK is more conducive to the entrepreneurial passion and entrepreneurial intentions relationship. Implications for research and practice are discussed.

1. Introduction

Entrepreneurial passion conceptualized as 'consciously accessible, intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur' (Cardon et al., 2009, p.517) is increasingly researched in the entrepreneurship domain.[1] Entrepreneurial passion can drive SME performance (Adomako and Ahsan, 2022), new venture creation (Biraglia and Kadile, 2017), venture growth (Drnovsek et al., 2016), persistence (Cardon and Kirk, 2015), angel/venture investing (Murnieks et al., 2016), employee commitment to entrepreneurial ventures (Breugst et al., 2012) and entrepreneur's motivation for work (Baum and Locke, 2004). Recent studies attempt to explain when and how entrepreneurial passion exerts an influence on entrepreneurial intentions (e.g., Biraglia & Kadiel, 2017; Murnieks et al., 2020; Syed et al., 2020), but in doing so, also highlight the importance for more research to uncover mechanisms and test variables that moderate the effect of this relationship and can help push forward this field of research.

Grounding our study in social cognitive theory (SCT), which suggests that the social environment one grows up in and interacts with contributes to their behavior as much as the individual person, i.e., there is a reciprocal, dynamic and triadic interplay between person, environment and behaviour (Bandura, 1986; 1989), we focus on examining differences across gender and cultural contexts on the entrepreneurial passion and entrepreneurial intentions relationship. Extant research underscores that gender-based expectancies are among the most dominant stereotypes in societies and people are frequently under pressure to perform and behave according to their prescribed gender roles (Laouiti et al., 2022; Murnieks et al., 2020; Shinnar et al., 2012). Indeed, extant research predominately shows that there are gender differences in the formation of attitudes and intentions about entrepreneurship (Santos et al., 2016) with women less inclined to start up their own businesses compared to men (Wilson et al., 2007); partly explained because entrepreneurship has traditionally been considered a male-gendered career path (Bae et al., 2014). Nevertheless, we also need to highlight that recent research finds that entrepreneurial intentions do not differ substantially between male and female students (Porfírio et al., 2023).

Our research additionally considers *cultural context* because extant research shows that national culture, can affect a person's attitudes and

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[1] For recent reviews on entrepreneurial passion see Newman et al. (2021) and Schwarte et al. (2023).

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intentions related to entrepreneurship (Alabduljader et al., 2020; Porfírio et al., 2016; 2018). Culture refers to 'the collective programming of the mind that distinguishes the members of one group or category of people from others' (Hofstede et al., 2010, p.6). Despite some notable exceptions such as the works of Alabduljader et al. (2020), Bogatyreva et al. (2019), Porfírio et al., (2016; 2018) and Shinnar et al. (2012), it is surprising that the impact of national culture has not been adequately explored when considering entrepreneurial intentions. We believe that a better understanding of how the national context moderates the entrepreneurial passion and entrepreneurial intentions relationship can serve to explain differences in the entrepreneurial propensity and career choices of people in different countries (Bogatyreva et al., 2019).

We place our research in two culturally different nations, namely, the United Kingdom, which belongs to the Anglo cluster and Greece, which belongs to the Mediterranean cluster. These two countries differ substantially in terms of their rankings on Hofstede's three dimensions of individualism, uncertainty avoidance and power distance, which are the three most prominent dimensions associated with entrepreneurship within nations (Autio et al., 2013; Shinnar et al., 2012). These countries also differ in the entrepreneurial propensity of their adult populations. For instance, in Greece just one in four adults (approx. 23 %) agrees that it is easy to start a business, in contrast to the UK where approximately 70 % of respondents agree it easy to start a business (GEM, 2022). Nevertheless, when it comes to gender differences the two countries are quite similar with the total early-stage entrepreneurial activity in Greece being 6.7 % females versus 10.6 % males and, in the UK, 6.2 % females versus 9.5 % males. Our reliance on a student sample is suitable for examining entrepreneurial intentions as students face immediate career choices upon graduating (Krueger et al., 2000) and stimulating entrepreneurial activity has been a priority policy goal among European governments (GEM, 2022). In this respect we envision that our study can shed some important insights on how to better influence entrepreneurial intentions based on the gender and cultural context, and thereby stimulate new venture creation.

Our study makes three theoretical contributions. First, we contribute to the limited, albeit growing, body of research that explores the relationship between entrepreneurial passion and entrepreneurial intentions (Syed et al., 2020). Given that passion consists of three domains (Cardon et al., 2013), namely, passion for *inventing* -searching for new business opportunities and markets-, passion for *founding* -establishing a new business-, and passion for *developing* -growing an existing business-, we advance one specific domain (i.e. *passion for founding*) which we posit is directly related with individuals (in our case students) who may become but are not yet entrepreneurs.

Second, we answer a recent call for more studies to examine the direct and moderating effect of gender on entrepreneurial passion research (Murnieks et al., 2020; Newman et al., 2021). Our study contributes to the gender identity (Bloemen-Bekx et al., 2019), and entrepreneurial passion nexus, by uncovering what happens when gender and entrepreneurial identities 'interact' and argues that in the case of men the interaction fuels more fire to the passion and entrepreneurial intentions relationship as the two identities are aligned. But, in the case of women, despite being passionate, their entrepreneurial and gender identities create misalignments between the stereotype of their gender roles and their desired entrepreneurial identity.

Third, we extend prior research on the role of culture on entrepreneurial behavior and attitudes (Woodside et al., 2011; Bae et al., 2014; Porfírio et al., 2016; 2018) by investigating whether culture influences the entrepreneurial passion and entrepreneurial intentions relationship. We explain that distinct cultures imprint different social values and behaviors that can be more (or less) supportive in cultivating an entrepreneurial mindset to aspiring entrepreneurs (Alabduljader et al., 2020; Bogatyreva et al., 2019). By showing how the cultural context can affect the entrepreneurial passion – entrepreneurial intentions relationship we help explain how even when the national culture is less supportive of an entrepreneurial career, a strong passion for entrepreneurship can go 'against' cultural predispositions and fuel the fire of entrepreneurialism to individuals.

2. Theoretical background and Hypotheses development

2.1. Social cognitive theory

The origins of the entrepreneurial intentions research can be traced to Shapero's entrepreneurial event model (Shapero, 1975) which postulates that a person's propensity to act entrepreneurially is influenced by individual, situational factors, and social-cultural inheritance, including past experiences, ethnic background, negative events (such as a job loss) as well as influence by role models (Shapero and Sokol, 1982). Later, social cognitive theory (SCT), conceptualized as an extension to Bandura's (1986) social learning theory, suggested that the social environment one grows up in and interacts with contributes to their behavior as much as the individual person, i.e., there is a reciprocal, dynamic and triadic interplay between person, behavior and environment (Bandura, 1986; 1989) as shown in Fig. 1.

People learn by observing others and such learning (which is an internal process) may or may not result in a change of behavior (Mccormick and Martinko, 2004), but will change a person's way of thinking (cognition). The choices people make about future actions are equally influenced by their beliefs, past experiences and capabilities (Bandura, 1997) and are regulated by their forethoughts -the belief of what people can achieve in the future will motivate and guide their actions in a proactive manner (Bandura, 1991). SCT, therefore, provides us with an overarching framework of entrepreneurship as a career choice based on the relationship depicted in Fig. 1.

The surrounding environment of the 'aspiring' entrepreneur, the neighborhood they grow up, the schools they attend, the groups and people they socialize, all become part of the identity they forge (Lent et al., 2000). People learn, imitate and associate themselves with others and within a particular social and cultural setting (Biraglia and Kadile, 2017), which in the context of entrepreneurial career choice can include role models, general media views and stories about successful (or not) entrepreneurs, university courses/education, as well as conversations with friends and family. Given that SCT focuses on young adults who are in the exploration phase of their career intentions and aspirations (Lent et al., 1994), the role of the national cultural environment becomes a critical source of learning, and an influencing force on a person's beliefs and expectations about the possible outcomes of their efforts. In particular, 'culture has moderating effects to the relationship between cognitive scripts and the venture creation process since each culture has unique norms and values' (Mitchell et al., 2002, p.980). Indeed, extant research shows that national culture and customs, can affect persons' cognitive scripts, beliefs and styles related to entrepreneurship (Alabduljader et al., 2020).

From another angle, personal characteristics such as gender, age, race, occupation, and professional background, as well as personal beliefs, emotions, cognitions, and expectations influence how someone interprets and is affected by the environmental inputs such as the culture and the social world they grow up (Biraglia and Kadile, 2017). SCT focuses on the past learned experiences and unique ways each person builds and particularly maintains their behaviour and cognition over time and what factors control and reinforce (i.e., regulate) such behaviours (Bandura, 1991). From the several personal traits outlined above, in this study we focus particularly on gender. Recent research has reignited the need to explore in a more fine-tuned manner, (i.e., include gender as an instrumental variable instead of a control variable) how gender affects entrepreneurial intentions particularly because past studies have produced mixed results or have simply 'controlled for' gender instead of examining its moderating effects (Santos et al., 2016; Murnieks et al., 2020).

According to SCT, together with the environment and the person (the self), the last piece of the dynamic triadic interaction/reciprocity is

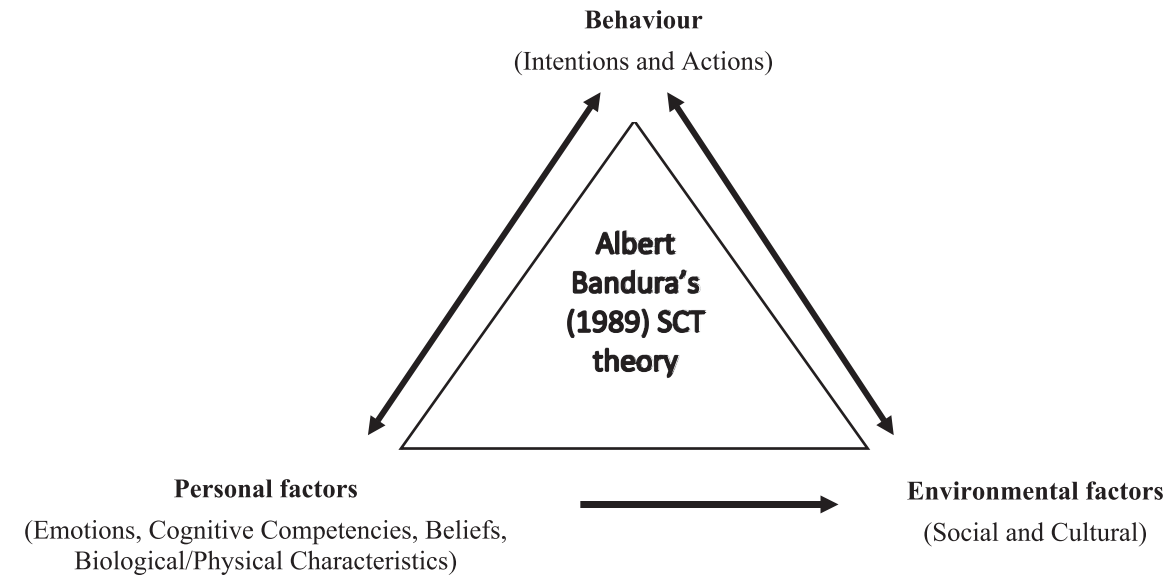

Fig. 1. Social Cognitive Theory Model Source: Adapted from Wood, R., & Bandura, A. (1989). Social Cognitive Theory of Organizational Management. *Academy of Management Review*, *14*(3), 361–384.

behaviour (Bandura, 1991). A person's past behaviour, past experiences, cognitions as well as their direct and vicarious learnings from their social setting and cultural environment will influence their desired (future) behaviour. In our study an entrepreneurial career choice will be the desired outcome when the person has strong feelings/emotions (i.e., passion) that they can execute an entrepreneurial career option based on their personal characteristics -in our case gender-, and the cultural context they are brought up, and that it will lead to a desired outcome.

Therefore, in our study we conceptualize SCT in a university student setting, and we focus on the triadic interplay between (a) *passion*, (b) *gender* and (c) the *cultural context* and its effect on entrepreneurial behaviour. In this way SCT becomes the underpinning theory framework which allows us to tie together emotions (passion), individual traits (gender) and the environment (cultural context) and better explain the differences in the entrepreneurial intentions between genders and across different nations. Within SCT's overarching theory framework we bring the work of Hofstede's (1998) cultural dimensions and gender identity theory (Eagly, 1987; Murnieks et al., 2020) to help us integrate considerations of culture and gender into the development of entrepreneurial passion. We therefore fill a recently identified gap in our knowledge regarding the way entrepreneurial passion influences entrepreneurial intentions across genders and nations. Indeed, Neneh (2022) suggests that emotions are largely culturally determined in such a way that 'a positive emotion in one national culture might cause different results in another culture' (p. 588), while Murnieks et al., (2020,p. 5), posit that 'we find it interesting that entrepreneurial passion theory has yet to accommodate possible differences attributable to gender […] [despite the] fact that gender often plays a pivotal role in the entrepreneurial process, and there are strong societal expectations concerning gender roles.'.

2.1.1. Entrepreneurial passion and entrepreneurial intentions

On the path towards an entrepreneurial career, the first critical step, is forming entrepreneurial intentions, defined as 'a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future' (Thompson, 2009, p.676), irrespective of that point in the future being known or unknown or never reached. The underlying premise that intentions precede action has sparked lively debate and a rich research strand in past years as scholars search and uncover 'what triggers' entrepreneurial intentions and how various personal factors influence such intentions (e.g., Bloemen-Bekx et al., 2019; López-Núñez et al., 2020).

Entrepreneurial intentions reflect the behaviour and motivation of individuals to choose the entrepreneurial route among other career choices (Piperopoulos and Dimov, 2015; Tantawy et al., 2021). During the formation of entrepreneurial intentions, entrepreneurial passion can help aspiring entrepreneurs 'fuel their fire' and fortify their identity as entrepreneurs and founders of new business ventures (McSweeney et al., 2022; Murnieks et al., 2020). Passion can act as an affecting state that is followed by cognitive and behavioural actions and commitment towards their new venture creation (Newman et al., 2021). Passion can also trigger the needed energy when the odds are stacking up against the entrepreneur and when obstacles rise in the search for social, human, and financial resources required to kickstart the new business venture (Cardon et al., 2009; Cardon and Kirck, 2015).

Recent studies have empirically verified that entrepreneurial passion exerts a significant positive influence on entrepreneurial intentions. For example, research on a sample of American homebrewer entrepreneurs (Biraglia and Kadile, 2017) finds that entrepreneurial passion is directly influencing entrepreneurial intentions. Furthermore, a study testing a sample of 500 students from South Africa (Neneh, 2022) finds that entrepreneurial passion is directly and positively influencing entrepreneurial intentions. In another university student context, this time in the US, Syed et al. (2020), equally support the direct and positive relationship of entrepreneurial passion to entrepreneurial intentions. Finally, using a sample of 231 individuals participating in a US based two-year entrepreneurship fellowship program that prepares recent graduates for entrepreneurial careers, McSweeney et al. (2022) find support that passion (for inventing and founding) is positively related with entrepreneurial intentions. Following the same line of arguments as in the aforementioned studies, we also propose (baseline hypothesis) that:

Hypothesis 1.

(Baseline): Entrepreneurial passion is positively related to entrepreneurial intentions.

2.1.2. The moderating role of gender

Gender, an individual trait under SCT, can significantly influence how individuals interpret and assesses various environmental inputs and can explain differences in behaviors and beliefs between men and women. Gender norms are prevalent throughout society and influence

not just the ways individuals view themselves but also how society views and positions them (Murnieks et al., 2020). Various studies indicate that society's gender-based expectations can lead men and women to choose gender-stereotype professions and careers in order to align with the cultural and societal predispositions of the country they belong to as well as their families' expectations (Eagly, 1987; Bloemen-Bekx et al., 2019). Indeed, gender role stereotypes in societies pressure individuals to behave according to socially accepted roles and institutional norms and pursue gender-stereotype occupations, in which case, entrepreneurship is considered a male-gendered career path (Ramadani et al., 2022).

Empirical evidence has largely revealed that women have lower career expectations for advancement and success, and they are less motivated with high income and independence than men (Orlando et al., 2022). Indeed, entrepreneurship is viewed as a gendered process (Murnieks et al., 2020), with men and women approaching opportunity recognition, creative problem solving, perceptions of barriers and challenges and ways of thinking in distinct ways (Hamilton, 2014). Together with the fact that there is a general biased support from societies towards male entrepreneurship which allows men to more easily build and maintain external relationships and networks conducive to entrepreneurial activities, suggests that entrepreneurship is culturally perceived as a masculine activity that is less suited to women (Laouiti et al., 2022). It comes as no surprise then that despite the growth of women-led new ventures, in every country surveyed by the global entrepreneurship monitor (GEM) women were much less active in business than men and represented only one in three high potential entrepreneurs (GEM, 2022).

While research has demonstrated that male and female entrepreneurial career intentions differ (Laouiti et al., 2022) and there is a lot to learn from this, it comes as a surprise that gender quickly became a 'mere' control variable in the entrepreneurial intentions research domain. Scanning the literature on entrepreneurial passion we find that only one study (Murnieks et al., 2020), to the best of our knowledge, tests the role of gender in examining the antecedents to entrepreneurial passion, and interestingly finds that gender has a moderating effect.

Gender stereotypes and roles are prevalent throughout society and influence not just the ways individuals view themselves but also how society views and positions them (Eagly, 1987; Murnieks et al., 2020). Within western developed societies and cultures, men's identities are formed around the idea of autonomy, power and independence while women build their identities based on interrelatedness, emotions and meaningful relationships with others (Eagly, 1987). Furthermore, in western societies entrepreneurship is still typically considered a masculine characteristic, with role models -understood as a person's capacity to influence others (Porfírio et al., 2023, p.3)- in popular media, news stories and even university textbooks predominately being men (e.g., Elon Musk, Richard Branson and Simon Cowell) instead of women. Indeed, what follows is that society's gender-based role identities can lead men and women to choose gender-stereotype professions and careers to align with the cultural and societal predispositions of the country they belong to as well as their families' and friends' expectations (Bloemen-Bekx et al., 2019).

Following the discussion above we expect that for men, a better alignment between their gender role stereotype/identity can further fuel their passion and make them more likely to pursue an entrepreneurial career than women. On the other hand, women can find themselves in a conflict as their entrepreneurial ambition of being competitive, independent, and autonomous can be incongruent with their gender-role expectations. Indeed, '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' (Bloemen-Bekx et al., 2019, p.647–648). Accordingly, we expect that gender will moderate the entrepreneurial passion to entrepreneurial intentions relationship, in such a way that men exhibiting high entrepreneurial passion (higher confidence and self-belief that they can succeed as entrepreneurs) will be even more likely to pursue an entrepreneurial career than women. Hence, we propose,

Hypothesis 2.

The positive relationship between entrepreneurial passion and entrepreneurial intentions is stronger for men compared to women.

2.1.3. The moderating role of cultural context

Further to gender as a personal, moderating, factor discussed above, we are also interested to investigate the extent to which the relationship between entrepreneurial passion and entrepreneurial intentions is influenced by cultural context. National culture 'the collective programming of the mind that distinguishes the members of one group or category of people from others' (Hofstede et al., 2010, p.6) includes a set of specific learned norms, values and beliefs of a group of people that belong to the same nation (Hofstede, 1998). Past research has identified that culture shapes individual entrepreneurial behavior and attitudes (Laouiti, et al., 2022; Porfírio et al., 2016; 2018) and suggests that cross-country studies should aim to elaborate how the country-level cultural context affects individuals' cognitive schema and entrepreneurial intentions (Bogatyreva et al., 2019; Costa et al., 2018).

The national context can have a great impact on young adults' intentions to become entrepreneurs as culture is deeply (and even permanently) imprinted on their beliefs and can guide their behavior (Marquis and Tilcsik, 2013). Cross-national studies have revealed differences (e.g., the social legitimization of entrepreneurship) that may enable or impede the translation of entrepreneurial intention into action (Alabduljader et al., 2020; Bogatyreva et al., 2019). Pioneer work on identifying the cultural dimensions that distinguish one nation from another (Hofstede, 1980), although not originally aimed to explain variances in entrepreneurial activity across cultures, has been applied successfully in the entrepreneurship domain (e.g., Alabduljader et al., 2020; Shinnar et al., 2012). Although Hofstede's work focuses on six dimensions, power distance, individualism, masculinity, uncertainty avoidance, long term orientation and indulgence, extant entrepreneurship studies have identified primarily individualism and uncertainty avoidance as the strongest influence of a national culture on the entrepreneurial behavior and orientation of an individual (e.g., Alabduljader et al., 2020; Autio et al., 2013; Mueller and Thomas, 2001; Shinnar et al., 2012).

Individualism refers to the tendency of people to consider themselves autonomous, looking after themselves and being independent from the other group members (Autio et al., 2013). Individualistic cultures promote personal achievement, individual financial prosperity and generally foster a social identity of individual contribution and looking after self-interests (Mueller and Thomas, 2001). In collectivistic societies, people place high value on group loyalty, adhesion and membership and consider themselves more interdependent committed to pursuing group conformity and making sure their actions and decisions fit with the group's norm (Schmutzler et al., 2019). With respect to the translation of entrepreneurial passion into an intention to start up a business, we expect that individualistic societies will further stimulate this relationship as these cultures are conducive to encouraging the need for personal achievement, independence and building confidence in one's own abilities and skills that can boost students' passion to go after an entrepreneurial career and, therefore, develop stronger intentions to start a business. On the other hand, because in collectivistic cultures people associate themselves with groups (family or social) who act as a strong influencer on their behavior, even when students feel passionate about entrepreneurship, they might be hesitant to pursue such a career goal from fear that they might be excluded or lose face from their groups. In such cases the cultural context can impede the relationship between entrepreneurial passion and entrepreneurial intention.

Uncertainty avoidance refers to '…the extent to which the members of a culture feel threatened by uncertain or unknown situations' (Hofstede, 1991, p.113). Such feelings are typically imprinted in a person early in their lives by institutions such as school, family, and the state

(Hofstede, 1980; Marquis and Tilcsik, 2013). In national cultures exhibiting low uncertainty avoidance individuals accept each day as it comes, are willing to take risks, tolerate creativity, novelty, and even deviant behavior from the norms (Hofstede, 1980; Mueller and Thomas, 2001). On the opposite side, high uncertainty national cultures, value structure, rely on bureaucratic practices and protect social norms (Alabduljader et al., 2020). Individuals in such cultures tend to be more resistant to change and exhibit a higher preference for security over risk (Autio et al., 2013).

With respect to the translation of entrepreneurial passion into an intention to start up a business, we expect that low uncertainty avoidance societies will further stimulate this relationship. Low uncertainty cultures are conducive to encouraging innovation, experimentation, risk taking and generally make people feel comfortable with uncertainty and ambiguity (Hofstede, 1980; Mueller and Thomas, 2001), which can boost students' passion to go after an entrepreneurial career and, therefore, develop stronger intentions to start a business. On the other hand, because in high uncertainty avoidance cultures people tend to avoid experimentation, prefer security over risk, are more hesitant to change and more skeptical to innovations (Autio et al., 2013; Shinnar et al., 2012), even when students feel passionate about entrepreneurship, these imprinted societal characteristics can evoke negative emotions and cast doubt on the entrepreneurial aspirations which can hamper the relationship between entrepreneurial passion and entrepreneurial intention.

As presented in Fig. 2, Greece (a member of the Mediterranean cluster) is a collectivistic and a high uncertainty avoidance culture, while on the opposite side, the UK (a member of the Anglo cluster) is a highly individualist and a low uncertainty avoidance culture). Whereas Greeks are defined by strong cohesiveness in the family (extended to include aunts, uncles, cousins, and grandparents) to which they rely for help, employment, networking and 'connections' (equivalent to the Chinese 'guanxi'), in the UK individuals are defined more with the 'I', to think for themselves and look after the direct family (Georgas et al., 1997; Schuler and Rogovsky, 1998). Individuals in the UK are comfortable with uncertainty and can tolerate little planning and a lot of flexibility (Hofstede et al., 2010). In contrast the Greek culture, is in favor of planning well ahead and trying to control the future, and Greeks are portraited as passionate and emotional individuals in most aspects of their personal and business lives (Hofstede, 2021). Accordingly, we expect that cultural context will moderate the entrepreneurial passion to entrepreneurial intentions relationship, in such a way that cultures that exhibit high individualism and low uncertainty avoidance, will be more conducive to students' passion for entrepreneurship and therefore students will be more likely to pursue an entrepreneurial career than students in low individualism and high uncertainty avoidance cultures. Hence, we propose,

Hypothesis 3.

The positive relationship between entrepreneurial passion and entrepreneurial intentions is stronger in the UK compared to Greece.

Our conceptual model representing the above three hypothesized relationships between the variables is presented in Fig. 3.

3. Data and research methods

3.1. Sample and data collection

Survey data were collected via Qualtrics from final year business school students across Greece and the UK in the summer of 2017. Student samples are widely common in entrepreneurship studies, particularly entrepreneurial intentions research, as it allows investigation of not only those who want to follow an entrepreneurial career, but also those who may not wish to become an entrepreneur (Piperopoulos and Dimov, 2015; Porfírio et al., 2023; Syed et al., 2020; Türk et al., 2020). Participation was voluntary and anonymous.

A non-probability convenience sampling technique was employed. A total of 329 students responded to the survey, and, after conducting a data validation procedure for missing data (Hair et al., 2006), the final sample included 321 students. While this sampling technique is limited by generalizability, it is often used in entrepreneurship research that involve students as samples (e.g., Neneh, 2022; Roman and Maxim, 2017) as it ensures the appropriateness of participants and enables collection of sufficient responses (Laouiti et al., 2022).

The final sample of students includes full-time undergraduate (208)

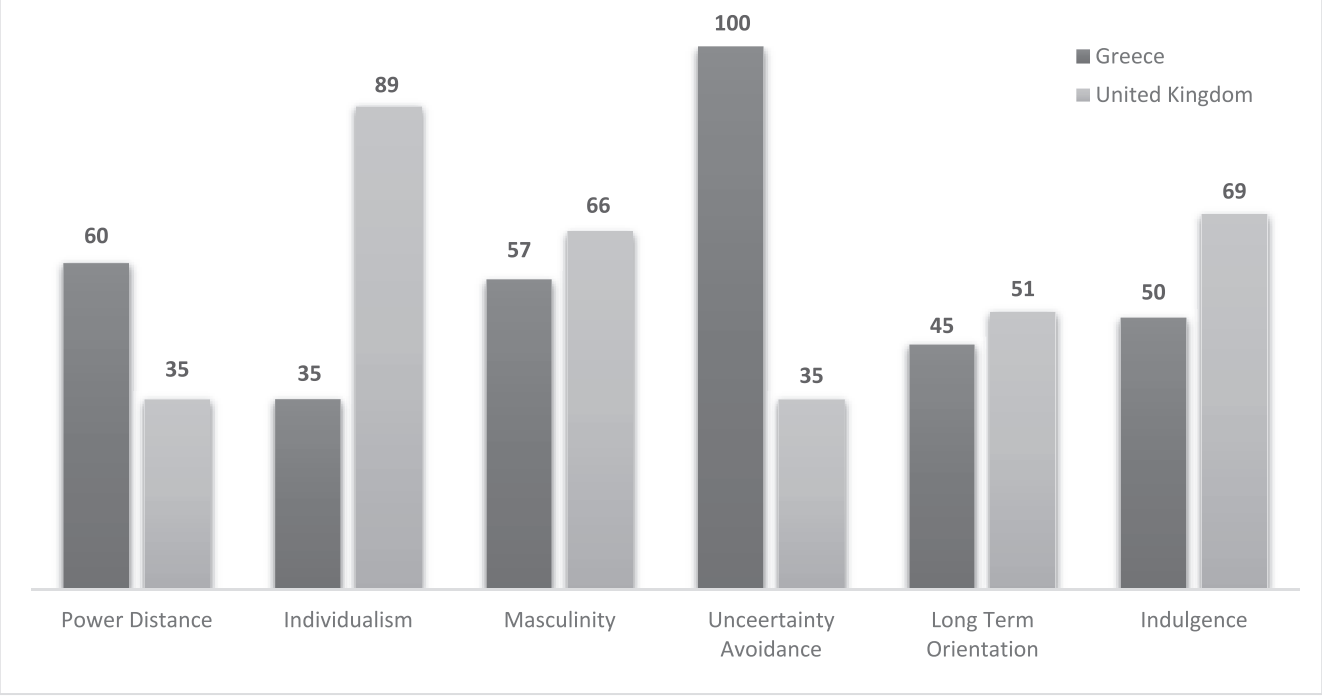

Fig. 2. Country Comparison – Greece and UK Source: Hofstede (2021): https://www.hofstede-insights.com/country-comparison/greece,the-uk/.

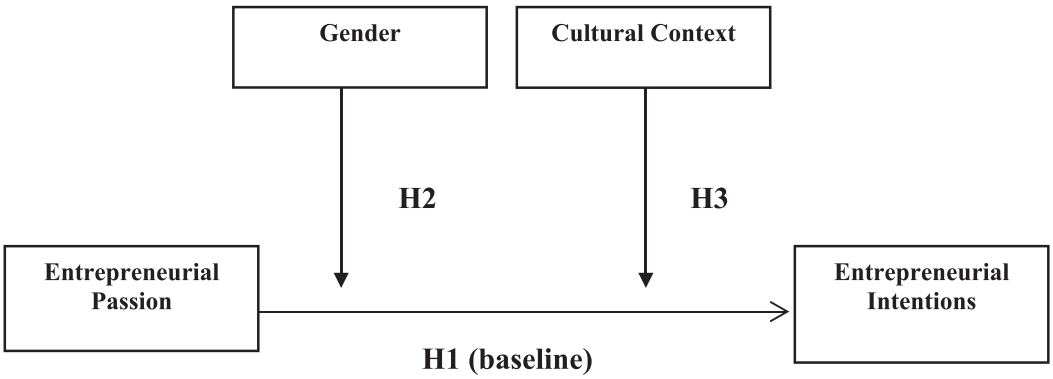

Fig. 3. Conceptual model.

and postgraduate (113) business school students from Greece (167) and the UK (154). The sample includes 238 students aged 18–24, 70 students aged 25–34 and 13 students aged > 35 with more females represented (193 females, 128 males). Thirty-seven percent of participants have a family member who have started a business, or who is a successful entrepreneur. The demographics presented in Table 1 for the two countries suggest a good level of similarity between the two sampled populations.

3.2. Measures

Entrepreneurial Passion is distinguished in three categories according to the specific activity (domain) which is meaningful to the entrepreneur's self-identity (Cardon et al., 2013) namely, 'inventing', 'founding', and 'developing'. Because our study's focus is on young adult students considering their career intentions, we use the 'passion for founding' category, defined as - assembling the necessary financial, human, and social resources needed to create a new venture (Cardon et al., 2013, p.376). The construct is a 4-items scale measured on a 7-point Likert scale with 1 = strongly disagree and 7 = strongly agree. The four items of the scale are, "nurturing a new business through its emerging success will be enjoyable", "establishing a new company excites me", "owning a company will be energizing", and "becoming a founder of a business is a very important part of who I want to be".

Entrepreneurial Intentions was measured using 4-itmes of a widely used scale (Liñán and Chen, 2009) on a 7-point Likert scale with 1 = strongly disagree and 7 = strongly agree. The four items of the scale are, "my professional goal is to become an entrepreneur in the next 5 to 10 years", "I will make every effort to start and run my own firm in the next 5 to 10 years", "I am determined to create a firm in the future", and "I have very seriously thought of starting a firm in the next 5 to 10 years".

Cultural Context was coded as 0 = Greece (collectivistic, high uncertainty avoidance), 1 = United Kingdom (individualistic, low uncertainty avoidance). Gender was coded as 0 = women, 1 = men.

The study also included several *control variables* that reflect person and environmental factors to comply with SCT as well as prior studies in entrepreneurial passion and intentions [e.g., Piperopoulos and Dimov, 2015; Syed et al., 2020). These variables include *age* (Biraglia and Kadile, 2017), *education level* (Tantawy et al., 2021; Porfírio et al., 2023), *family business exposure* -whether a family member of respondent have started a business, or is a successful entrepreneur (Piperopoulos and Dimov, 2015; Zapkau et al., 2015) and self-efficacy, measured as a 3-item scale on a 7-point Likert scale using 1 item, "I am confident that I can perform effectively on many different tasks" adopted from (Chen et al., 1998).

Table 1
Sample Demographics.

		Full sample N = 321	Greece sample N = 167	UK sample N = 154
Gender	*Women*	60 %	56 %	65 %
	Men	40 %	44 %	35 %
Family Business Exposure	*No*	63 %	64 %	62 %
	Yes	37 %	36 %	38 %
Age	*18–24*	74 %	84 %	64 %
	25–34	22 %	11 %	33 %
	>35	4 %	5 %	3 %
Education	*Undergraduate*	65 %	68 %	62 %
	Postgraduate	35 %	32 %	38 %

At this point we need to note that past studies on the interplay of entrepreneurial intentions and culture (e.g. Bogatyreva et al., 2019; Porfírio et al., 2018), on entrepreneurial passion and entrepreneurial intentions (e.g. Biraglia and Kadile, 2017; Neneh, 2022; Murnieks et al., 2014), as well as on general entrepreneurial intentions studies (e.g. Porfírio et al., 2023; Shinnar et al., 2012) have placed considerable emphasis on self-efficacy, which represents a central mechanism of personal agency that influences a person's efforts and perseverance as well as their behaviours and attitudes (Tantawy et al., 2021). Nevertheless, in our study we keep the role of self-efficacy in the background (i.e., we control for it) as our main motivation lies with uncovering gender and culture as the two unexplored moderators on the entrepreneurial passion–entrepreneurial intentions relationship. Of course, we also recognize that this could be a potential limitation for our study and we, therefore, address this in the limitations and future research section.

4. Analysis and results

4.1. Descriptive statistics

The means, standard deviations, reliabilities, and correlations of the study variables are presented in Table 2 (full sample), Table 3 (Greece sample), and Table 4 (UK sample). Consistent with prior studies (Biraglia and Kadile, 2017; Syed et al., 2020) and as indicated in Hypotheses 1, entrepreneurial passion is positively correlated with entrepreneurial intentions (r = 0.69 (full sample); 0.86 (Greece sample); 0.54 (UK sample), p <.01). Gender is negatively correlated with entrepreneurial passion in the full sample (r = -0.15, p <.01) and Greece sample (r = -0.18, p <.05), suggesting that women are relatively more passionate about entrepreneurship than men and that this relationship appears stronger in Greece than the UK. No significant correlation is found between gender and entrepreneurial intentions or between cultural context and entrepreneurial passion or entrepreneurial intentions.

4.2. Confirmatory factor analysis and common method bias

As encouraged by Podasakoff et al. (2003), common method bias in this research was reduced procedurally by protecting respondent anonymity, reducing evaluation apprehension, ensuring that all items were

Table 2
Means, standard deviations, reliabilities, and correlations among the study variables.

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Entrepreneurial Intentions	4.39	1.60	(0.94)							
2. Entrepreneurial Passion	5.09	1.33	0.69**	(0.93)						
3. Gender	0.40	0.49	0.03	-0.15**	–					
4. Cultural Context	0.48	0.50	-0.03	-0.00	-0.09	–				
5. Self-efficacy	5.79	1.03	0.51**	0.63**	-0.06	0.03	–			
6. Family Business	0.37	0.48	-0.05	-0.04	-0.04	0.02	-0.01	–		
7. Age	0.30	0.54	-0.01	-0.02	0.06	0.17**	0.02	0.27**	–	
8. Education	0.35	0.48	-0.03	-0.06	0.04	0.06	0.01	0.30**	0.61**	–

**p <.01 (two-tailed). N = 321. Cronbach alpha coefficients on the diagonal.
Family Business coded: 0 = no; 1 = yes.
Age coded: 1 = 21–25 to 8 = 56 +.
Education coded: 0 = undergraduate; 1 = postgraduate.
Cultural Context coded: 0 = Greece; 1 = United Kingdom.
Gender coded: 0 = women; 1 = men.

Table 3
Greece sample means, standard deviations, reliabilities, and correlations among the study variables.

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Entrepreneurial Intentions	4.43	1.52	(0.96)						
2. Entrepreneurial Passion	5.09	1.25	0.86**	(0.89)					
3. Gender	0.44	0.50	-0.09	-0.18*	–				
4. Self-efficacy	5.76	1.03	0.73	0.68**	-0.04	–			
Family Business	0.36	0.48	-0.06	-0.09	0.21**	-0.09	–		
Age	0.21	0.51	0.03	-0.01	0.32**	0.00	-0.04	–	
5. Education	0.32	0.47	0.01	-0.05	0.29**	0.01	0.04	0.29**	–

**p <.01, *p <.05 (two-tailed). N = 167. Cronbach alpha coefficients on the diagonal.
Family Business coded: 0 = no; 1 = yes.
Age coded: 0 = 18–24; 1 = 25–34; 2 = >35.
Education coded: 0 = undergraduate; 1 = postgraduate.
Gender coded: 0 = women; 1 = men.

Table 4
UK sample means, standard deviations, reliabilities, and correlations among the study variables.

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Entrepreneurial Intentions	4.34	1.68	(0.93)						
2. Entrepreneurial Passion	5.09	1.41	0.54**	(0.96)					
3. Gender	0.35	0.48	0.15	-0.12	–				
4. Self-efficacy	5.82	1.02	0.21**	0.56**	-0.09	–			
Family Business	0.38	0.49	-0.04	0.02	-0.32**	0.08	–		
Age	0.40	0.55	-0.03	-0.02	-0.18*	0.03	0.58**	–	
5. Education	0.38	0.48	-0.06	-0.07	-0.22**	0.01	0.73**	0.91**	–

**p <.01, *p <.05 (two-tailed). N = 154. Cronbach alpha coefficients on the diagonal.
Family Business coded: 0 = no; 1 = yes.
Age coded: 0 = 18–24; 1 = 25–34; 2 = >35.
Education coded: 0 = undergraduate; 1 = postgraduate.
Gender coded: 0 = women; 1 = men.

clear and concise and counterbalancing question order to control for retrieval cues. Although there is "compelling empirical evidence that concerns about CMV [common method variance/bias] are likely overstated" (Fuller et al., 2016, p. 3197) and Fuller and colleagues warn against reporting many post-hoc statistical common method bias techniques, we conducted a confirmatory factor analysis (CFA) to establish the discriminant validity of the study measures and from these results we can also report on the most commonly used approach to managing common method bias, the one-factor test.

The two multi-item measures were included in the CFA. The two-factor model (where the indicators for each of the two multi-item study variables loaded onto their two separate factors) yielded a better fit $\chi 2$ (df = 20) = 549.37, RMSEA = 0.29, TLI = 0.70, CFI = 0.79, than a one factor model (where both variables were loaded onto a single factor) $\chi 2$ (df = 19) = 50.55, RMSEA = 0.07, TLI = 0.98, CFI = 0.99. These results provide evidence for the distinctiveness of the measures used in this study. Further, they indicate that a single factor does not account for all the variance in the data and that there is not a substantial amount of common method bias present in the data.

4.3. Hypotheses testing

To test the hypothesized model, ordinary least squares (OLS) regression with SPSS and the Hayes (2013) SPSS 'PROCESS' macro tool, version 3 was used. To facilitate the interpretation of the effects, all variables were z-standardised prior to the analysis (Mathieu and Taylor, 2007). In line with general recommendation (Hayes, 2013) 10,000 resamples were produced for 95 % bias-corrected confidence intervals. The results are presented in Table 5. As suggested entrepreneurial passion is positively related to entrepreneurial intentions, $\beta = 0.63$ (model 1) 0.66 (model 2), p =.00.

The moderated effect of gender on the relationship between

Table 5
Standardised Regression Results with Dependent Variable Entrepreneurial Intentions.

	Model 1	Model 2
Entrepreneurial Passion	0.63**	0.66**
Gender	0.13**	0.13**
Cultural Context	-0.02	-0.02
Entrepreneurial Passion * Gender	0.08†	
Entrepreneurial Passion * Cultural Context		-0.16**
Self-efficacy	0.12*	0.10*
Family Business	-0.02	−01
Age	-0.01	-0.01
Education	0.02	0.01
R^2	0.50**	0.71**

N = 321.
* p < 0.05.
** p < 0.01.
† p < 0.10.

entrepreneurial passion and entrepreneurial intensions is β = 0.08, p =.06 (95 % -0.00 to 0.15). Although zero is contained within the 95 % confidence interval for the moderated effect, p =.06 thus we conclude that Hypothesis 2 is marginally supported (p <.10, 90 % confidence interval), signalling that the relationship between entrepreneurial passion and entrepreneurial intentions could be stronger for men compared to women. To help interpret this marginal moderating effect, we plot the effect in Fig. 4, which presents the predicted entrepreneurial intentions value as a function of entrepreneurial passion and gender.

The moderated effect of cultural context on the relationship between entrepreneurial passion and entrepreneurial intensions is β = -0.16, p =.00 (95 % -0.24 to -0.08). As zero is not contained within the 95 % confidence interval for the moderated effect we conclude that Hypothesis 3 is partially supported, in that cultural context does moderate the relationship between entrepreneurial passion and entrepreneurial intentions, however contrary to what was hypothesised the relationship is stronger in Greece compared to the UK. To help interpret this moderating effect, we plot Fig. 5, which presents the predicted entrepreneurial intentions value as a function of entrepreneurial passion and cultural context.

4.4. Additional split sample analyses

To explore differences across Greece and the UK we also split the data by country and re-ran the analyses (results presented in Table 6). Consistent with H1 entrepreneurial passion is positively related to entrepreneurial intentions in both Greece, β = 0.70, p <.01 (model 2) and the UK β = 0.58, p <.01 (model 3). However, the moderated effect of gender on the relationship between entrepreneurial passion and entrepreneurial intensions does not reach a level of significance in either sample. This could be due to lack of statistical power, as each sample is approximately half the full sample.

5. Discussion and conclusions

In this study we conceptualized and tested a moderated model of gender and cultural context underlying the entrepreneurial passion and entrepreneurial intentions relationship. In doing so, we improve our understanding of how entrepreneurial intentions differ between male and female students (Laouiti et al., 2022; Murnieks et al., 2020; Porfírio et al., 2023) and how the national context also affects a person's attitudes and intentions related to entrepreneurship (Alabduljader et al., 2020; Porfírio et al., 2016; 2018). To uncover and put in perspective the theory implications of our findings we conducted a selected review of past studies on the (a) passion-intentions relationship, (b) entrepreneurial intentions-gender relationship, and (c) culture and entrepreneurial intentions relationship, which we present in Table 7. In order to draw meaningful comparisons and contrasts between these studies and our results we focused (where possible) on studies using similar sample populations, i.e., students in developed nations.

Our study adds to the burgeoning research investigating the relationship between entrepreneurial passion and entrepreneurial intentions. Our results confirm (as seen in Table 7) past research findings that entrepreneurial passion is positively and strongly related to entrepreneurial intentions (Huyghe et al., 2016; Biraglia and Kadile, 2017; Syed et al., 2020), but also suggest that the relationship is marginally stronger for men compared to women. Interestingly though the correlational relationship between entrepreneurial passion and gender is negative, suggesting the women have greater entrepreneurial passion than men. One explanation could be that despite young women being passionate about entrepreneurship the backlash they face by behaving counter stereotypically to society's gender-role stereotypes reduce the likelihood of following an entrepreneurship career path. Nevertheless, as can be seen from the plotted results (Fig. 4), we also find that entrepreneurial passion is a strong driving force that 'fuels the fire' and

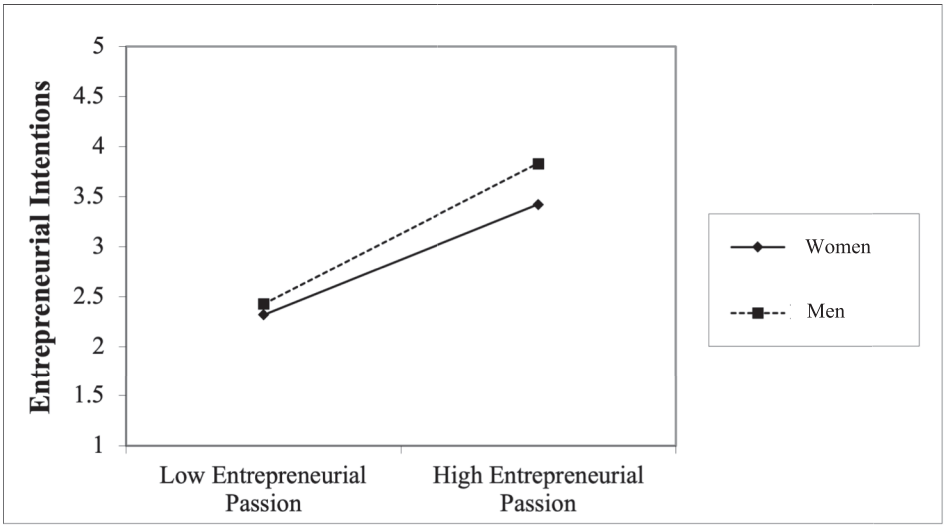

Fig. 4. Plot of the relationship between entrepreneurial passion and entrepreneurial intentions for women and men.

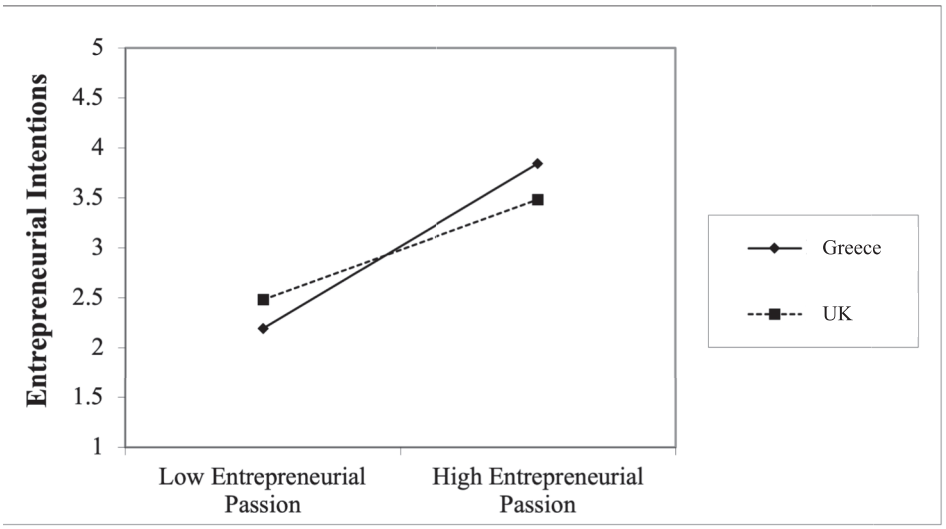

Fig. 5. Plot of the relationship between entrepreneurial passion and entrepreneurial intentions for cultural contexts Greece and UK.

Table 6
Split Sample Analysis: Standardised Regression Results with Dependent Variable Entrepreneurial Intentions.

	Full Sample	Greece Sample	UK Sample
Entrepreneurial Passion	0.63**	0.70**	0.58**
Gender	0.13**	0.02	0.25**
Entrepreneurial Passion * Gender	0.08†	-0.01	0.09
Cultural Context	-0.02		
Self-efficacy	0.12*	0.24**	-0.01
Family Business	-0.02	0.02	0.01
Age	-0.01	0.02	-0.00
Education	0.02	0.03	0.02
R^2	0.50**	0.77**	0.34**

Full sample N = 321; Greece sample N = 167; UK sample N = 154.
* $p < 0.05$.
** $p < 0.01$.
† $p < 0.10$.

fortifies the identities of both female and male aspiring entrepreneurs.

Table 7 illustrates that the relationship between gender and entrepreneurial intentions is somewhat elusive. For instance, research has found that men exhibit higher levels of entrepreneurial intentions than women amongst students in Norway (Shneor et al., 2013), the UK, Spain (Santos et al., 2016), and the Netherlands (Bloemen-Bekx et al., 2019). Both Shneor et al. (2013) and Porfírio et al. (2023) however, find no significant differences between male and female students' intentions to start their own businesses in Turkish and Portuguese samples respectively. Comparing these results to our own, which also do not provide a consistent picture across both cultural contexts, demonstrates that gender needs to be much more rigorously investigated and included as an instrumental variable and not simply a control variable (López-Núñez et al., 2020; Murnieks et al., 2020).

We further advance extant literature by confirming empirically how the national context moderates the entrepreneurial passion and entrepreneurial intentions relationship. Indeed, our counter-intuitive empirical findings (given that H3 was not fully supported) can help explain how even when the national culture is less supportive of an entrepreneurial career, a strong passion for entrepreneurship can go 'against' cultural predispositions and fuel the fire of entrepreneurialism to individuals. Indeed, contrary to prior studies' findings (e.g., Autio et al., 2013; Alabduljader et al., 2020) and many observations of practice which suggest individualistic and low uncertainty avoidance national cultures are more supportive of entrepreneurship, we find that Greek business school students who are passionate about entrepreneurship (Cardon et al., 2009) can go 'against' cultural predispositions and instead seem ready to pursue a riskier entrepreneurial career path. Looking at Table 7, we find some support for our results as Bogatyreva et al. (2019) find that populations from countries with higher individualism scores are not more likely to show a higher level of entrepreneurial intentions. We believe that like the case of gender, the national context has been 'forgotten' from the broader research field on entrepreneurial intentions (and passion) even though it has great impact on young adults' intentions to become entrepreneurs as it is deeply (and even permanently) imprinted on their beliefs and can guide their behavior (Marquis and Tilcsik, 2013).

5.1. Implications for practice

The findings of this study provide practical insights to educators and policy makers by uncovering some important insights on how to better influence entrepreneurial intentions, based on the gender and cultural context, and thereby stimulate new venture creation. After all, stimulating entrepreneurial activity has been a priority policy among all European governments (GEM, 2022). Our study draws educators' attention to the need of igniting entrepreneurial passion to students via learning and training as it will help them boost their entrepreneurial intentions. Such learning in a university setting could for instance focus on developing students to dedicate themselves fully to an entrepreneurial career, by teaching them how to become resilient to obstacles and failure, committed to achieving their goals even if these take months, years or a lifetime and support them to channel their passion and control their emotions. This appears to be particularly important in countries which are not characterised by the cultural dimensions typically considered most conducive to entrepreneurship. Our results suggest that passion is an even stronger predictor of entrepreneurial intentions in collectivist, high uncertainty avoidance cultures and as such should be nurtured by educators.

Furthermore, our findings allude to entrepreneurship educators that they should carefully consider students' gender differences when designing their syllabus/curriculum to reduce the gender gap and increase female entrepreneurship. Despite finding heightened entrepreneurial passion in women, it seems incongruency in gender-role expectations may hinder their entrepreneurial passion from forming entrepreneurial intentions at the same strength as men. Our findings

Table 7
Selective studies on passion, gender, culture, and entrepreneurial intention.

No	Study	Research question	Theory	Sample	Context	Findings	Comparison with our study's findings
1	Shneor et al. (2013)	To investigate the culture-sex interaction and to evaluate its impact on EI.	Theory of Planned Behaviour	693 university students	Norway & Turkey	Male students exhibit higher levels of entrepreneurial intentions and self-efficacy despite their cultural background. Turkish students, despite gender differences, demonstrate a greater level of EI and self-efficacy.	In a similar manner we also find men exhibit higher levels of entrepreneurial intention. And in some way like their study, we find that students in Greece (and not the more advanced economy of the UK) who are more passionate about entrepreneurship are more ready to pursue this career choice.
2	Huyghe et al. (2016)	To what extent (entrepreneurial) passion is related to spin-off intentions	Identity Theory	4,515 researchers	Sweden, Spain, Slovenia, Germany & Belgium	Entrepreneurial passion is positively and strongly related to spin-off and start-up intentions	We too find a positive effect between EP and EI
3	Paul & Shrivatava (2016)	Do young managers in a developing country have stronger EI than those in a developed country?	Theory of Planned Behaviour	190 young managers	India & Japan	Young managers from India exhibit lower EI compared to those from Japan.	We see our study as an extension of theirs in the sense that we move the discussion towards differences that exist between developed countries as well. Our comparison of 2 European countries verifies the importance of context/ culture when researching EI.
4	Santos et al. (2016)	1. How social environment (i.e., social valuation and closer valuation) affect EI? 2. Does this relationship differ between genders?	Theory of Planned Behaviour	516 business undergraduate students	Spain & United Kingdom	Men demonstrated higher EI compared to women in both countries due to their perception of the social legitimation.	Like their study ours also reveals gender differences (particularly showing men with marginally higher EI compared to women).
5	Biraglia & Kadile (2017)	To what extent passion and creativity affect EI?	Social Cognitive Theory	226 Homebrewers (as potential incubator for Entrepreneurs)	USA	Passion is strongly and positively related to EI even when self-efficacy is introduced as a mediator	We too find a positive effect between EP and EI
6	Bloemen-Bekx et al. (2019)	To what extent family context and gender impact on EI?	Social Cognitive Theory	18,000 (bachelor) university students	Netherlands	This study confirms the direct impact of gender on EI and that parental preference mediates the relationship between gender and EI revealing that male students with entrepreneurial parents are more likely to demonstrate higher EI than female students with entrepreneurial parents.	Like their study ours also reveals gender differences (albeit as a moderating variable on the EP-EI relationship) and hence showcases that gender should be treated as an instrumental and not only as a control variable in EI studies.
7	Bogatyreva et al. (2019)	To investigate the role of national culture in the translation of EI into starting a start-up.	Theory of Planned Behaviour	1,434 university students	Germany, Switzerland, Austria, the Netherlands, Estonia, Russia, Hungary, Brazil, & Singapore	Countries with higher individualism are not more likely to show a higher level of EI compared to collectivistic cultures.	Like their study we too find that entrepreneurial intentions (albeit we test the EP-EI relationship) are not higher in countries (in our case UK) with higher individualism compared to countries with higher collectivism (in our case Greece).
8	Syed et al. (2020)	Does innovativeness mediate the relationship between passion and EI?	Self-regulation theory	295 university (undergraduate) students	USA	Passion has a positive relationship with EI.	We too find a positive effect between EP and EI
9	Laouiti et al. (2022)	Which are the key personality traits (i.e., the Big Five) that may impact on EI?	A Gender-based Perspective	531 (business school) students	France	Female students demonstrate a lower degree of extraversion compared to men leading to lower level of EI.	In a similar manner we also find that the relationship between entrepreneurial passion and entrepreneurial intentions could be stronger for men compared to women. But we also find that women have greater

(*continued on next page*)

Table 7 (*continued*)

No	Study	Research question	Theory	Sample	Context	Findings	Comparison with our study's findings
							entrepreneurial passion than men.
10	Porfírio et al. (2023)	To what extent personal characteristics (i.e., gender, age, type of education), role model (i.e., gender, family tie, business/sports or media) and cultural aspects (i.e., country, school) impact on EI?	Theory of Planned Behaviour	1,750 secondary school students	Portugal	Entrepreneurial culture and entrepreneurial education play a key role on adolescence entrepreneurial self-efficacy and EI. However, EI does not differ substantially between males and females.	When we look only at the 'gender – EI' effect we find differences between males and females whereas this study doesn't.

Source: Authors' own – informed by the cited studies within the table.

suggest that women may instead choose gender-stereotyped professions to align with cultural and societal expectations even when extremely passionate about entrepreneurship. Therefore, it would be beneficial for educators to include and promote a range of entrepreneurial role models and generally try to disassociate the traditional masculine entrepreneur stereotype. In fact, as Liñán, Jaén and Martín (2022) suggest entrepreneurship education should be focusing on exploring and stimulating personality traits such as optimism, innovativeness, creativity being analytical and active, and thus foster students' passion for entrepreneurship by educating the ideal personality characteristics and not the gender of the entrepreneur.

Our findings are also useful for broader policy making in different countries. Indeed, our counterintuitive insight on how Greece compared to the UK is more conducive to the entrepreneurial passion and entrepreneurial intentions relationship, suggests that the intention-action gap can be better understood by delving into the cultural context (Bogatyreva et al., 2019). Such knowledge allows policymakers to develop initiatives aimed to motivate students to move from intention into actual behaviour (i.e., set up an entrepreneurial venture). Such programs for example could focus on women and provide them with support (e.g., training, development and mentorship by international entrepreneurial role models from different cultures) aiming to negate any socio-cultural barriers and preconceptions about pursuing an entrepreneurial career path.

5.2. Limitations and future research

The study has a few key limitations that can also open avenues for future research. First, although student samples are very frequently used and highly appropriate in the entrepreneurial intentions research (Espíritu-Olmos, & Sastre-Castillo, 2015; Esfandiar et al., 2019), limiting our sampled population in a student cohort, might also limit the potential generalizability from our study's findings to different populations. We encourage future research to test our theoretical model in different population samples (e.g., university wide student cohorts, college, and other tertiary education students) and populations of young people outside formal education institutes as this will help increase the validity and robustness of the findings. Second, because a convenience sample cannot guarantee the representativeness of the results, to enhance the generalizability of findings we direct future research to employ random sampling techniques, where time and resources permit.

Third, we included only two countries from Europe. Larger cross-country samples would be required to uncover nuances regarding the more positive (or potentially negative) effect of a high collectivistic and high uncertainty avoidance culture as a good seedbed for entrepreneurship, as well as test and uncover other potential cultural effects. Fourth, even though cultural context was measured with the highly relevant and reputable Hofstede country comparison metrics, the findings could differ if individualism and uncertainty avoidance were measured using alternative datasets such as the Global Entrepreneurship Monitor (GEM) and/or the Global Leadership and Organizational Behavior Effectiveness (GLOBE). Finally, we believe there is merit for future research to incorporate the concept of self-efficacy as an instrumental variable when studying passion, intentions, gender, and culture. One avenue would be to develop a mediation and moderation model to test the indirect effect of gender and culture on the entrepreneurial passion entrepreneurial intention relationship through the mediating role of self-efficacy.

CRediT authorship contribution statement

Panagiotis Kyriakopoulos: Project administration, Investigation, Conceptualization, Funding acquisition, Writing - original draft, Writing - review & editing. **Kendall Herbert:** Writing – review & editing, Writing – original draft, Software, Formal analysis, Conceptualization. **Panagiotis Piperopoulos:** Supervision, Project administration, Investigation, Conceptualization, Writing - original draft, Writing - review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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