Abstract: This paper presents a conceptual model of international entrepreneurial intention (IEI) through the lens of planned behavior and expectancy-valence theories. Extending the entrepreneurial intentions literature, where attitude to sustainability has started to have an increasingly important influence, to post-launch decisions, we provide an improved theoretical rationale for new venture internationalization, clarify the relationship between entrepreneurial orientation (EO) and IEI, and more closely align the international entrepreneurship literature with mainstream entrepreneurship literature. In this model, IEI is influenced by the entrepreneur’s attitudes to sustainability, learning, risk, work enjoyment, and work effort, moderated by entrepreneur’s perceived feasibility to act entrepreneurially, and determines the firm-level EO, which may culminate in the internationalization of a new or existing venture.

Keywords: international entrepreneurship; entrepreneurial intention; entrepreneurial orientation; internationalization; attitude to sustainability

1. Introduction

International entrepreneurship (IE) and entrepreneurial orientation (EO) are inextricably intertwined by the common practice of defining the former in terms of the latter. The three main elements of EO, namely pro-active, risk-taking, and innovative firm behavior [1–3], are typically used to define IE with the proviso that IE involves EO across international boundaries [4,5]. That proviso has given rise to the construct of International entrepreneurial orientation (IEO), leading to confusion whether IEO is the same or a separate construct to EO, and whether firms practicing EO should have an international outlook in any case, with the result that lack of construct clarity [5] is inhibiting theoretical and empirical work in both the IE and EO literatures [7]. It is important to clarify these issues because EO drives corporate innovation and technological advancement and creates employment and new wealth for society. However, only pursuing goals such as new wealth and employment, resulting from domestic and international growth in the longer term, are not enough, since our planet and the environment is clearly showing us that we need to act more sustainably, if we want to avoid natural catastrophes resulting from climate change and extensive pollution. There is also an increasing agreement among researchers that continuous economic growth of established economic systems is unsustainable [8]. Furthermore, as environmental issues are becoming increasingly significant threats to economic growth, firms regard human health and living conditions as integral parts of core business activities [9,10].
As such, small businesses are under increasing societal pressure to become more environmentally sustainable [11], while research points out that SMEs constitute the micro level foundation of sustainable economic development [12]. Therefore, the triple bottom line, where entrepreneurs not only address the profit and societal but also the environmental aspects, is becoming a necessity consideration in business operations even in SMEs [11,13]. Moreover, when considering which foreign markets to enter, firms also need to respect and obey the environmental regulations and sustainability goals of each specific market they enter.

Scholars have noted problems at the IE/EO interface. First, the appropriate unit of analysis is often ambiguous [7]. EO is a firm-level construct [1–3] but the IE literature commonly treats EO as an individual-level variable [14,15] and imputes the behavior of the firm to the ‘upper-echelon effect’ [16,17] whereby the preferences of the founding entrepreneur are infused throughout the firm and thereby drive the firm’s market behavior. Moreover, while it is commonly agreed that individual-level IEO drives firm-level EO, IEO is often described as a combination of attitudes (e.g., risk tolerance) and abilities (e.g., prior international experience). Similarly, EO is commonly measured by the ‘Miller-Covin-Slevin’ scale, which includes items relating to attitudes, self-efficacy, and behaviors [7]. The question arises whether the IE/EO relationship is tautological—do the dependent variable (IE) and the independent variable (IEO) contain similar constructs, such as risk-taking, proactivity, and innovative behavior? It is clear that further work is required to clarify the EO and IEO constructs to remove impediments, such as the level of analysis [18] to further conceptual and empirical research [6,19,20].

Second, several scholars have called for an underlying theory of IE and of EO, while starting to use EO to explain the “behavioural elements of a global orientation that captures the top management’s propensity for risk taking, innovativeness, and proactiveness” [17] (p. 3). We ask why do entrepreneurs seek internationalization, and why do firms exhibit EO? The drivers of these phenomena have largely been presumed to be profit maximization, but in the entrepreneurship literature, more generally the entrepreneur is presumed to also seek non-monetary benefits and is expected to trade-off profit for benefits such as independence, risk avoidance, and work enjoyment (see, e.g., [21]) or other non-monetary motivations, such as care for the environment, resulting from their attitude to sustainability [22,23]. Internationalization can empower companies that in their EO are motivated by sustainable outcomes. By going international, start-up entrepreneurs can better realize their desire to contribute to the sustainable development goals and their related challenges [23]. It is clear that what is required is a conceptual model that more convincingly links the attitudinal and self-efficacy drivers of individual-level IEO, which we shall call international entrepreneurial intention (IEI), with firm-level EO behavior.

Accordingly, this paper responds to calls by Rauch, Wiklund, Lumpkin, and Frese [24] and Covin and Miller [7] to argue that firm-level EO (behavior) is driven by individual-level cognitions (attitudes) and abilities. In the context of IE, it remains unclear what are the individual entrepreneur’s attitudes that influence their perceived desirability to internationalize the firm, which implies an incomplete theory of IE. Our theoretical lens is the theory of planned behavior (TPB) whereby values underlie attitudes, which drive intentions, which precede behaviors. Upper-echelon theory [16] is used to explain the link between individual internationalization intention (IEI) and firm-level behavior (IE). We draw on the entrepreneurial intention literature to propose that the IEI drives the firm’s internationalization activity. The individual’s IEI might be more urgent (as in born global) or occur as a later stage of the new venture’s planned growth strategy. We will treat international entrepreneurship as being exemplified by pro-active, risk-taking, innovative behavior (i.e., by EO) in one or more international markets.

This paper will make the following contributions to the entrepreneurship and international entrepreneurship literatures. First, it will provide a more complete theoretical explanation for international entrepreneurship (IE)—i.e., we argue that IE is driven by the attitudes of the entrepreneur toward five salient outcomes of IE. Second, by using the TPB as our theoretical lens and expectancy-valence logic to link the entrepreneur’s attitudes and self-efficacy to firm behaviors
(via upper-echelon theory), we reconcile the IE literature with the broader entrepreneurship literature in an area where these literatures have tended to diverge along different paths. Third, we clarify that IEI at the individual level is more appropriately considered as the result of the entrepreneur’s attitudes, moderated by self-efficacy and capabilities toward the salient outcomes of IE, that give rise to an intention to internationalize, rather than by reference to the behavior of the entrepreneur.

The remainder of this paper is structured as follows. The second section will review the international entrepreneurship literature and the EO-IEO debate. Next we review the theory of planned behavior in the context of extant entrepreneurial intentions literature and modify this to apply to the intention to internationalize, positing a series of research propositions as we proceed. The fourth (Discussion) section will consider some other potential moderators and contextual factors in terms of the attitudes to the salient outcomes of IE. Finally, we conclude with implications for further research.

2. International Entrepreneurship and Entrepreneurial Orientation

The EO literature (see, for example [1,2,25,26], considers the firm’s strategic orientation involving three dimensions (innovativeness, risk taking, and proactiveness), or five dimensions, including autonomy and competitive aggressiveness [3], to capture specific entrepreneurial aspects of decision-making styles, methods, and practices. The EO concept is widely used in entrepreneurship literature to explain different outcomes of the entrepreneurial process, including firm performance [27–30]; firm growth [31]; firm organization [32]; variations in product innovativeness [33]; and technology and product speed to market [34], which are modelled and presented in numerous frameworks.

More recently, the EO concept has been used in international entrepreneurship research to explain the identification and realization of opportunities related to firm internationalization; such as new entry [35]; performance in export markets [36–39]; international scope [40]; and behavior [41]. Most scholars have used the original concept of EO, while others conceptualized it as IEO [17] by emphasizing the international aspect. Due to the increasing importance and complexity of international trade [42], many perspectives and challenges relating to IE and the roles of entrepreneurs in globally integrated environments remain neglected, which calls for new and solid theoretical frameworks in the IE field [19]. The increasing globalization due to information and communications technology and other technological innovations [43] is causing intensified competition in domestic markets. On the other hand, researchers [23] are skeptical when it comes to defining the aspects of sustainable entrepreneurship and sustainable EO, even though SMEs are recognized as especially important in small and open economies in order to maintain sustainable development [12]. Because of the increasing importance of sustainability and environmental issues, we see the necessity to include the sustainability behavior of entrepreneurs to detect whether this is grounded in their attitude to sustainability.

Entrepreneurial opportunities will exist in both product and resource markets internationally. However, identifying and developing opportunities in foreign markets entails significant challenges [44] and differs significantly to the realization of entrepreneurial opportunities in the home market [45]. To address this problem, we suggest that constructs explaining entrepreneurial processes for the realization of entrepreneurial opportunities, such as EO, must involve additional perspectives associated with international markets and an increasingly complex environment, hindered with its natural limitations. This calls for new concepts and the integration of EO theories with theories explaining firm internationalization, sustainable competitive advantage, and dynamic capabilities [7,20].

In summary, we contend that EO must be viewed in the international context since the great majority of domestic markets are now open to international competition. Only in a totally closed economy could a firm’s strategy exclude consideration of opportunities in international product and resource markets, and this would be a special case of the general model in which internationalization opportunities are nil. Thus, we argue that EO and IEO are the same construct when viewed at the firm level of analysis, and that construct should remain known as EO for clarity and convenience of exposition. Treating the two as the same construct will remove what is likely to be an artificial distinction between EO and IEO in the great majority of business situations where the firm seeking survival and
success must pay heed to opportunities in international product and resource markets in order to withstand competitive pressures from firms that do. This conclusion excludes the individual-level concept of IEO as used in the literature [17], which many scholars have argued is antecedent to the firm-level EO, and thus the individual-level construct requires further consideration [20].

The Level of Analysis of IEI

Studies focusing on explaining born-global firms (e.g., [46]), and firm internationalization more generally, demonstrate agreement that internationalization is a firm-level entrepreneurial activity [47,48] driven by individual entrepreneurs [49,50] or the consensus of the founding or top management team (TMT). In small and medium-sized enterprises (SMEs), the ownership and control of the firm are typically in the hands of key decision-makers or their families [51] who are able to exert a powerful influence on the way they pursue their objectives and allocate scarce resources in the pursuit of profit and/or socio-emotional wealth [52]. SMEs are also typically less hierarchical in structure and are less constrained by organizational inertia than are larger firms [53]. In most cases, the founders and owners directly or indirectly, by controlling the composition of the management team [53], manage the operations of their firms, and thus are crucial for their firm’s strategies and represent the central factor explaining the firm’s behavior [54]. This is particularly true in the early stages of the new venture creation, where there is consistency between the individual entrepreneurial orientation of the entrepreneur and the entrepreneurial orientation of the firm [55].

The internationalization literature emphasizes that ventures engage in international markets to exploit the firm’s unique competencies and superior performance (in terms of production, technology, product, or services), to acquire cheaper resources, and to achieve economies of scale, along with other motives [19,56,57]. On the other hand, companies need to comply also with environmental regulations that are often intended to stimulate the generation and adoption of ecologically efficient innovations [58]. An important argument in the public debate is also the creation of new markets for environmentally benign products, processes, and services in other countries, and the generation as a result of export opportunities for the pioneering country [58]. Likewise, Jafré et al. [59] stress that regulations can induce environmentally friendly innovations with export potential for a country’s domestic industry. As a result, sustainable behavior of entrepreneurs is important for their internationalization. As noted earlier, scholars predominantly focus on the cross-border ‘outward’ expansion of entrepreneurial business ventures, generally presupposing that firms will start their operations locally and then gradually, after establishing certain organizational experiences, routines, and capabilities, start entering foreign markets [60,61]. This stage-based approach argues that firms need to build organizational knowledge that determines their international expansion [62]. The observation of born-global new ventures [46] challenged the widely accepted stage-based theory by proposing that individual factors, such as personal characteristics and personal knowledge [62–64] may overcome liabilities of foreignness [65], of newness [66], and of smallness [67], associated with the lack of organizational knowledge and other resources to operate in foreign environments early after their inception, thus redirecting the level of analysis to the individual level. However, a precondition to the internationalization process is the need to identify an international opportunity (either in product or resource markets), which is a subjective process [50,68]. Covin and Miller [7] (p. 15) note that IEO has been often discussed as “an attribute of the international entrepreneur that drives (them) to engage in international new entry activity.”

With the increasing number of studies using EO in relation to different outcomes or its determinants, there is a need for clear positioning of the level of analysis. The current lack of clarity “is partially a result of examining entrepreneurial tendencies from multiple perspectives, including personality traits research, entrepreneurial attitude studies and loosely defined attribute studies, not specifically looking at EO of an individual that is a direct result of the trait and attitude measures inherent in the original EO scale” [69] (p. 220). We note that the “attributes” of the entrepreneur that might drive him or her to engage in internationalization are likely to be related to both abilities and attitudes. The literature on entrepreneurial intentions is pertinent here. Based on the theory of planned behavior [70], Krueger
and colleagues [71–73] have argued that the intention to engage in entrepreneurial activity is based on the “perceived desirability” of the activity, reflecting attitudes to the salient outcomes of the activity, and the “perceived feasibility” of the activity, reflecting self-efficacy beliefs about one’s ability to successfully undertake the tasks involved in the activity (see [74,75]). This perceived desirability may stem from environmental awareness and concern for the environment and be reflected in environmental innovations of entrepreneurs. Similarly, Hambrick and Mason [16] and Hambrick [76], in their upper-echelon theory, propose that the values and cognitive biases of top managers influence the organization’s path to organizational outcomes and decision-making process by directing their field of vision [53]. While the personal knowledge, experience, and abilities of individual entrepreneurs have been well-considered in the IE literature, there is a dearth of attention paid to the cognitions of the entrepreneur who contemplates or undertakes internationalization. More recently, the focus of research toward international opportunity identification is moving toward the entrepreneur’s cognitive perspective, thus applying the theory of planned behavior [50]. These prior cognitions, which give rise to the extent of desirability perceived, relate to attitudes toward risk, new knowledge, and other outcomes (e.g., environmental) of the entrepreneurial activity, that in turn complement internal and external stimuli to which decision makers are exposed [48], and which are surely relevant to the subsequent decision and firm-level behavior to establish a born-global firm or, alternatively, to internationalize in stages.

The ambiguous level of analysis in EO research is also evident in its measurement. Other scholars (e.g., [77–79]) argue that the current measure of EO is actually a psychological assessment of individual EO, because an objective firm-level measure of entrepreneurial behavior would have to follow a different measurement approach and criteria. It would need to include the firm’s actual behavior, observations on multiple levels of organizational hierarchy, aggregation of individual data on the organizational level, and the test of agreement among the top management team. Weerawardena, Mort, Knight, and Liesch [80] also argue the importance of managers’ international vision for the development of specific dynamic capabilities (based on different kinds of learning) for companies’ early internationalization and performance. Douglas [21] has shown that the intention to start a growth-oriented, rather than an independence-oriented new venture, depends on the different attitudes of individuals to risk and work enjoyment, and we note that growth intentions and internationalization intentions might well be intertwined.

Accordingly, we argue first that an individual-level measure of the perceived desirability of internationalization is important because it is likely to be an antecedent of the entrepreneur’s decision to pursue internationalization and is thus likely to be a determinant of the EO firm-level outcomes subsequently observed, and second, that the measure of the perceived desirability of internationalization should include items that capture the attitudes of the individual to the salient outcomes of internationalization. Accordingly, we introduce the construct of international entrepreneurial intention (IEI) to replace the individual-level perspective of IEO currently used in the literature, after arguing that the firm-level perspective of IEO should be subsumed under the EO construct to measure the entrepreneurial behavior of the firm.

3. Entrepreneurial Intention for Internationalization

In the entrepreneurship literature, ‘entrepreneurial intention’ most commonly refers to the intention to start and manage a new business venture (e.g., [72,73,81,82]). The literature is largely concerned with the nascent entrepreneur’s formation of the intention to design and implement a new business venture. Once the new venture is launched and that intention is realized, research attention shifts to issues of survival, growth, and measures of success (e.g., [83]). Many scholars have considered a second area of entrepreneurial intentions, namely the firm’s intention (or aspiration) to grow subsequent to the launch of the new venture (see [32,84–89]). In this paper, we are suggesting a third area of entrepreneurial intention, namely the intention to internationalize the business firm, either by exporting, importing, or conducting operations abroad. The theoretical rationale for ‘why’
the firm seeks to internationalize has not been a major focus of prior research, with scholars mostly relying on the presumption that it will be profit-maximizing to do so. Here, we will consider multiple motivations and utilize the theory of planned behavior to argue that internationalization of the firm will provide additional monetary and non-monetary benefits (and incur costs) to the entrepreneur that may (or may not) lead to the formation of the intention to internationalize the business firm.

The theory of planned behavior (TPB) argues that actions are preceded by intentions, which in turn are preceded by attitudes toward the outcomes of the contemplated action [70], thus providing a framework for understanding determinants of internationalization behavior [50]. Krueger and colleagues [72,73], argued that entrepreneurial intentions (i.e., to start a new venture) could be parsimoniously determined by the perceived desirability and the perceived feasibility of that new venture. The perceived desirability of a new venture is related to the expected utility from the new venture and is theoretically determined by using expectancy-valence theory [17,90,91]. The individual forms an expectation of the positive and negative outcomes associated with the new venture, and these expectancies are weighted by the individual’s attitudes towards those outcomes (the valences), which may be positive or negative and of greater or lesser magnitude. The product of an expectancy and the attitude to that expectancy constitutes a utility part-worth, and the sum of the utility part-worths across all salient outcomes represent the perceived desirability of the new venture [17]. Based on earlier research [78,92,93], Douglas [17] hypothesized that the five major salient outcomes of entrepreneurship relate to income (profit), decision-making autonomy, risk exposure, work effort, and work enjoyment, and that the individual’s attitudes to the expectancies of these outcomes will determine whether the new venture is perceived as desirable (i.e., maximizes perceived future expected wellbeing, or utility) compared to other alternative uses of the individual’s resources. However, due to the salience of environmental issues, more and more entrepreneurs also consider environmental outcomes, which we contend should be included in the expectancy-valence analysis. Some do this simply to comply with the minimal environmental regulations, while others see their mission as providing product and services that will be both user- and environmentally friendly. Companies have recognized that market opportunities exist in environmental innovations and the pursuit of sustainability, since environmental innovations lead to improved firm performance and competitive capability [94].

The perceived feasibility of a new venture is a measure of the individual’s confidence that he/she can successfully accomplish the tasks involved in creating and managing that new venture [75,95,96]. The perceived feasibility is thus dependent on the individual’s prior acquisition of abilities and knowledge, whether directly or vicariously, and on their confidence that they can learn quickly and adapt to unforeseen circumstances that may arise. Fitzsimmons and Douglas [82] argue that there may be a negative interaction between perceived desirability and perceived feasibility as the individual indulges in preventative self-regulation [97,98] when assessing the viability of the new venture prior to making the decision to proceed ahead.

Now moving to the context of the intention to internationalize, we posit that three of the five salient outcomes will underlie the perceived desirability of internationalizing the firm. We note that the period of nascent entrepreneurship abuts the subsequent period of doing business, and since decisions to be growth-oriented may be made during nascency [17], and because growth might require internationalization as a strategic alternative to product proliferation, we expect that formation of the intention to internationalize might precede, be coincident with, or follow the formation of the intention to launch a new venture. In any case, it is unlikely that entrepreneurs would experience a significant shift in their dispositional attitudes between the nascency phase and the growth phase of their new venture.

We now discuss these salient attitudes in the context of international entrepreneurship. For reasons of model parsimony and ambiguity of directional impact on IEI, we will include only three of the five attitudes commonly included in the (start-up) intention literature. Attitude to income will not be considered, because many studies confirm that internationalization will be profitable only in the medium to longer term and that profitability is not among the main motives for SME internationalization [99,100].
Similarly, we will exclude attitude to decision making autonomy, since internationalization requires geographical expansion, which entails added complexity, where entrepreneurs tend to lose some of their decision-making autonomy [100] by delegation to other-country-based managers. We will replace these two attitudes (which are more salient for start-up intentions), with two new attitudes that are more salient for the intention to internationalize a small venture, namely attitude to sustainability, and attitude to learning. (In presenting our propositions, we are hypothesizing the dominant net effect, and recognize that some entrepreneurs and some firms will not agree with the dominant (positive) direction of the effect). We now consider the five attitudes in more detail.

3.1. Risk Exposure

Following Douglas and Shepherd [92], a “positive attitude towards risk” means a relatively high tolerance for additional risk borne (or conversely a relatively low degree of risk aversion). “Venturing into the unknown” is a major source of risk in the strategy context [101] (p. 231) and this risk is perhaps nowhere greater than when entering foreign markets. Thus, entrepreneurs and their firms are exposed to considerable risk when establishing and managing foreign market operations. This risk exposure may derive from a variety of sources, such as different consumer tastes; political, currency, and legal risks; risks associated with transfer of goods and services; and cultural differences [42]. At the personal level of analysis it may be assumed that entrepreneurs with more positive risk tolerance will behave more positively toward an “international new entry” in terms of timing (start and pace of international activities), scope (number of countries being involved, modes of operations being used), and extent (share of sales realized in international markets). This was confirmed empirically by Kiss, Williams, and Houghton [102], who found that the extent of risk perception associated with internationalization choice explained variations in international growth rates and international scope. Risk-tolerant entrepreneurs are expected to view new initiatives with uncertain payoffs more positively, such that their firms may undertake more risky internationalization modes, such as setting up sales outlets or foreign branch plants, compared to less risky modes such as exporting [7]. Similarly, Kropp, Lindsay, and Shoham [103] found that risk taking was required from individuals when establishing an international business venture, which provides insight into converting an established local firm’s intention into international business actions. The foregoing discussion suggests:

P1. The intention to internationalize will be negatively related to aversion to risk.

3.2. Work Effort

Green [104] (p. 56) described work effort as “the rate of physical and/or mental input to work tasks performed during the working day”. Thus, work effort refers to the expenditure of physical and mental effort in the workplace and can be measured as the product of working hours and working intensity. A person with higher tolerance for work effort has a lesser degree of aversion to work effort, and thus derives relatively little marginal disutility from additional hours and/or intensity of work effort [93], which is usually associated also with the complexity of internationalization, if not from other things, because of the geographical distance of the target markets. Hofer [105] and Schein [106] argue that successful entrepreneurs must work long and hard and put their new venture ahead of their personal and family life. Because internationalization increases work intensity and decision-making complexity, which may increase stress, we suggest the following research proposition:

P2. The intention to internationalize will be negatively related to aversion to work effort.

3.3. Work Enjoyment

Enjoyment of work is the degree to which individuals work because they find the work itself intrinsically interesting or pleasurable [107,108]. On the other hand, work challenges generate stress factors, and these challenges increase with the firm’s international involvement. However, there is also
the chance to experience positive affect (i.e., work enjoyment) via factors attributed to the international work environment. Managerial work is particularly challenging in today’s organizational environment, given that restructuring, globalization, focus on short-term results, and advances in technology have increased demands on managers and contributed to long work hours for many [109–111]. Work enjoyment, as the extent to which people experience their work as pleasant and gratifying [104] may be especially challenging when being performed in an international environment, with new cultures, languages, different people, and behavioral habits. Managers seek pleasure or interest from the nature of the work rather than the act of working [112]. Intrinsic motivation [113,114] is a key aspect of enjoyment of work. Although enjoyment of work contains affective components (i.e., pleasure, interest), it differs from general positive affect toward one’s job or organization (e.g., job satisfaction, organizational commitment). Intrinsic motivation, which involves freely engaging in an activity because that activity is personally interesting or enjoyable [113,114], appears to be a key aspect of enjoyment of work. The autonomous nature of managers’ behaviors may create feelings of engagement and genuineness, which in turn enhance fulfillment of their basic psychological needs, boost psychological well-being, and increase the extent to which work accomplishments are truly satisfying [115–119]. Feelings of engagement and genuineness may also lead managers to engage in extra efforts and to sustain these efforts over time, increasing the probability of successful performance. Further, some authors demonstrate that positive states trigger upward spirals toward emotional well-being [120,121]. According to Fredrickson and Branigan [122], emotions are “short-lived experiences that produce coordinated changes in people’s cognitive, physiological, and behavioral responses, so that positive emotions will create positive responses” (p. 313). In our context, expectations of work enjoyment will spur the entrepreneur’s decision to start with the international activities. Consistent with these arguments presented, we propose,

P3. The intention to internationalize will be positively related to attitude to work enjoyment.

3.4. Attitude to Learning

Covin and Miller [7] called for scholars to explore new conceptual and measurement issues related to the specifics of international market entry that are not currently acknowledged or emphasized in the EO conversations. In answering their call, we introduce a learning dimension that was suggested by these authors, but our focus is on the attitude to future learning rather than prior learning. We contend that the significantly increased environmental dynamism in the global economy necessitates a proactive approach by the internationalizing firm toward the search for, acquisition of, and retention of new knowledge within the firm [123]. This is especially relevant for firms moving to international markets, since information processing demands increase and become more complex [53,124]. Accumulated knowledge by the firm is a foundational aspect of the stages view of internationalization [125,126], while learning and knowledge creation is commonly acknowledged as critical to the internationalization process [127–129]. In the stages model, however, the level of analyses is the firm and the knowledge and networks reside and accumulate in the administrative structures of the firm.

Individual entrepreneurs may possess unique knowledge, capabilities, and attitudes towards information search and retention, which may lead them to undertake international new entry at inception and thereby internationalize quickly [14,130]. They will have accumulated previous knowledge and built a positive attitude toward global markets, even before the company started, which highlights the critical pre-formation role of individuals’ (international) experience and knowledge. Weerawardena et al. [14] (p. 289) were among the first to argue that “learning orientation” of the owner-managers who possess a global mindset and prior international experience are among the crucial drivers of the capability building process of born global firms. Such logic, and other studies (e.g., [77,131]) indicates that the individual level of analyses, examining the attitudes and orientations of the entrepreneurs, is appropriate.
Weerawardena et al. [14] and Swoboda and Olejnik [129] more recently adopt a dynamic capabilities [132] perspective of organizational learning (see, e.g., [133]) in the context of born-global firms [134] to argue that early internationalization by the firm will be driven to a greater or lesser extent by top management’s attitude toward the value of new information search and retention within the firm, which is the antecedent to the propensity to view something as a learning opportunity. Learning orientation is thus inevitably linked with the extension of the entrepreneur’s knowledge base needed for the realization of new resource combinations and to overcome the error sources of unexplored fields [68,135], such as new foreign markets, new cultures, and new business practices. Learning is a central part of the entrepreneurship process as it provides entrepreneurs with new levels of understanding, interpretation, and insights [136], as well as facilitating the development of more complete mental models, and is crucial in making successful decisions [77].

For their firms to survive, entrepreneurs need to constantly improve their “ability to recognize the value of new information, assimilate it, and apply it to commercial ends” [123]. Such learning capability, called absorptive capacity, depends on transfers of knowledge across individuals and boundaries within the firm. Greater absorptive capacity facilitates the acquisition of additional knowledge required for speedier international market involvement [137]. Thus, international knowledge acquisition can result in the discovery of new opportunities in both domestic and international markets [138]. Without such abilities resulting in specific knowledge, the entrepreneurs will be less capable of discovering and exploiting new opportunities [28]. Knowledge, as the result of the learning process, provides individuals with increases in their cognitive abilities, leading to more productive and efficient potential activity [139].

In summary, the more positive the entrepreneur’s attitude to learning, the more we expect managers and employees to be directed by top management towards information acquisition and retention activities, and the more we expect to observe EO outcomes at the firm level. Finally, we expect a positive association between the individual entrepreneur’s attitude to learning and the firm-level outcomes relating to the decision to start with speed, extent and scope of internationalization, since more knowledge gained and retained is expected to allow the firm to more-readily recognize and capitalize on international opportunities. This suggests the following research proposition:

**P4. The intention to internationalize will be positively related to the entrepreneur’s attitude to learning.**

### 3.5. Attitude to Sustainability

Sustainability and entrepreneurship are often regarded as binary concepts that have a trade-off relationship, meaning that the higher the social and environmental consideration, the lower the private and economic benefits [140]. However, it seems that sustainability orientation has a positive relationship with opportunity recognition and entrepreneurship intention related to sustainability [140]. Moreover, when discussing opportunity recognition, this one can stem also from environmental regulation, which demands that products or services comply with certain environmental regulation and rules. Since environmental pollution and environmental damage are becoming major concerns in countries around the world, with the result that in many cases, national environmental regulation is being made more stringent to try to improve environmental quality [141]. Moreover, environmental regulation creates a positive effect on firms’ environmental performance and on their competitiveness [142]. Green products that provide public benefits also have private environmental benefits for the customer (e.g., energy savings) and thus generate stronger consumer demand [143]. Many environmental innovations combine environmental benefits with corporate or user benefits [58]. Therefore, environmental innovation and firm-level sustainability orientation is attractive, since it can increase firms’ financial performance [11].

Companies wanting to operate in domestic or international markets need to comply with regulations, avoid penalties by the governments, as well as effectively address customer demands. Moreover, companies adopting a green entrepreneurial orientation are enabled to recombine resources...
to launch new products or processes [144], as well as improve process efficiency, minimize waste, and reduce costs through exploitation of new ideas. Since sustainability and environmentally friendly behavior are becoming salient topics and are imposed not only by governments but also by customers demanding that companies be environmentally friendly and pursue sustainability, we introduce the concept of attitude to sustainability as a determinant of IEI. To the entrepreneur is entrusted an important task, which involves adoption of “eco-innovations” and demonstrating concern for the environment as well as employees, consumers, and society [145]. Passion for the environment by entrepreneurs who want to make a difference to their communities has been found to be the main catalyst for embarking on environmentally sustainable initiatives [146].

The entrepreneur and top management play a key role in influencing corporate environmentalism directly and help to modify the influence of other stakeholders [147]. This so-called sustainable spirit can surpass the effect of regulations, especially for proactive companies with the goal of becoming global. Ndubisi and Nair [148] argue that green entrepreneurial orientation is vital for the development of green value added. Moreover, sustainability-oriented entrepreneurs are the ones who “balance economic health, social equity and environmental resilience though their entrepreneurial behavior” [149] (p. 525). Therefore, managers who perceive environmental protection as an important and integral part of a company’s identity will act accordingly, even without formal controls and incentives [150]. This leads to the following proposition:

**P5. The intention to internationalize will be positively related to the entrepreneur’s attitude to environmental sustainability.**

In line with the theory of planned behavior, we contend that the stronger the preference of an individual entrepreneur toward these five salient outcomes of IE, the greater the entrepreneur’s perceived desirability of internationalization will be. This will be moderated by the entrepreneur’s perceived feasibility of internationalization, which will take into account the firm’s resources and organizational capability to successfully undertake the focal internationalization activity. If the action is perceived to be both desirable and feasible, and is expected to generate greater psychic rewards than any alternative use of the firm’s resources, the entrepreneur will form international entrepreneurial intentions (IEI), and this will drive (moderated by the upper-echelon effect) the entrepreneurial orientation (EO) of the firm. Some entrepreneurs will have very low IEI, and/or perceive relatively low feasibility of internationalization, and/or have little sway at the top level of firm decision-making, such that there will be little or no entrepreneurial behavior toward international markets, while other entrepreneurs will drive the entrepreneurial behavior of their firms in foreign markets to create new value.

Figure 1 presents a schematic presentation of the proposed conceptual model, where the entrepreneur’s attitudes to the five salient outcomes of internationalization drive the perceived desirability of internationalization, which in conjunction with the entrepreneur’s perceived feasibility of the focal internationalization action drives international entrepreneurial intention (IEI), as a signal to start with international operations. In turn, the entrepreneur’s IEI drives the firm’s entrepreneurial orientation (EO), manifested as risk-taking, proactive, and innovative firm behavior and moderated by the strength of the upper-echelon effect, which results in firm-level action to pursue a new international venture.
Broadly speaking, IEO consists of the beliefs, preferences and behaviours that lead to and include acts of new international market entry” implicitly referring to the beliefs and preferences (if not also the behaviors) of individuals. Similarly, several other authors [14,26,137,151] argue that it is useful to focus on the attributes of individual entrepreneurs when studying internationalization decisions. For the most part, the attributes of individual entrepreneurs that have received empirical attention have related to knowledge, prior international experience and other ‘ability’ variables, including international opportunity recognition [50], with little attention given to ‘attitude’ variables (with the notable exception of attitude to risk, see, e.g., [151]).

We have argued that to better understand internationalization activity by firms we need to have a measure of the entrepreneur’s perceived desirability [73] of internationalization and that this measure will encompass more cognitions than simply risk tolerance, thus answering a call for better understanding of entrepreneurs’ cognitions and their influence on decisions to start with international activities [20] while contributing to a more solid theoretical base of the IE. Our transformation from the firm level to the individual level of IEO was achieved by focusing on the individual’s attitudes toward five salient outcomes of international entrepreneurship. The individual-level IEO construct will allow researchers to use measures of entrepreneurial attitudes to explain different firm-level pro-active, risk-taking, and innovative behaviors in one or more international markets, thus potentially reconciling the stage models and the born-global theories of internationalization [20,62].

Next, we note that the entrepreneurs’ cognitions, which depend on prior experiences and dispositional beliefs, influence their decisions and behaviors today [20]. This extends the time perspective backwards, to when the entrepreneur’s attitudes, knowledge, and abilities were acquired, formed, and developed [64]. Therefore, the historical aspect of the development of such attitudes and abilities, as well as the time of starting an international new entry can be considered. IE scholars have previously considered some personal measures as independent variables, such as prior experience with establishing and leading entrepreneurial ventures, special (international) business skills, international orientation, time spent abroad, past experience with international business, and other issues [64]. The inclusion of a range of personal cognitions of the entrepreneur is an important advantage of the personal-level IEI construct, compared to the firm-level EO, that allows the time and pace of international new entry to be related to antecedent personal attitudes of the entrepreneur.

A further contribution of the new IEI construct relates to the contextual factors, such as specific industry, home country size, culture (emphasized by Covin and Miller [7]), level of competitiveness,
regulations, and market development, which may also be relevant when they significantly influence the firm’s operating conditions and/or business model, since they may erode the competitive advantages entrepreneurs have built since establishment. Such external factors will likely moderate the relationship between IEI and the firm’s internationalization performance.

For consistency with the entrepreneurial intention literature, we have partly followed Douglas [17] and considered three main attitudes from that literature that drive entrepreneurial intention (namely attitudes to risk, work effort, and work enjoyment), and added the entrepreneur’s attitude to knowledge acquisition and retention (i.e., learning) and attitude to sustainability. These additional aspects reflect behavior of entrepreneurs acting in today’s competitive, dynamic, and market-driven business environments, plus the increasing sustainability orientation of consumers and regulators. The individual’s attitude to each of the five proposed antecedents of IEI may be tested by already developed and tested survey instruments and measures available in the literature or more reliably revealed by a conjoint experiment (see [17,152]) using a sample of international entrepreneurs. Similarly, the EO behaviors of the firm may be observed using traditional measures (e.g., [153]) or by newer scales that involve the international perspective of the “new entry”. We expect that by regressing the behavioral outcomes against the attitudinal data (and measures of entrepreneurial self-efficacy and various control variables), these proposals will be supported or refuted.

An important issue in the potential use of the IEI construct is the path that translates the IEI, as an attitudinal, personal-level construct, to the EO firm-level behavior. Here, we expect that future research might adopt different moderators, including different concepts, such as transformational leadership [154] and entrepreneurial self-efficacy for different kinds of management capabilities [75] that enable the entrepreneur’s attitudes to be translated into concrete entrepreneurial actions of the firm.

5. Conclusions and Implications

In this paper, we resolve the ambiguity regarding the analytical level of the IEO construct by arguing that IEI is an individual-level attitudinal construct that drives firm-level IE behavior in the context of global competition in product and resource markets, thus building on relatively few previous studies (e.g., [77]). We contribute to reinforcing a psychological concept that complies with the Schumpeterian understanding of entrepreneurship and complements current comprehensions of EO [77]. As such, we provide a theoretical basis for international entrepreneurship, answering the call for new integrative theoretical frameworks and concepts of IE [20] where the decision to start internationalization activities is driven by the attitudes of the entrepreneur toward five salient outcomes of IE. We linked the attitudes of individual entrepreneurs to their behaviors (via upper-echelon theory) by using the TBP and expectancy-valence logic as our theoretical lenses.

To avoid confusion as to the level of analysis, we advocate replacing the individual-level international entrepreneurial orientation (IEO) construct with the redefined IEI construct that reflects the entrepreneur’s attitudes toward the salient outcomes of IE, including toward learning and sustainability. The proposed new individual-level construct is expected to be more comprehensive, better supported theoretically, and hopefully more useful empirically.

6. Contributions to the Literature

First, this paper contributes to construct clarity [6] in the EO and International Entrepreneurship literatures by re-defining the EO construct in the international context and proposing the individual-level IEI construct to reflect the entrepreneur’s perceived desirability and perceived feasibility of conducting an international business. The individual-level IEI construct more appropriately considers the composite of the underlying attitudes toward the salient outcomes of IE, and the firm’s organizational capability, that manifest in the intention to internationalize.

Second, we propose a different approach to measuring the attitudinal and behavioral antecedents of entrepreneurial orientation (EO). Rather than confounding individual attitudinal constructs (i.e., attitudes to risk and autonomy), with firm-level behaviors (i.e., proactivity, innovation, and
competitive aggressiveness), we contend that the antecedents of EO, whether applied to domestic or international markets, should include individual-level attitudes to learning and to sustainability, the entrepreneur’s perceived feasibility of successful internationalization (taking into account the firm-level resources and organizational capabilities), and the operationalization of the upper-echelon effect.

Third, this paper serves to align the international business and entrepreneurship literatures on the issue of what drives entrepreneurial intention to start, grow, and/or internationalize a new business venture. The attitudes to learning and to sustainability have never before been incorporated into mainstream models of entrepreneurial intention (see [155]) but surely do enter the consciousness of at least some intending, nascent, or practicing entrepreneurs. Given the overlap and/or synchronicity of the phases of new venture start-up, growth, and internationalization, we must expect these issues to arise and remain under consideration through all three phases (if the latter two are perceived to be desirable by the entrepreneur).

Finally, this paper facilitates a more-complete understanding of the internationalization process by including multiple theoretical perspectives of entrepreneurship and SME internationalization, in both a holistic and pluralistic manner [156,157] thus bringing closer the entrepreneurship-based explanations to those of the international business literatures (e.g., [19,102]). Empirical research in the field of International Entrepreneurship will also benefit from the conceptual model introduced here, and research in international business, entrepreneurship, and other fields [157,158] may find new relationships and interactive effects.

7. Suggestions for Further Research

The introduction of the IEI construct is a theory-building exercise that inevitably leaves many aspects to be further elaborated. Conceptually, IEI may be extended to include other elements and dimensions or may be more parsimoniously stated by combining some of the proposed elements. Some additional measures need to be developed, while other measures already used in the entrepreneurial intention literature (e.g., [17]) need to be tested in other cultural and environmental settings, and in combination with other constructs (e.g., EO) to support or deny the theoretical propositions advanced here and to ensure its generalizability. Similarly, other dimensions may be introduced to capture different aspects of the entrepreneurial intention formation process, and further empirical analyses should be undertaken to test the new IEI concept and the proposed correlations and interactions between and among the variables in our model. Further, our proposed conceptual model might be tested also empirically. Since it includes different level of analysis (firm and personal level), it is recommended to employ the multilevel modelling (MLM) technique, as is appropriate for this kind of research because the framework involves relationships between constructs at both the individual level and the firm level [159,160]. Thus, there remains considerable scope for further research in this area.

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