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## Article

# Determinants of Entrepreneurial Risk among Young Emiratis

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**Abstract:** This work aimed to investigate the determinants of entrepreneurial risk among Emirati youth enrolled in a university in the United Arab Emirates. This was a quantitative study, which used a survey of 324 university students with an average age of 20.7 years and a standard deviation of 3.1 years. The collected data were analyzed using two methods—Ordinal Probit Regression Estimation and Structural Equation Modeling—to identify the factors that may determine entrepreneurial risk and assess the research hypotheses among this group of Emirati youth. The results showed that Emirati youth are risk-averse when (a) they do not receive government support, (b) they have a perception of low self-efficacy, (c) they are afraid of failure, and d) they perceive considerable obstacles and barriers. In addition, it is concluded that it is necessary to stimulate creativity and an innovative mindset among students.

**Keywords:** entrepreneurship; fear of failure; risk aversion; innovative thinking mindset; ordered probit regression; structural equation modeling



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## 1. Introduction

Economies are considered complex systems; therefore, the individual entrepreneurs embedded in these economic webs must cope with risky decisions when trying to maximize economic profits.

The propensity or ability of entrepreneurs to make optimal decisions in situations under uncertainty has sometimes been considered a negative feature. However, entrepreneurs are not currently considered mindless decision makers but optimal decision makers when situations are inherently uncertain. They are expected to efficiently manage uncertainty in economic markets to obtain a profit from it. They make calculated risky decisions to take advantage of uncertain situations to build economic wealth. It is the role of entrepreneurs to canalize uncertainty to produce competitive goods or services. This is one of the reasons that some initiatives have been implemented to develop educational programs in which specific training on risky decisions is included. In the context of entrepreneurial education, training is also critical in terms of risk management. As a result, providing the appropriate environment to allow potential entrepreneurs to develop their abilities to cope with uncertainty efficiently is critical if we wish to boost the positive role of entrepreneurs in economies [1].

Markets are competitive environments. The products and services' expiration occurs more rapidly than in the past, and this context requires a great amount of energy investment from entrepreneurs. In this sense, universities are a perfect niche in which to encourage students to start up new businesses. In fact, many universities have specific services to support and help potential entrepreneurs. Nonetheless, not all ideas crystallize into actual ventures due to fear of failure, and business creation is normally avoided. Nonetheless,

having a background education in entrepreneurship will encourage potential entrepreneur university students to venture and take the needed risks [2].

Relating contextual variables, such as country support and subjective norms, to individual variables, such as fear of failure, risk aversion, and self-efficacy, represents a promising path of discovery relevant to the area of entrepreneurship, which is a multi-faceted, multiparadigm phenomenon permeated by multiple approaches, from economic to behavioral.

Fear of failure, which is also related to risk aversion, requires different studies involving cognitive, behavioral, and emotional responses [3], and this study integrates these three responses. In this research, we explore the fear of failure beyond being merely a personal trait, as a phenomenon that can drive entrepreneurial intention and action.

As Blasio et al. [4] point out, the empirical literature that investigates entrepreneurial risk aversion is relatively new, and there is a lack of empirical evidence on the motivating role of fear of failure in companies [5]. It is in this way that this study brings contributions and helps to bridge the gap in this literature, as it investigates the relationships of these contextual and individual variables.

The Theory of Planned Behavior (TPB) is the most used theory to measure behavioral intention [6] and therefore supports this study, which has entrepreneurial intention as its dependent variable. Furthermore, most research that investigates entrepreneurial intention uses TPB [7,8].

The present research aims to study the relationship between fear of failure, risk aversion, and entrepreneurial intention and innovation. It also explores the impact of the country's support on entrepreneurial intention. The variables that precede behavioral intention, such as self-efficacy and subjective norms, are also studied.

## 2. Theoretical Relationship and Hypotheses

### 2.1. Determinants of Entrepreneurial Risk

The models traditionally used to explain the entrepreneurial phenomenon from a psychological point of view have been based on attitudes [9], such as the Theory of Planned Behavior (TPB).

The individual variables present in TPB are attitude and perceived behavioral control. The entrepreneurial attitude is the main form of entrepreneurial intention [10] and refers to the affective evaluation that individuals make of the entrepreneurial career, leading to attractiveness or distancing from the target object of the attitude, which, in this case, is the creation of a business or development of an innovative idea [11,12]. The more positive the attitude, the greater the intention to pursue this career. On the other hand, perceived behavioral control is the perceived ease or difficulty in relation to the entrepreneurial idea—that is, how viable the idea is considered, the perception of success and control over future processes, and the perception that there is more ease than difficulty regarding the development of the idea [13].

The contextual variable of TPB is the subjective norm, which refers to social influences related to certain choices [14]—for example, the influences of family members, friends, school or university colleagues, or institutional or governmental support. They represent moral, material, and psychological support for students who wish to follow this entrepreneurial career and operate as models to be followed and as support in the development of the business.

TPB considers some aspects that can be considered obstacles to the entrepreneur's intention, such as the lack of behavioral control. Nevertheless, some scholars have proposed theoretical models that have explicitly included the barriers to entrepreneurship in an attempt to explain this complex phenomenon, e.g., [15–17] in addition to other variables (e.g., personality, attitudes, social norms, locus of control, support perceived, etc.). Armitage and Conner [18] noted that the obstacle perception is what determines that intention turns to action. That is to say, whether someone becomes an actual entrepreneur depends on the obstacles or barriers perceived. Several studies have focused on the categorization of

the entrepreneurs' perceived obstacles [15,16,19–22]. Some aspects of the entrepreneurship processes are considered obstacles, and, at the same time, they are considered facilitators, depending on the state of entrepreneurs (real or actual); these are crucial in venturing into a new business.

Risk aversion or fear of failure can be considered as barriers to entrepreneurship on some occasions for both potential and actual entrepreneurs. Risk aversion has been conceptualized as a personality trait characterized by a predisposition to avoid risks in the entrepreneurial process. It also has been defined as a state in which actual and potential entrepreneurs perceive the likelihood of achieving success in the entrepreneurial process [3,23]. In fact, Cacciotti et al. [3] suggest that fear of failure varies with time and the entrepreneurial stage. Fear of failure can be a barrier that encourages the individual to abandon the entrepreneurial idea, but it is also a reason to venture. Ruiz-Ruano et al. [2] have noted that some obstacles are perceived as encouraging to boost the entrepreneurial intention, depending on whether the respondent is an actual or a potential entrepreneur. Cacciotti et al. [3] have found that the fear of failure involves different aspects, such as the source (financial security, personal ability, or potential of the idea), the affective arousal (positive or negative), the behavioral response (inhibition, motivation, and repression), and the temporal dynamics (commitment and learning).

Fear is a normal phenomenon in almost all aspects of life. Life is, in nature, uncertain, and people act without knowing the results of their actions. Moreover, in some way, this fear or avoidance of risk causes us to choose what is safe, without taking unnecessary risks. Nevertheless, within this environment of uncertainty, some regularities provide us with clues to determine how to act depending on the situation. What is important to point out here is that the person must evaluate the situation and deem it as important to activate these feelings. If the person does not think that the situation is important, he or she may accept the consequences, and, in this case, no fear is experienced. In the entrepreneurial context, Cacciotti et al. [3] suggest that “experiencing fear of failure . . . depends on how strongly individuals believe or anticipate that certain aversive consequences will occur when external events may suggest that they or their venture is at a greater risk of failing” (p. 316). Nevertheless, Cacciotti et al.'s [3] entrepreneurial model maintains that fear of failure has cognitive, affective, behavioral, and temporal dimensions that seem quite similar to the proposal of TPB [9]. All these models try to reflect the complex system that characterizes entrepreneurship. Furthermore, Baluku et al. [23] have found that risk aversion has negative effects on both entrepreneurial attitude and intention.

Fear of failure may depend on the degree of perceived return on investment. The greater the perceived viability of the business (perceived behavioral control), the greater the courage to face fear; the greater the support received through close relationships and from the country, the more confident the individual becomes, and, consequently, they can see fear as a natural part of the process.

The perception of feasibility is also related to subjective norms, in the sense of receiving support from proximal and institutional relationships. When the educational environment is favorable to entrepreneurship, there is greater encouragement for students to pursue this career, as it constitutes a space for learning, experimentation, risk mitigation, motivation, engagement, and the formation of new networks.

As indicated by [24], the formation of a business network provides the construction of business relationships, identification and development of opportunities, information sharing, and a search for potential business partners. The authors have identified that the entrepreneurial business network has a significant positive relationship with dynamic capabilities, which in turn has a positive relationship with sustainable small business performance. Another study by Hussain et al. [25] confirms the importance of these networks as promoters of business sustainability, as well as the intention to undertake.

All these relationships are important and predict the intention to undertake, as they are positive influences and models that can be followed by potential entrepreneurs, such as

students who are developing their identities and discovering new possibilities in entering the job market.

## 2.2. Hypotheses of the Study

The scientific literature has given great importance to risk-taking behaviors among entrepreneurs; as a result, it can be expected that potential entrepreneurs in the sample will tend to show higher levels of propensity for risk taking as compared to those who are not potential entrepreneurs.

**Hypothesis 1.** *People scoring highly in entrepreneurial intention are also expected to obtain low scores in risk aversion.*

**Hypothesis 2.** *It is also expected that those potential entrepreneurs who observe high country support will be able to accept a higher degree of risk.*

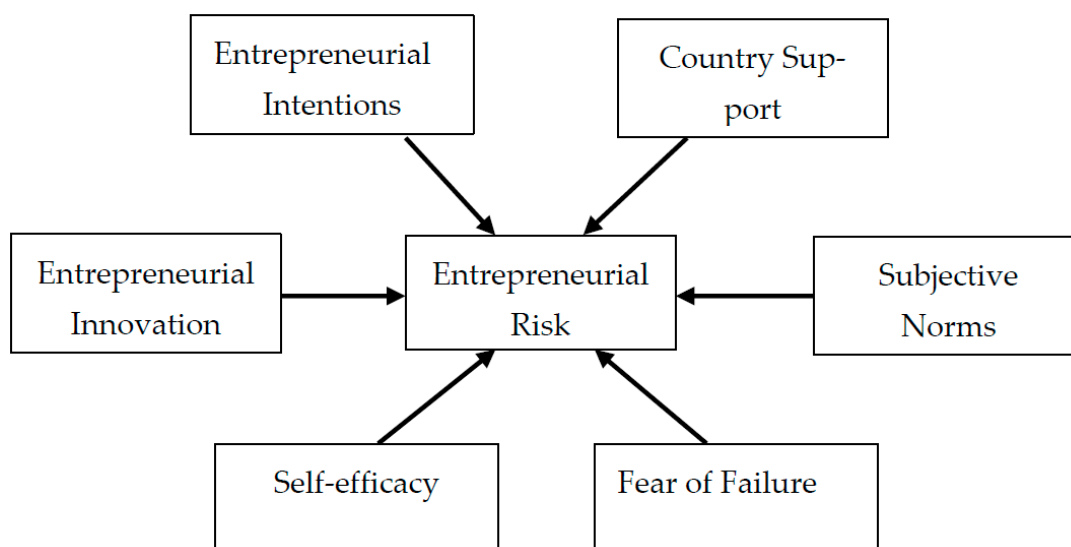
**Hypothesis 3.** *Self-efficacy is another variable suspected to be related to risk aversion. It is expected that the higher the self-efficacy of a potential entrepreneur, the lower the risk aversion.*

**Hypothesis 4.** *Fear of failure is expected to positively correlate with risk aversion. Thus, the higher the level of fear of failure, the higher the degree of risk aversion.*

**Hypothesis 5.** *An innovative thinking mindset is expected to positively correlate with risk taking. Thus, the higher the level of the entrepreneurial innovative thinking mindset, the higher the willingness to take on additional risks when starting a business.*

## 2.3. Conceptual Framework

Figure 1 shows the conceptual framework for our study based on the literature review cited above. This study investigates possible relationships between fear of failure, risk aversion, and entrepreneurial intention. It also explores the impact of the country's support and the variables that precede behavioral intention, such as self-efficacy.



**Figure 1.** The proposed Conceptual Framework of the study.

## 2.4. Econometric Models

We rely on both the Ordered Probit Model and Structural Equation Modeling in our analysis. The use of Ordered Probit Regression is due to the categorical nature of the dependent variable, which is ordered, and its actual values reflect a ranking. In this case,

the variables in the analysis would have different coefficients for every level of the ordered variable. In other methods—for example, multinomial logistics—the information contained in the ordering is lost.

As for SEM, it is superior to the traditional path analysis methods, which assume that all variables are estimated without errors. SEM accounts for measurement errors when estimating linear relationships. It is also more powerful than the classical OLS as it allows us to investigate causal mechanisms with direct and indirect effects; furthermore, it allows us to incorporate our assumptions about variables' links directly into the model.

### 3. Materials and Methods

#### 3.1. Participants and Procedure

A cross-sectional study was conducted among a random sample of 324 Emirati students attending a public university in the UAE. Students were recruited randomly and without replacement from the whole university student body between June 2020 and September 2020, and participation was on a voluntary basis. This recruitment procedure permitted the minimum sample size of 200 for the effect size and for the structural complexity of the models [26–28].

#### 3.2. Instrument

A survey was used to collect the data. It collected first the respondent's demographic information, such as age, gender, high school type, years of education and experience, parents' entrepreneurial background, residence, and field of study. Then, it asked questions about their understanding of entrepreneurship and their entrepreneurial background. Moreover, the survey had several questions to assess the entrepreneurial intention and the risk aversion attitudes among the students and also evaluated students' perceptions of the external factors that affect entrepreneurship. The survey included questions about the entrepreneurial environment in the UAE and within the university itself, entrepreneurial opportunities, and the limitations of starting a new business in the country. In each question, students were able to choose their answers on a Likert scale of 1 to 5, with 5 denoting "strongly agree" and 1 denoting "strongly disagree" (see Appendix A).

We used the scales from [17,29–33]. We reformulated, added, and rephrased some of the items to suit our population.

The survey was translated into Arabic by a professional translator, and the content validity was ensured by experts in the field. The measure of internal consistency and reliability of the Arabic version of the survey on Cronbach's  $\alpha$  scale was 0.98, based on a pilot study of 10 students who were not included among the final surveyed individuals.

### 4. Data Analysis and Results

#### 4.1. Data Analysis

The data collected by the survey were analyzed to identify the determinants of entrepreneurial risk and to test the stated hypotheses among the young Emiratis. The analysis was carried out using two methods: Ordinal Probit Regression Estimation and Structural Equation Modeling (SEM). STATA statistical analysis software 16.1 was used.

All the variables and their corresponding item statements are presented in Appendix A, while reliability and validity analyses are presented in detail in Appendix B.

#### 4.2. Descriptive Statistics

The risk aversion (RA) scale was created using eight statements from the questionnaire. The value of RA reported here is the average agreement of the eight statements (min = 1.2, max = 4.3, M = 2.87, SD = 0.54). Higher scores on the RA scales indicate higher reluctance to take risks by starting a new business. The Cronbach's  $\alpha$  of 0.72 indicates good reliability. The fear of failure (FOF) was measured with a direct question on a scale of 1 to 5. Higher scores on the FF indicate a higher fear of failing in business, with an average of 3.16 (SD = 1.18) (See Table 1).

**Table 1.** Descriptive statistics and internal consistency coefficients for main variables.

Variables	No. of Statements	Cronbach's Alpha	KMO	Mean	SD	Min	Max
Risk Aversion (RA)	8	0.72	0.75	2.87	0.54	1.2	4.3
Entrepreneurial Intention (INT)	7	0.79	0.82	3.34	0.54	1.4	4.9
Entrepreneurial Innovation (EI)	10	0.82	0.83	3.60	0.51	1.70	4.90
Self-Efficacy (SE)	11	0.79	0.81	3.07	0.61	1.4	4.9
Subjective Norms (SN)	14	0.92	0.90	3.84	0.64	1	5
Country Support (CS)	5	0.89	0.81	3.86	0.84	1	5
Fear of Failure (FOF)	1	-	-	3.16	1.18	1	5

KMO: Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy.

Most young people in the sample are risk-neutral rather than risk-averse (59.2% versus 43.3%), and only 6.5 percent of them seek risk. Moreover, more than 45 percent of them have either high or very high fear of failure in starting a business.

#### 4.3. Ordinal Probit Regression Estimation

The set of full predictors includes gender, age, age<sup>2</sup>, entrepreneurial education, entrepreneurial innovation, country support, subjective norms, self-efficacy, and fear of failure. The dependent variable in model 1 is risk aversion (RA), while, in models 2, 3, and 4, it is the dummy variables risk lover, risk-neutral, and risk-averse, respectively.

The dummy variable risk lover was created as a control variable for the risk type of the respondents (1 = risk lover, 0 = not risk lover) in model 2, risk-neutral (1 = yes, 0 = no) in model 3, and risk-averse (1 = yes, 0 = no) in model 4.

In the *Ordinal Probit Regression Estimation* (Table 2, model 1), we considered all the above-mentioned independent variables as the set of full predictors to explain the risk aversion variable. The model fits the data well ( $\chi^2(9) = 151.69, p < 0.0001$ ). Moreover, as pseudo  $R^2 = 0.077$ , the model containing risk aversion in addition to the set of full predictors shows a 7.7 percent improvement in fit relative to an intercept-only model. Similarly significant results were obtained for models 2, 3, and 4, where the pseudo  $R^2$  increased sharply to 32.6 percent for model 2, 11.8 percent for model 3, and 19.8 percent for model 4.

Among the different factors, INT is negative and significant ( $\beta = -0.93, SE = 0.14, p < 0.01$ ), indicating that students with high entrepreneurial intention to start a business have a lower risk aversion degree, which is confirmation of our Hypothesis 1. This result was similar in model 4 for risk-averse but positive and significant for risk-neutral participants, and it was not significant for risk lovers. We also found a positive and significant association between country support and risk aversion degree in model 1 only (Hypothesis 2).

Self-efficacy is another predictor that is negative and significant for models 1 and 4 ( $p < 0.01$ ), but positive and significant for model 3 ( $\beta = 0.33, SE = 0.16, p < 0.05$ ), indicating that the higher the self-efficacy, the lower the risk aversion, which is confirmation of Hypothesis 3.

**Table 2.** Ordinal Probit Regression Estimation.

Variables	Model 1 Risk Aversion Degree	Model 2 Risk Lover	Model 3 Risk Neutral	Model 4 Risk Averse
Entrepreneurial Intention (INT)	−0.93 *** (0.14)	0.43 (0.31)	0.36 ** (0.18)	−0.74 *** (0.21)
Fear of Failure (FOF)	0.02 *** (0.003)	−0.01 ** (0.01)	−0.01 *** (0.003)	0.02 *** (0.004)
Entrepreneurial Innovation (EI)	−0.35 ** (0.18)	1.39 ** (0.47)	−0.30 (0.23)	−0.20 (0.26)
Self-Efficacy (SE)	−0.25 ** (0.12)	0.10 (0.29)	0.33 ** (0.16)	−0.50 *** (0.18)
Subjective Norms (SN)	0.26 (0.17)	0.31 (0.40)	−0.41 * (0.23)	0.47 * (0.26)
Country Support (CS)	0.22 ** (0.09)	−0.27 (0.20)	−0.04 (0.12)	0.20 (0.14)
Age	0.14 (0.17)	1.02 ** (0.49)	−0.45 ** (0.23)	0.23 (0.25)
Age <sup>2</sup>	−0.003 (0.003)	−0.02 ** (0.01)	0.01 * (0.005)	−0.004 (0.01)
Gender	−0.22 (0.18)	0.07 (0.37)	0.26 (0.24)	−0.30 (0.27)
LR $\chi^2$ (9) ( <i>p</i> -value)	151.69 (0.000)	5.76 (0.000)	51.72 (0.000)	82.46 (0.000)
Pseudo R <sup>2</sup>	0.077	0.326	0.118	0.198

(\*\*\*)  $p < 0.01$ , (\*\*)  $p < 0.05$ , (\*)  $p < 0.1$ . Numbers in parentheses are standard errors.

Fear of failure was also positive and a significant predictor in models 1 and 3 for the risk aversion degree and risk-averse variables, respectively, which indicates that the higher the level of fear of failure, the higher degree of risk aversion, which is confirmation of our Hypothesis 4.

In model 2, we considered risk lovers, and we found that this model offered a good fit with the data and a significant improvement over the first model ( $\chi^2$  (9) = 50.76,  $p < 0.0001$ , pseudo R<sup>2</sup> = 0.33). Among the predictor variables, entrepreneurial innovation was significantly and positively associated with the risk lover type ( $\beta = 1.39$ , SE = 0.47,  $p < 0.05$ ). This indicates that the higher the perception of entrepreneurs as being responsible for new innovations, technologies, and products, the higher is their willingness to take on additional risk by starting a business, which is confirmation of our Hypothesis 5.

The third probit regression specification (model 3) included, in addition to the full set of predictors, the risk type. The model had a good fit with the data and offered a significant improvement over the first model ( $\chi^2$  (9) = 51.72,  $p < 0.0001$ , pseudo R<sup>2</sup> = 0.12).

#### 4.4. Structural Equation Modeling (SEM) Estimation

We tested the four models using SEM with exogenous variables: gender, age, age<sup>2</sup>, entrepreneurial education, entrepreneurial innovation, country support, subjective norms, self-efficacy, and fear of failure. Endogenous variables included risk aversion degree (RA) in model 1, risk lover in model 2, risk neutral in model 3, and risk averse in model 4.

The direct and indirect path coefficients are given in Table 3. The standardized parameter estimates for this model were all significant at the 1 percent significance level. The *p*-value of the chi-square ( $\chi^2$ ) for all models was less than 0.0001, which indicates the non-significance of the absolute fit index at the 1 percent significance level, which was the



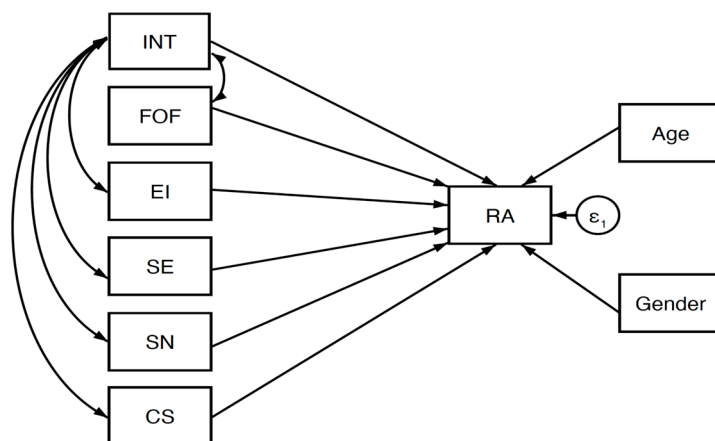
expected outcome for model fit. Moreover, the model’s coefficient of determination  $R^2$  indicates that the models were valid and explained reliably the variations in the risk models.

**Table 3.** Direct effect estimates for the SEM model.

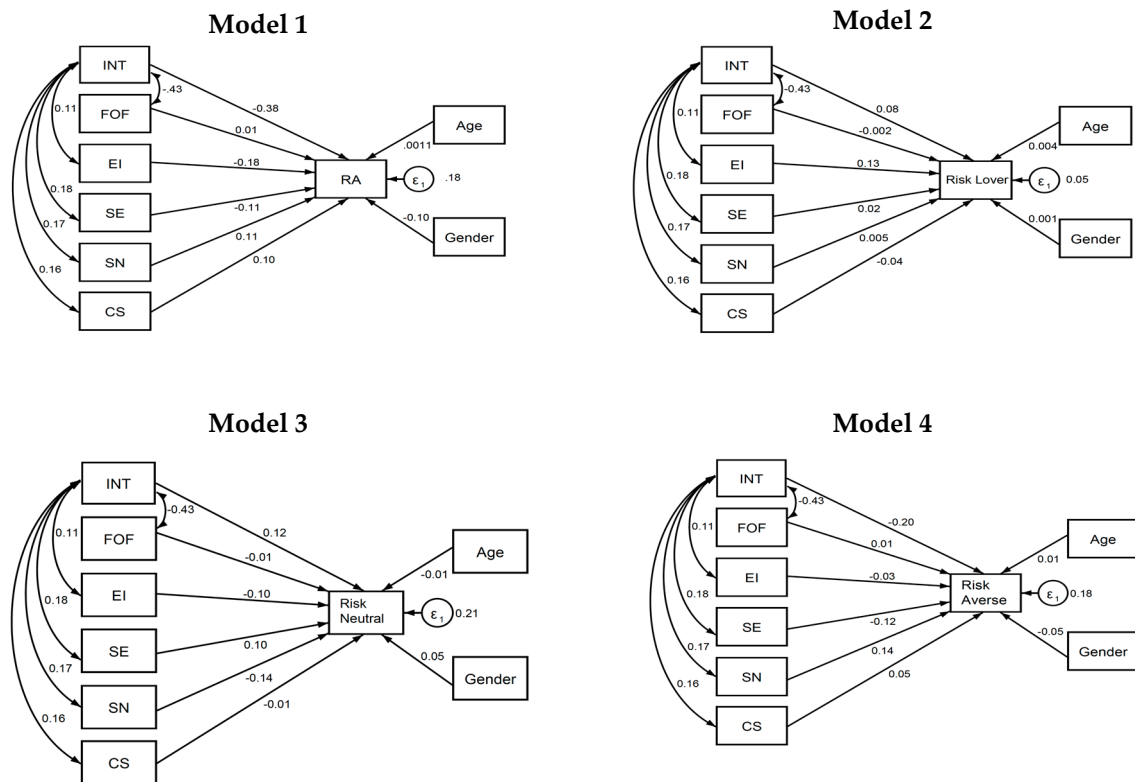
Variables	Model 1 Risk Aversion Degree	Model 2 Risk Lover	Model 3 Risk Neutral	Model 4 Risk Averse
Entrepreneurial Intention (INT)	−0.38 *** (0.06)	0.08 *** (0.03)	0.12 ** (0.06)	−0.20 *** (0.06)
Fear of Failure (FOF)	0.01 *** (0.001)	−0.002 ** (0.001)	−0.005 *** (0.001)	0.01 *** (0.001)
Entrepreneurial Innovation (EI)	−0.18 ** (0.08)	0.13 *** (0.04)	−0.10 (0.08)	−0.03 (0.07)
Self-Efficacy (SE)	−0.11 ** (0.05)	0.02 (0.03)	0.10* (0.05)	−0.12 ** (0.05)
Subjective Norms (SN)	0.11 (0.07)	0.01 (0.04)	−0.14 * (0.08)	0.14 ** (0.07)
Country Support (CS)	0.10 ** (0.04)	−0.04 * (0.02)	−0.01 (0.04)	0.05 (0.04)
Age	0.001 (0.01)	0.004 (0.004)	−0.01 (0.01)	0.01 (0.01)
Gender	−0.09 (0.07)	0.001 (0.04)	0.05 (0.08)	−0.05 (0.07)
Constant	3.87 *** (0.26)	−0.57 *** (0.14)	1.32 *** (0.28)	0.25 (0.26)
Baseline vs. saturated	$\chi^2(8) = 152.48$ $p = 0.000$	$\chi^2(8) = 52.96$ $p = 0.000$	$\chi^2(8) = 48.51$ $p = 0.000$	$\chi^2(8) = 79.37$ $p = 0.000$
Coefficient of determination ( $R^2$ )	CD = 0.375	CD = 0.151	CD = 0.139	CD = 0.215

(\*\*\*)  $p < 0.01$ , (\*\*)  $p < 0.05$ , (\*)  $p < 0.10$ . Numbers in parentheses are standard errors.

The path analysis in the SEM which was used to analyze the models’ hypotheses is presented in Figure 2, followed by the path analysis for the four models 1, 2, 3, and 4 in Figure 3.



**Figure 2.** Research models with hypotheses.



**Figure 3.** The path analysis output for Risk Aversion Degree (Models 1 to 4).

Based on Figure 3 and Table 3, it can be seen that the entrepreneurial intention variable was the most important factor that impacted the risk aversion degree, as it had a very strong and highly significant negative effect on the risk aversion degree ( $\beta = -0.38$ ,  $p < 0.01$ ). Thus, this result provides support for Hypothesis 1. Moreover, self-efficacy and entrepreneurial innovation both had negative and significant effects on the risk aversion degree, with coefficients of 0.11 and 0.18, respectively. Furthermore, fear of failure and country support were both positive and significant factors in the risk aversion degree.

For model 2, it could be seen that entrepreneurial innovation was the most important factor that affected the risk lover variable, as it had a very strong and highly significant positive effect ( $\beta = 0.13$ ,  $p < 0.01$ ). The second factor was entrepreneurial intention, with a positive and significant coefficient of ( $\beta = 0.08$ ,  $p < 0.01$ )

Furthermore, country support was a negative and significant factor for risk lover, with a coefficient of ( $\beta = 0.04$ ,  $p < 0.10$ ). Thus, the higher the country's support, the less risk lovers are willing to start a business, as they feel that country support lowers the risk in their investments, and therefore leads to lower returns. The results were in direct contrast to this in model 4 for the risk-averse type.

For model 3, it could be seen that the subjective norms variable was the most important factor that affected the risk-neutral type as it had a very strong and highly significant negative coefficient ( $\beta = -0.14$ ,  $p < 0.10$ ). The second most important impact on the risk-neutral type came from the entrepreneurial intention variable as it had a positive and significant coefficient of ( $\beta = 0.12$ ,  $p < 0.10$ ). Additionally, self-efficacy was a positive and significant factor for the risk-neutral type, with a coefficient of ( $\beta = 0.10$ ,  $p < 0.10$ ), while the fear of failure was a negative and significant factor, with a coefficient of ( $\beta = -0.005$ ,  $p < 0.01$ ).

## 5. Discussion

The transformation of intention into action can be influenced by the perception of obstacles and barriers, as evidenced by [18] and confirmed in Hypothesis 1 of this study, which predicted that people with high scores in entrepreneurial intention have low scores

in risk aversion. Uncertainty in obtaining expected returns is an aspect that is part of the entrepreneurial process and can also be seen as a facilitator of action, since people come to see the career option as a promising opportunity.

As described in the theoretical part of this study, life is uncertain by nature, and people must act without knowing the results of their actions. However, to some extent, this fear or risk avoidance causes people to choose safety, without taking irrational risks—that is, the risk is calculated. Within this uncertainty, there are some regularities that provide clues to determine how to act depending on the situation—for example, performing market research and business feasibility analysis, testing the business before broadly entering the market (prototyping), and designing business models, among other actions. It is important to reaffirm that the person must value the business as important to activate these positive feelings. In particular, if the person does not believe that the opportunity is important, he/she does not care about the possible consequences, and, in this case, he/she does not experience this fear or aversion to risk.

This viewpoint is supported by the effectuation approach [34], in which the entrepreneur does not need to possess a finished project and that processes can be resolved and executed in short cycles, assuming acceptable risks. This contrasts the causation approach, which requires a structured plan from start to finish before experimentation. Effectuation presumes experimentation, since innovative ideas are also more predisposed to risk, and research shows that entrepreneurs have risk taking as a more latent characteristic than non-entrepreneurs [34,35].

Regarding Hypothesis 2, which was also confirmed, potential entrepreneurs who perceive high support from the country are also able to accept a higher degree of risk. Institutional support has been an important predictor of entrepreneurial intention and the explanation lies in the values of a collectivist culture, which does not encourage self-sufficiency but rather supports the context of the search for new and alternative resources [36].

In the Asian context, especially in Sri Lanka, Qatar, and Malaysia, students highlight some barriers, such as a lack of financial support, negative attitudes towards entrepreneurship, and a lack of ideas, creativity, and capacity to take risks [37]. There is a prevalent collectivist culture in Asia, which justifies the importance of contextual support to enable potential entrepreneurial students to take risks in a more cautious way—for example, receiving government incentives, tax reduction, infrastructure and logistics policies, and support in managerial training, among other actions.

Risk aversion was negatively related to self-efficacy—that is, the greater the self-efficacy in a potential entrepreneur, as is the case of students, the lower the risk aversion. The reason for this lies in the self-perception of entrepreneurial competence, self-confidence, and a positive attitude towards the career, as these are aspects that mitigate fear and/or encourage action. This confirmatory result of Hypothesis 3 is also supported by other studies on entrepreneurial self-efficacy or, in other words, perceived behavioral control, in which both constructs make use of the individual's perceived ability to perform a behavior (or sequence of behaviors), perceive the viability of their ideas, and envision success in their choices [9].

As evidenced by Moraes et al.'s study [38], a person with high self-efficacy for a given task will expend more effort for a longer period, persist under setbacks, accept higher goals, take more risks, and develop better plans and strategies to achieve good performance in this task. Therefore, the greater the belief that students have in their abilities, the greater their likelihood of turning an idea into a business.

Fear of failure was positively correlated with risk aversion—that is, the higher the level of fear of failure, the greater the degree of risk aversion, as predicted and confirmed by Hypothesis 4. As the study by Nefzi [39] showed, the fear trait has a strong relationship with the perception of risk, and this relationship is mediated by cognitive dimensions, such as the perception of certainty. Risk aversion varies between entrepreneurs and non-entrepreneurs, but, generally, more risk-tolerant people undertake more tasks and have a lower fear of failure [4]. However, it is important to emphasize that the students in

this research were more willing to bear uncertainties that involved strategic risk, and this scenario may result from the context in which they were considered, in which the possibility of governmental and institutional support was seen in a favorable and encouraging way.

Regarding the last hypothesis, which considered the relationship between the level of innovative entrepreneurial mindset and risk taking, the result was also positive, confirming that the higher the level of an innovative entrepreneurial mindset, the greater the willingness to take additional risks to start a business. This finding is also convergent with the design thinking approach, which is a tool that has been widely explored in recent times when it comes to innovation, experimentation, and business modeling [35], as it facilitates innovative thinking, seeking to materialize an idea through steps such as ideation, testing, and execution. Design thinking can be considered an action-oriented way of thinking and contributes to risk mitigation as the potential entrepreneur tests their idea before launching it widely in the market. This perspective is also supported by the effectuation approach.

## 6. Conclusions and Policy Implications

Pointing to the unknown is a typical characteristic of inventive minds, resulting in the creative ability to solve problems, and the educational environment is a promising context in which to develop this type of behavior. Students showed that entrepreneurial education attenuates the fear of failure and risk, as it strengthens the deconstruction of career paradigms, provides experience with business processes, and increases access to information that leads to the achievement of goals and ambitions.

This study concluded that UAE students are risk-averse when (a) they do not receive government support, (b) they have a perception of low self-efficacy, (c) they are afraid of failure, and (d) they perceive considerable obstacles and barriers. In addition, it is concluded that it is necessary to stimulate creativity and an innovative mindset among students.

Risk management can be addressed in the context of entrepreneurial education through, for example, the offer of the discipline of entrepreneurship, the promotion of workshops, participation in practical activities, and business modeling, among other actions. In agreement with [1], providing the appropriate environment to allow potential entrepreneurs to develop their skills to efficiently deal with uncertainty is critical if we wish to increase the positive role of entrepreneurs in economies.

It should be noted that testing an idea—that is, prototyping—has been an interesting alternative to mitigate risks, as it is an innovative means for students to experience entrepreneurial situations and processes before entering the market in reality. Future studies may deepen our understanding of the relationship between risk aversion and business modeling.

It is important for policymakers in the UAE to promote youth entrepreneurship by providing the needed governmental and institutional resources and easing the obstacles that they face [40] University teaching and incubation should also emphasize design thinking to mitigate risk and reduce the degree of fear of failure. Finally, a well-developed strategy with wide and encouraging support from the public and private sectors and educational institutions will enhance young people's entrepreneurial intention and encourage them to accept a higher degree of risk, which is an important element of innovation.

**Author Contributions:** L.S. initiated the project, supervised data collection, developed the methods, helped in the data analysis, and drafted the results. M.A. guided the entrepreneurship indicators and the instruments used to assess them, in addition to performing the data analysis. A.d.S.M.F. wrote the discussion and conclusion sections. A.M.R.-R.G. and J.L.P. wrote the introduction and literature review and drafted the hypotheses. All authors have read and agreed to the published version of the manuscript.

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**Data Availability Statement:** The datasets analyzed during the current study are available from the corresponding author on reasonable request.

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## Appendix A Defining Variables

**Table A1.** Risk Aversion.

Question	Variable Name
I am not a risk taker	R1
The entrepreneurial risk is not for me	R2
I cannot tolerate financial uncertainty	R3
It is too risky to start my own business	R4
I do not like to work in changing circumstances	R5
Entrepreneurship does not require taking risks	R6
I need job security	R7
I do not want to be responsible for the enterprise and its employees	R8

**Table A2.** Entrepreneurial Intention.

Question	Variable Name
I want to start my own business	I1
I prefer to work for a large company, for better career prospects (reversed)	I2
I seriously consider entrepreneurship as a career option	I3
I can earn more money working for someone else (reversed)	I4
I would become an entrepreneur if a suitable opportunity appeared	I5
I have many ideas for business ventures	I6
I am constantly alert to business opportunities	I7

**Table A3.** Entrepreneurial Innovation.

Question	Variable Name
Entrepreneurs are almost always inventors	EI1
Entrepreneurs Enjoy seeing a technology or an invention go out as a product/service into the world	EI2
My interactions with people in different situations allow me to gain information	EI3
Technological changes are sources of entrepreneurial opportunities because they make it possible for me to do things in more productive ways	EI4
Entrepreneurship requires taking risks	EI5
Entrepreneurs are rarely busy with current tasks that keeps them from learning and trying new things	EI6

**Table A3.** *Cont.*

Question	Variable Name
Entrepreneurs do not prefer working alone	EI7
Entrepreneur has the ability to change the way people think about the world	EI8
Entrepreneurs are largely responsible for new innovations, technologies and products	EI9
I have good understanding of intellectual property	EI10

**Table A4.** Self-Efficacy.

Question	Variable Name
I have practical skills for running a business	SE1
My education supports becoming an entrepreneur	SE2
I know market research techniques	SE3
I know about market threats	SE4
I know how to finance a business	SE5
I can prepare a business plan	SE6
I have good understanding of intellectual property	SE7
I understand what is meant by equity finance	SE8
I have many ideas for business ventures	SE9
I am constantly alert to business opportunities	SE10
I need good connections to start a new business	SE11

**Table A5.** Subjective Norms.

Question	Variable Name
My family and close friends support entrepreneurs	SN1
My local community supports entrepreneurs	SN2
An entrepreneur has the chance to be independent, his/her own master	SN3
My income level is better as an entrepreneur than in a paid work	SN4
As an entrepreneur the quality of life is better than if I would work in a paid job	SN5
As an entrepreneur I can make independent decisions	SN6
Entrepreneurship affects the country's economy positively	SN7
Entrepreneurship increases job opportunities in the country	SN8
Entrepreneurs have a positive image within society and the community	SN9
Entrepreneurial opportunities are integral parts of the social, political, and demographic changes of the population	SN10
Entrepreneur often makes a difference in the world	SN11
An entrepreneur holds an esteemed position in society	SN12
Entrepreneurship is an honorable profession	SN13
Has the ability to change the way people think about the world	SN14

**Table A6.** Country Support.

Question	Variable Name
The UAE is an excellent country to start a business	CS1
My local community supports entrepreneurs	CS2
It is easy to raise the money needed to start a new business in the UAE	CS3
Assistance is easily available in the country to help start a new business	CS4
The government offers many programs to help people start new businesses	CS5

**Appendix B Reliability and Validity Analysis***Appendix B.1 Risk Aversion***Table A7.** Pearson Correlations.

Variable	R1	R2	R3	R4	R5	R6	R7	R8
R1	1.00							
R2	0.14 <sup>+</sup>	1.00						
R3	0.02	0.59 <sup>*</sup>	1.00					
R4	−0.15 <sup>*</sup>	0.34 <sup>*</sup>	0.35 <sup>*</sup>	1.00				
R5	0.41 <sup>*</sup>	−0.09	−0.21 <sup>*</sup>	−0.23 <sup>*</sup>	1.00			
R6	0.22 <sup>*</sup>	−0.10	−0.26 <sup>*</sup>	−0.28 <sup>*</sup>	0.16 <sup>*</sup>	1.00		
R7	−0.07	0.31 <sup>*</sup>	0.47 <sup>*</sup>	0.40 <sup>*</sup>	−0.28 <sup>*</sup>	−0.31 <sup>*</sup>	1.00	
R8	0.15 <sup>*</sup>	0.66 <sup>*</sup>	0.53 <sup>*</sup>	0.33 <sup>*</sup>	−0.09	−0.08	0.25 <sup>*</sup>	1.00

(<sup>\*</sup>)  $p < 0.01$ , (<sup>+</sup>)  $p < 0.05$ .

**Table A8.** Factor loadings (pattern matrix) and unique variances.

Variable	F1	F2	F3	F4	F5	F6	F7	Uniqueness
R1	−0.07	0.69	0.25	0.13	0.10	−0.05	−0.01	0.43
R2	0.73	0.35	−0.17	−0.04	−0.02	0.10	−0.03	0.30
R3	0.77	0.09	0.06	0.12	−0.24	0.01	0.04	0.32
R4	0.57	−0.18	0.07	−0.22	0.23	0.02	0.02	0.54
R5	−0.34	0.53	0.26	−0.23	−0.07	0.05	0.01	0.48
R6	−0.34	0.32	−0.25	0.21	0.16	0.06	0.03	0.65
R7	0.62	−0.21	0.35	0.19	0.11	0.02	−0.01	0.41
R8	0.68	0.36	−0.23	−0.08	0.05	−0.11	0.00	0.33

LR test: independent vs. saturated:  $\chi^2(28) = 678.32$ , Prob >  $\chi^2 = 0.0000$ .

**Table A9.** Kaiser-Meyer-Olkin measure of sampling adequacy.

Variable	kmo
R1	0.55
R2	0.75
R3	0.80
R4	0.84

**Table A9.** *Cont.*

Variable	kmo
R5	0.66
R6	0.76
R7	0.78
R8	0.75
Overall	0.75

Scale reliability (alpha) coefficient: 0.72.

### Appendix B.2 Entrepreneurial Intention (INT)

**Table A10.** Pearson Correlations.

Variable	I1	I2	I3	I4	I5	I6	I7
I1	1.00						
I2	−0.15 *	1.00					
I3	0.50 *	−0.19 *	1.00				
I4	−0.18 *	0.33 *	−0.27 *	1.00			
I5	0.48 *	−0.21 *	0.43 *	−0.18 *	1.00		
I6	0.52 *	−0.26 *	0.48 *	−0.33 *	0.40 *	1.00	
I7	0.43 *	−0.15 *	0.48 *	−0.28 *	0.39 *	0.62 *	1.00

(\*)  $p < 0.01$ .

**Table A11.** Factor loadings (pattern matrix) and unique variances.

Variable	Factor1	F2	F3	F4	F5	F6	Uniqueness
I1	0.70	0.26	−0.22	−0.16	−0.07	−0.04	0.36
I2	−0.34	0.47	0.18	0.02	−0.10	−0.05	0.62
I3	0.68	0.08	−0.09	0.11	−0.17	0.08	0.48
I4	−0.42	0.44	−0.01	−0.03	0.13	0.07	0.61
I5	0.60	0.12	−0.26	0.13	0.16	−0.03	0.51
I6	0.80	−0.03	0.24	−0.21	0.07	0.03	0.26
I7	0.73	0.08	0.33	0.17	0.04	−0.02	0.32

LR test: independent vs. saturated:  $\chi^2(21) = 617.57$  Prob >  $\chi^2 = 0.0000$ .

**Table A12.** Kaiser-Meyer-Olkin measure of sampling adequacy.

Variable	kmo
I1	0.82
I2	0.75
I3	0.87
I4	0.80
I5	0.86
I6	0.80
I7	0.80
Overall	0.82

Scale reliability (alpha) coefficient: 0.79.



## Appendix B.3 Entrepreneurial Innovation

Table A13. Pearson Correlations.

Variable	EI1	EI2	EI3	EI4	EI5	EI6	EI7	EI8	EI9	EI10
EI1	1.00									
EI2	0.35 *	1.00								
EI3	0.29 *	0.69 *	1.00							
EI4	0.35 *	0.53 *	0.56 *	1.00						
EI5	0.21 *	0.43 *	0.44 *	0.62 *	1.00					
EI6	-0.23 *	-0.12 +	-0.12 +	-0.10 +	-0.15 *	1.00				
EI7	-0.32 *	-0.17 *	-0.15 *	-0.22 *	-0.16 *	0.47 *	1.00			
EI8	0.40 *	0.53 *	0.50 *	0.39 *	0.30 *	-0.12 *	-0.19 *	1.00		
EI9	0.54 *	0.49 *	0.47 *	0.50 *	0.42 *	-0.19 *	-0.24 *	0.46 *	1.00	
EI10	0.20 *	0.30 *	0.24 *	0.22 *	0.26 *	-0.22 *	-0.17 *	0.30 *	0.37 *	1.00

(\*)  $p < 0.01$ , (+)  $p < 0.05$ .

Table A14. Factor loadings (pattern matrix) and unique variances.

Variable	F1	F2	F3	F4	F5	F6	F7	F8	F9	Uniqueness
EI1	0.57	-0.27	0.34	0.23	-0.19	0.00	0.07	0.06	0.04	0.38
EI2	0.75	0.22	0.07	-0.24	-0.03	0.00	-0.04	0.14	-0.03	0.30
EI3	0.75	0.28	-0.01	-0.30	-0.11	-0.14	0.01	-0.08	0.02	0.23
EI4	0.74	0.21	-0.29	0.22	-0.15	0.05	-0.07	-0.02	0.08	0.23
EI5	0.62	0.16	-0.38	0.18	0.11	0.04	0.11	0.02	-0.06	0.38
EI6	-0.30	0.60	0.21	0.17	-0.04	0.10	-0.09	-0.01	-0.03	0.45
EI7	-0.37	0.57	0.14	0.07	0.16	-0.09	0.11	0.03	0.06	0.46
EI8	0.64	0.05	0.24	-0.14	0.03	0.21	0.07	-0.07	-0.01	0.46
EI9	0.74	-0.07	0.22	0.25	0.14	-0.16	-0.05	-0.05	-0.06	0.28
EI10	0.43	-0.13	0.03	-0.05	0.43	0.05	-0.06	0.01	0.06	0.60

LR test: independent vs. saturated:  $\chi^2(45) = 1109.23$ , Prob >  $\chi^2 = 0.0000$ .

Table A15. Kaiser-Meyer-Olkin measure of sampling adequacy.

Variable	kmo
EI1	0.81
EI2	0.86
EI3	0.84
EI4	0.84
EI5	0.83
EI6	0.66
EI7	0.72
EI8	0.91
EI9	0.87
EI10	0.86
Overall	0.83

Scale reliability (alpha) coefficient: 0.82.

## Appendix B.4 Self-Efficacy

Table A16. Pearson Correlations.

Variable	SE1	SE2	SE3	SE4	SE5	SE6	SE7	SE8	SE9	SE10	SE11
SE1	1.00										
SE2	0.41 *	1.00									
SE3	0.06	0.05	1.00								
SE4	0.07	0.06	0.65 *	1.00							
SE5	0.07	0.07	0.67 *	0.61 *	1.00						
SE6	0.12 +	0.15 *	0.61 *	0.57 *	0.68 *	1.00					
SE7	−0.05	−0.14 +	0.27 *	0.23 *	0.34 *	0.32 *	1.00				
SE8	−0.16 *	−0.20 *	0.28 *	0.19 *	0.37 *	0.24 *	0.46 *	1.00			
SE9	−0.08	−0.05	0.33 *	0.26 *	0.35 *	0.39 *	0.39 *	0.34 *	1.00		
SE10	−0.14 +	−0.19 *	0.32 *	0.2 **	0.27 *	0.28 *	0.43 *	0.44 *	0.62 *	1.00	
SE11	−0.26 *	−0.12 +	0.13 +	0.09	0.21 *	0.13 +	0.41 *	0.25 *	0.37 *	0.43 *	1.00

(\*)  $p < 0.01$ , (+)  $p < 0.05$ .

Table A17. Factor loadings (pattern matrix) and unique variances.

Variable	Factor1	F2	F3	F4	F5	F6	F7	F8	F9	F10	Uniqueness
SE1	−0.05	0.53	0.46	0.19	−0.12	−0.11	0.10	−0.12	−0.01	−0.01	0.42
SE2	−0.06	0.51	0.42	−0.03	0.16	0.15	0.05	0.17	0.00	0.01	0.48
SE3	0.72	0.33	−0.18	−0.09	−0.07	−0.11	0.14	0.08	−0.04	−0.07	0.28
SE4	0.63	0.37	−0.21	−0.09	0.01	−0.18	0.07	0.06	0.08	0.06	0.36
SE5	0.79	0.34	−0.17	0.08	0.11	0.20	0.05	−0.18	0.03	0.00	0.14
SE6	0.72	0.38	0.00	−0.05	0.03	0.04	−0.27	0.01	−0.11	0.01	0.24
SE7	0.60	−0.29	0.15	0.37	0.15	−0.21	−0.12	0.02	0.02	−0.01	0.32
SE8	0.55	−0.31	−0.07	0.36	−0.16	0.20	0.09	0.11	0.00	0.01	0.39
SE9	0.63	−0.24	0.28	−0.22	−0.12	0.07	−0.11	0.00	0.14	−0.03	0.37
SE10	0.64	−0.44	0.25	−0.19	−0.26	−0.03	0.08	−0.03	−0.09	0.03	0.21
SE11	0.43	−0.45	0.14	−0.13	0.44	−0.01	0.13	−0.03	−0.03	0.00	0.37

LR test: independent vs. saturated:  $\chi^2(55) = 1309.88$ , Prob >  $\chi^2 = 0.0000$ .

Table A18. Kaiser-Meyer-Olkin measure of sampling adequacy.

Variable	kmo
SE1	0.59
SE2	0.61
SE3	0.85
SE4	0.86
SE5	0.83
SE6	0.85
SE7	0.84
SE8	0.81
SE9	0.82
SE10	0.78

**Table A18.** *Cont.*

Variable	kmo
SE11	0.76
Overall	0.81

Scale reliability (alpha) coefficient: 0.79.

*Appendix B.5 Subjective Norms***Table A19.** Pearson Correlations.

Var	SN1	SN2	SN3	SN4	SN5	SN6	SN7	SN8	SN9	SN10	SN11	SN12	SN13	SN14
SE1	1.00													
SE2	0.76 *	1.00												
SE3	0.49 *	0.53 *	1.00											
SE4	0.34 *	0.28 *	0.49 *	1.00										
SE5	0.35 *	0.29 *	0.47 *	0.69 *	1.00									
SE6	0.37 *	0.34 *	0.61 *	0.54 *	0.57 *	1.00								
SE7	0.42 *	0.45 *	0.40 *	0.31 *	0.28 *	0.46 *	1.00							
SE8	0.44 *	0.49 *	0.50 *	0.30 *	0.25 *	0.50 *	0.70 *	1.00						
SE9	0.35 *	0.42 *	0.42 *	0.20 *	0.26 *	0.28 *	0.38 *	0.40 *	1.00					
SE10	0.36 *	0.43 *	0.45 *	0.30 *	0.29 *	0.43 *	0.55 *	0.53 *	0.35 *	1.00				
SE11	0.36 *	0.44 *	0.43 *	0.32 *	0.37 *	0.45 *	0.60 *	0.67 *	0.37 *	0.59 *	1.00			
SN12	0.46 *	0.44 *	0.65 *	0.43 *	0.48 *	0.51 *	0.46 *	0.47 *	0.44 *	0.45 *	0.46 *	1.00		
SN13	0.36 *	0.38 *	0.49 *	0.33 *	0.28 *	0.50 *	0.47 *	0.52 *	0.41 *	0.52 *	0.55 *	0.47 *	1.00	
SN14	0.38 *	0.45 *	0.46 *	0.26 *	0.26 *	0.33 *	0.46 *	0.50 *	0.41 *	0.57 *	0.63 *	0.41 *	0.52 *	1.00

(\*)  $p < 0.01$ .**Table A20.** Factor loadings (pattern matrix) and unique variances.

Var	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	Uniq
SN1	0.66	-0.01	0.55	-0.15	0.03	-0.05	0.07	-0.05	-0.10	-0.10	0.10	0.01	0.00	0.20
SN2	0.69	-0.15	0.57	-0.10	0.06	-0.06	-0.02	0.04	0.04	0.11	-0.11	-0.02	0.01	0.13
SN3	0.76	0.21	0.11	0.30	-0.18	-0.10	-0.21	0.03	0.09	0.00	0.00	-0.01	-0.02	0.18
SN4	0.57	0.54	-0.09	-0.13	0.09	-0.04	0.04	-0.01	0.15	-0.15	-0.07	-0.02	0.01	0.29
SN5	0.59	0.63	-0.07	-0.13	0.22	0.14	0.00	0.04	-0.04	0.09	0.03	0.04	-0.01	0.15
SN6	0.70	0.32	-0.18	-0.04	-0.22	-0.20	0.06	0.04	-0.08	0.14	0.07	-0.03	0.01	0.26
SN7	0.71	-0.24	-0.14	-0.26	-0.16	0.14	0.07	-0.12	0.09	0.03	0.02	-0.07	-0.01	0.27
SN8	0.76	-0.29	-0.14	-0.21	-0.25	0.04	-0.08	0.12	0.05	-0.07	0.03	0.07	0.01	0.18
SN9	0.55	-0.12	0.10	0.24	0.01	0.27	0.15	0.14	0.08	0.06	0.01	0.01	0.01	0.50
SN10	0.68	-0.21	-0.16	0.03	0.11	-0.08	0.03	-0.22	0.05	0.09	-0.04	0.07	0.00	0.38
SN11	0.75	-0.25	-0.27	-0.13	0.19	0.02	-0.15	0.10	-0.16	-0.01	-0.07	-0.03	0.00	0.18
SN12	0.72	0.15	0.04	0.23	-0.12	0.21	-0.06	-0.16	-0.15	-0.06	-0.03	-0.01	0.01	0.29
SN13	0.69	-0.13	-0.17	0.19	-0.01	-0.15	0.25	0.06	-0.07	-0.08	-0.06	0.00	-0.01	0.34
SN14	0.67	-0.28	-0.10	0.16	0.33	-0.08	-0.06	0.00	0.08	-0.03	0.13	-0.03	0.01	0.30

LR test: independent vs. saturated:  $\chi^2(91) = 2517.04$  Prob >  $\chi^2 = 0.0000$ .

**Table A21.** Kaiser-Meyer-Olkin measure of sampling adequacy.

Variable	kmo
SN1	0.84
SN2	0.84
SN3	0.91
SN4	0.86
SN5	0.81
SN6	0.91
SN7	0.92
SN8	0.90
SN9	0.94
SN10	0.95
SN11	0.90
SN12	0.93
SN13	0.94
SN14	0.92
Overall	0.90

Scale reliability (alpha) coefficient: 0.92.

#### Appendix B.6 Country Support

**Table A22.** Pearson Correlations.

Var	CS1	CS2	CS3	CS4	CS5
CS1	1.00				
CS2	0.76 *	1.00			
CS3	0.38 *	0.51 *	1.00		
CS4	0.53 *	0.66 *	0.74 *	1.00	
CS5	0.59 *	0.67 *	0.64 *	0.80 *	1.00

(\*)  $p < 0.01$ .

**Table A23.** Factor loadings (pattern matrix) and unique variances.

Var	F1	F2	F3	F4	Uniq
CS1	0.74	0.45	-0.05	0.02	0.25
CS2	0.84	0.31	0.13	-0.01	0.18
CS3	0.72	-0.34	0.11	0.04	0.35
CS4	0.90	-0.29	-0.01	-0.04	0.11
CS5	0.86	-0.10	-0.16	0.01	0.23

LR test: independent vs. saturated:  $\chi^2(10) = 1096.96$ , Prob >  $\chi^2 = 0.0000$ .

**Table A24.** Kaiser-Meyer-Olkin measure of sampling adequacy.

Variable	kmo
CS1	0.77
CS2	0.80
CS3	0.84
CS4	0.78
CS5	0.85
Overall	0.81

Scale reliability (alpha) coefficient: 0.89.

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