

Exploring the Influence of Environmental, Social, and Individual Factors on the Entrepreneurial Intentions of Emirati University Students.

Appendix 1.

VARIABLES CONSTRUCTION

Intention (INT):

| 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 |

Attitude (ATT):

| Question | Variable name |
|--|---------------|
| Entrepreneurship provides an individual the opportunity for financial independence | A1 |
| Entrepreneurs May improve one's quality of life | A2 |
| Entrepreneurs Raises one's standard of living. | A3 |
| Entrepreneurs are comfortable taking risks. | A4 |
| Entrepreneurial opportunities are essential elements of my everyday life. | A5 |
| Entrepreneurs are largely responsible for new innovations, technologies and products | A6 |
| I would like to utilize my education in my own enterprise. | A7 |
| As an entrepreneur I can take responsibility for my work. | A8 |
| I would become an entrepreneur, if a suitable opportunity appeared | A9 |
| Entrepreneurship is interesting and challenging | A10 |

Subjective Norms (SN):

| Question | Variable name |
|---|---------------|
| My family and close friends support entrepreneurs (1-5) | 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 frequently makes a difference in the world | SN11 |
| An entrepreneur holds an esteemed position in society (1-5) | SN12 |
| Entrepreneurship is an honorable profession | SN13 |
| Has the ability to change the way people think about the world | SN14 |

Self-Efficacy (SE):

| Question | Variable name |
|---|---------------|
| I have no practical skills for running a business (reversed) | SE1 |
| My education does not support becoming an entrepreneur (reversed) | SE2 |
| I know market research techniques | SE3 |
| I know about market threats | SE4 |
| I know how to finance a business | SE5 |
| I am able to 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 |

Obstacles - Fear-of-Failure- (OBT):

| Question | Variable name |
|---|---------------|
| I fear that I will fail if I start a new business | O1 |
| Personal financial instability | O2 |
| Financing an enterprise is too expensive | O3 |
| Entrepreneurship takes all of the time, and there is not enough time left for the family or my own hobbies. | O4 |
| Need for job security | O5 |
| Current economic atmosphere not conducive | O6 |
| I have no practical skills for running a business | O7 |
| As an entrepreneur I cannot develop myself enough | O8 |
| I do not want to be responsible for the enterprise and its employees. | O9 |
| My education does not support becoming an entrepreneur | O10 |

University Support -University Opportunity Feasibility- (US):

| Question | Variable name |
|---|---------------|
| The university offers mentorship on how to start a business | US1 |

| | |
|--|------|
| The university offers small finances to encourage entrepreneurship | US2 |
| The university interacts highly with businesses to encourage entrepreneurial activities | US3 |
| The university seeks private sector financial support for students' entrepreneurs | US4 |
| Entrepreneurial or business related examples are included in classes | US5 |
| The university encourages entrepreneurship across all majors | US6 |
| The university offers support programs to students to start a business | US7 |
| The university offers Entrepreneurship education to students. | US8 |
| The university offers a wide range of training programs | US9 |
| I am aware of programs offered at the university to help and support students to start a business | US10 |
| I believe now is the best time to think about starting a business | US11 |
| The university increased science and technology examples taught in class to help generate new business ideas | US12 |
| The university provides platforms to show case students businesses | US13 |
| The university is doing well in encouraging entrepreneurial activities among students | US14 |
| Do you think that the education you are gaining at university enhances your entrepreneurship skills ? | US15 |

Country Support -Country Opportunity Feasibility- (CS):

| 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 2. Factor Analysis, Sampling adequacy and Cronbach's Alpha

Intention (INT):

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> $\chi^2 = 0.0000$

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

Attitude (ATT):

Factor loadings (pattern matrix) and unique variances

| Variable | Factor1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 | F9 | Uniqueness |
|----------|---------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| A1 | 0.75 | -0.46 | -0.06 | 0.04 | -0.09 | 0.16 | -0.07 | 0.04 | 0.01 | 0.18 |
| A2 | 0.79 | -0.46 | -0.07 | -0.11 | -0.02 | -0.03 | 0.12 | -0.04 | -0.03 | 0.12 |
| A3 | 0.76 | -0.52 | -0.14 | 0.11 | 0.08 | -0.14 | -0.05 | 0.01 | 0.01 | 0.10 |
| A4 | 0.38 | -0.06 | 0.38 | 0.12 | 0.14 | 0.14 | 0.03 | -0.02 | -0.01 | 0.65 |
| A5 | 0.63 | 0.13 | 0.33 | 0.11 | -0.10 | -0.09 | -0.08 | -0.06 | -0.01 | 0.43 |
| A6 | 0.61 | 0.08 | 0.38 | -0.11 | 0.02 | -0.07 | 0.06 | 0.07 | 0.02 | 0.46 |
| A7 | 0.75 | 0.38 | -0.10 | 0.11 | -0.25 | 0.01 | 0.05 | 0.03 | -0.01 | 0.21 |
| A8 | 0.79 | 0.34 | -0.10 | -0.11 | 0.15 | -0.02 | -0.08 | 0.04 | -0.03 | 0.20 |
| A9 | 0.68 | 0.38 | -0.24 | 0.19 | 0.14 | 0.02 | 0.07 | -0.02 | 0.02 | 0.27 |
| A10 | 0.82 | 0.22 | -0.07 | -0.24 | -0.02 | 0.06 | -0.03 | -0.06 | 0.03 | 0.20 |

LR test: independent vs. saturated: $\chi^2(45) = 2017.75$ Prob> $\chi^2 = 0.0000$

Kaiser-Meyer-Olkin measure of sampling adequacy

| Variable | kmo |
|----------|------|
| A1 | 0.89 |
| A2 | 0.85 |

| | |
|---------|------|
| A3 | 0.83 |
| A4 | 0.90 |
| A5 | 0.93 |
| A6 | 0.92 |
| A7 | 0.90 |
| A8 | 0.89 |
| A9 | 0.88 |
| A10 | 0.90 |
| Overall | 0.88 |

Scale reliability (alpha) coefficient: 0.89

Subjective Norms (SN):

Factor loadings (pattern matrix) and unique variances

| Variable | Factor1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 | F9 | F10 | F11 | F12 | F13 | Uniqueness |
|----------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| 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> $\chi^2 = 0.0000$

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

Self-Efficacy (SE):

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: $\chi^2(55) = 1309.88$, $\text{Prob} > \chi^2 = 0.0000$

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 |

| | |
|---------|------|
| SE11 | 0.76 |
| Overall | 0.81 |

Scale reliability (alpha) coefficient: 0.79

Obstacles (OBT):

Factor loadings (pattern matrix) and unique variances

| Variable | Factor1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 | F9 | Uniqueness |
|----------|---------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| O1 | 0.54 | -0.03 | 0.31 | -0.20 | 0.10 | 0.14 | 0.04 | -0.02 | 0.01 | 0.54 |
| O2 | 0.62 | -0.46 | 0.17 | 0.03 | -0.05 | -0.18 | 0.02 | 0.08 | -0.01 | 0.33 |
| O3 | 0.73 | -0.52 | -0.10 | -0.16 | 0.16 | -0.08 | 0.00 | -0.05 | -0.01 | 0.13 |
| O4 | 0.72 | 0.16 | -0.25 | -0.08 | -0.14 | 0.13 | 0.10 | 0.00 | -0.03 | 0.33 |
| O5 | 0.63 | -0.46 | -0.05 | 0.18 | -0.20 | 0.00 | 0.01 | -0.06 | 0.02 | 0.32 |
| O6 | 0.61 | -0.09 | -0.25 | 0.04 | 0.17 | 0.12 | -0.11 | 0.06 | 0.02 | 0.50 |
| O7 | 0.64 | 0.07 | 0.22 | 0.23 | 0.02 | 0.17 | -0.06 | -0.01 | -0.02 | 0.45 |
| O8 | 0.66 | 0.53 | -0.02 | 0.06 | 0.09 | -0.19 | -0.08 | -0.05 | -0.01 | 0.23 |
| O9 | 0.70 | 0.41 | 0.06 | -0.18 | -0.21 | -0.04 | -0.08 | 0.02 | 0.01 | 0.25 |
| O10 | 0.58 | 0.39 | -0.01 | 0.12 | 0.12 | -0.06 | 0.18 | 0.02 | 0.02 | 0.45 |

LR test: independent vs. saturated: $\chi^2(45) = 1378.47$ Prob> $\chi^2 = 0.0000$

Kaiser-Meyer-Olkin measure of sampling adequacy

| Variable | kmo |
|----------|------|
| O1 | 0.90 |
| O2 | 0.83 |
| O3 | 0.81 |
| O4 | 0.90 |
| O5 | 0.86 |
| O6 | 0.91 |
| O7 | 0.92 |
| O8 | 0.82 |
| O9 | 0.85 |
| O10 | 0.89 |
| Overall | 0.86 |

Scale reliability (alpha) coefficient: 0.86

University Support (US):

Factor loadings (pattern matrix) and unique variances

| Variable | Factor1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 | F9 | F10 | F11 | F12 | F13 | F14 | Uniqueness |
|----------|---------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|------------|
|----------|---------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|------------|

| | | | | | | | | | | | | | | | |
|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| US1 | 0.82 | -0.10 | -0.26 | 0.08 | 0.03 | 0.21 | 0.06 | 0.13 | -0.13 | 0.01 | -0.04 | -0.02 | 0.01 | 0.00 | 0.16 |
| US2 | 0.77 | 0.50 | -0.14 | -0.01 | -0.15 | 0.01 | -0.05 | 0.10 | -0.02 | -0.08 | 0.07 | -0.01 | 0.00 | -0.02 | 0.10 |
| US3 | 0.82 | -0.11 | -0.09 | 0.21 | -0.08 | 0.09 | -0.23 | -0.12 | -0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.02 | 0.18 |
| US4 | 0.76 | 0.42 | 0.13 | 0.27 | 0.01 | 0.01 | 0.01 | -0.01 | 0.13 | 0.03 | -0.07 | 0.02 | 0.00 | 0.00 | 0.14 |
| US5 | 0.79 | -0.09 | -0.09 | 0.22 | 0.22 | -0.23 | 0.10 | 0.01 | -0.01 | 0.03 | -0.02 | -0.02 | 0.02 | -0.01 | 0.19 |
| US6 | 0.80 | -0.11 | -0.14 | -0.15 | 0.07 | -0.19 | -0.14 | 0.14 | 0.03 | -0.07 | -0.04 | 0.01 | -0.02 | 0.02 | 0.22 |
| US7 | 0.86 | 0.06 | -0.07 | -0.12 | -0.03 | -0.03 | 0.06 | -0.06 | -0.10 | 0.18 | -0.04 | 0.02 | -0.03 | -0.01 | 0.18 |
| US8 | 0.86 | -0.21 | -0.14 | -0.06 | 0.23 | 0.12 | -0.02 | -0.10 | 0.10 | -0.06 | 0.07 | 0.02 | -0.01 | -0.02 | 0.10 |
| US9 | 0.82 | 0.07 | 0.18 | -0.27 | 0.02 | -0.02 | -0.12 | 0.02 | 0.05 | 0.13 | 0.04 | -0.03 | 0.03 | 0.00 | 0.18 |
| US10 | 0.70 | 0.21 | -0.15 | -0.19 | -0.03 | -0.01 | 0.18 | -0.16 | 0.03 | -0.07 | 0.00 | -0.02 | 0.00 | 0.02 | 0.34 |
| US11 | 0.39 | 0.16 | 0.31 | -0.04 | 0.26 | 0.15 | 0.05 | 0.09 | -0.05 | -0.02 | 0.03 | 0.03 | 0.00 | 0.01 | 0.62 |
| US12 | 0.78 | -0.06 | 0.24 | 0.03 | -0.07 | -0.13 | 0.00 | -0.08 | -0.18 | -0.09 | 0.03 | 0.03 | 0.01 | -0.01 | 0.26 |
| US13 | 0.79 | -0.26 | 0.32 | 0.10 | -0.13 | 0.01 | 0.08 | 0.04 | 0.05 | 0.00 | 0.07 | -0.04 | -0.03 | 0.00 | 0.16 |
| US14 | 0.87 | -0.26 | 0.11 | -0.09 | -0.18 | 0.08 | 0.06 | 0.03 | 0.07 | -0.06 | -0.13 | 0.02 | 0.02 | -0.01 | 0.09 |
| US15 | 0.19 | -0.14 | -0.18 | 0.07 | -0.14 | -0.03 | 0.11 | 0.09 | 0.07 | 0.07 | 0.12 | 0.05 | 0.02 | 0.01 | 0.84 |

LR test: independent vs. saturated: $\chi^2(105) = 3785.03$ Prob> $\chi^2 = 0.0000$

Kaiser-Meyer-Olkin measure of sampling adequacy

| Variable | kmo |
|----------|------|
| US1 | 0.95 |
| US2 | 0.89 |
| US3 | 0.96 |
| US4 | 0.91 |
| US5 | 0.94 |
| US6 | 0.96 |
| US7 | 0.97 |
| US8 | 0.94 |
| US9 | 0.95 |
| US10 | 0.95 |
| US11 | 0.92 |
| US12 | 0.97 |
| US13 | 0.93 |
| US14 | 0.94 |
| US15 | 0.91 |
| Overall | 0.94 |

Scale reliability (alpha) coefficient: 0.94

Country Support (CS):

Factor loadings (pattern matrix) and unique variances

| Variable | Factor1 | F2 | F3 | F4 | Uniqueness |
|----------|---------|-------|-------|-------|------------|
| 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> $\chi^2 = 0.0000$

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