The Study of Assessing Youths' Restaurant Entrepreneurship Competency: The Development and Examination of the Inventory

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Abstract

This study aims to explore the construction and examination of the questionnaire. A qualitative and quantitative method was combined and implied in this study. In the qualitative phase, the in-depth interviews of experts had applied for item development at first. The Delphi technique had used for item modification and alignment. In the quantitative phase, EFA had employed for initial construction validity examination. Hereafter, the CFA in structural equation modeling had implemented for validity and reliability test. Based on this study, a well-constructed instrument for assessing youths' restaurant entrepreneurship competency had developed for further implementation of entrepreneur education and inspire youths' entrepreneur potential. The literature on restaurant entrepreneurship competency highlighted a competency and the relationship between the executives of small restaurant companies; the development of the new venture also gained significant attention in the hospitality industry. Therefore, restaurant talents should gain restaurant entrepreneurship competency from the education system. The findings contribute to the understanding of the main attributes of restaurant entrepreneurship competency in the context of Taiwanese practitioners.

Table 1. Summary of related Entrepreneurship measurement tools.

Researcher(s)	Instrument (items)	Sub-domains (items)	Objects
Wang (2014).	Entrepreneurial	Risk-taking (3)	244 China-based
	Orientation (16)	Innovativeness (3)	electronics
		Pro-activeness (3)	manufacturers.
		Environmental	
		Turbulence (4) New	
		Product Success (3)	
Bezzina (2010).	Entrepreneurial	Need for achievement (2)	120 Maltese citizens.
, ,	Characteristics	Locus of Control (2)	
	Questionnaire (16).	Ambiguity Tolerance (2)	
	• , ,	Self-Confidence (2)	
		Creativity/Innovativeness	
		(2) Risk-Taking	
		Propensity (4)	
		Self-Sufficiency/Freedom	
		(2)	

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Researcher(s)	Instrument (items)	Sub-domains (items)	Objects
Kopycińska, Bernat & Korpysa (2009).	Entrepreneurship Index (10).	Attitudes towards the enterprise (3) Enterprising behavior (4) The assessment of the labor market and climate for entrepreneurship (3).	Multi-country (sample size): Lithuania (601), Latvia (602), Poland (603), Russia (600), Ukraine (601), Hungary (602).
Omenyi, Agu & Odimegwu (2009).	Students Entrepreneurship Readiness Scale (36).	Need achievement readiness (6) New venture/project readiness (5) Endurance readiness (4) Creativity readiness (6) Self-confidence readiness (6) Risk-taking readiness (3) Independence/autonomy readiness (3) Challenge readiness (3)	450 undergraduates from Nigeria.
Liñán & Chen (2006).	The Entrepreneurial Intention Questionnaire (EIQ) (20).	Personal Attraction (5) Perceived Social Norms (3) Self-efficacy (6) Entrepreneurial Intention (6)	Last year university students of business and economics: 400 from Spanish, 133 from Taiwanese.
Mancuso (1974).	Entrepreneur Questionnaire (15).	No sub-dimension.	N/A

Source: Own compilation.

Table 2. Summary of estimated model reliability coefficients.

Items	Unstandardized factor loading	Estimated Standard Error	Coefficients of standardized factor loading	SMC
HEO	HEO	HEO	HEO	HEO
λ_1	1.207	0.073	0.731***	0.534
λ_2	1.251	0.073	0.774***	0.599
λ_3	1.179	0.070	0.749^{***}	0.561
λ_4	1.103	0.071	0.677***	0.458^{a}
λ_5	1.057	0.067	0.690***	0.476^{a}
λ_6	1.000	_	0.639***	0.408^{a}
\mathbf{GEC}	\mathbf{GEC}	\mathbf{GEC}	\mathbf{GEC}	\mathbf{GEC}
λ_1	0.893	0.057	0.600***	0.360^{a}
λ_2	1.088	0.056	0.733***	0.537
λ_3	1.004	0.051	0.740^{***}	0.548
λ_4	1.065	0.054	0.746^{***}	0.557
λ_5	1.000	_	0.759***	0.576
\mathbf{EOC}	EOC	\mathbf{EOC}	EOC	\mathbf{EOC}
λ_1	0.976	0.051	0.778***	0.605
λ_2	1.099	0.055	0.810***	0.656
λ_3	1.018	0.053	0.768***	0.590

Items	Unstandardized factor loading	Estimated Standard Error	Coefficients of standardized factor loading	SMC
$\overline{\lambda_4}$	1.017	0.052	0.786***	0.618
λ_5	0.974	0.052	0.747***	0.558
λ_6	1.000	_	0.693***	0.480^{a}
\mathbf{MER}	\mathbf{MER}	\mathbf{MER}	MER	\mathbf{MER}
λ_1	1.175	0.061	0.765***	0.585
λ_2	1.196	0.058	0.825***	0.681
λ_3	1.229	0.058	0.846^{***}	0.716
λ_4	1.188	0.057	0.818***	0.669
λ_5	1.033	0.055	0.740^{***}	0.548
λ_6	1.000	_	0.701***	0.491^{a}
\mathbf{MEC}	MEC	\mathbf{MEC}	MEC	\mathbf{MEC}
λ_1	0.897	0.041	0.738***	0.545
λ_2	0.974	0.040	0.795***	0.632
λ_3	1.016	0.039	0.837***	0.701
λ_4	0.998	0.039	0.823***	0.677
λ_5	1.021	0.039	0.842***	0.709
λ_6	1.000	_	0.833***	0.694

Note: N=726; a SMC <.50; *** p<.001.

Table 3.

Summary of reliability and validity coefficients.

Factors	Cronbach's α	${\rm CR}~(\rho_{\rm c})$	AVE
HEO	.858	0.860	0.510
GEC	.840	0.841	0.516
EOC	.892	0.894	0.585
MER	.898	0.905	0.615
MEC	.911	0.921	0.660

Note: N=726.

Table 4.

Summary of discriminated validity coefficients.

Pairwise factors	Pairwise factors	Restricted model	Restricted model	Unrestricted model	Unrestricted model	$\Delta \chi^2$
		χ^2	df	χ^2	df	
HEO	GEC	540.230***	44	298.035***	43	242
	VOA	603.174***	54	347.822***	53	255
	MER	719.795***	54	439.849***	53	279
	MEC	516.372***	54	257.575***	53	258
GEC	VOA	512.515***	44	333.576***	43	178
	MER	636.612***	44	373.458***	43	263
	MEC	480.217***	44	217.994***	43	262
VOA	MER	728.205^{***}	54	496.455***	53	231
	MEC	604.305***	54	355.579***	53	248

Pairwise factors	Pairwise factors	Restricted model	Restricted model	Unrestricted model	Unrestricted model	$\Delta \chi^{i}$
MER	MEC	667.528***	54	419.123***	53	248

Note: N=726; *** p<.001.

Table 5.

Summary of goodness-of-fit indexes examination results.

Indexes	Suggested cut-off value	Model A: First-order CFA	Model B: Second-order CFA
χ^2	Near to 1	1518.534	1624.621
df	_	367	372
$\chi^2/\mathrm{d}f$	2.00~5.00 (Tabachnick & Fidell, 2007; Wheaton et al., 1977)	4.138	4.367
GFI	>0.80 (Hair et al., 2010)	0.865	.858
AGFI	>0.80 (Hair et al., 2010)	0.840	.833
NFI	>0.80 (Hair et al., 2010)	0.889	.881
NNFI	>0.80 (Hair et al., 2010)	0.869	.897
CFI	>0.90 (Hair et al., 2010)	0.913	.905
PGFI	>0.50 (Mulaik, 2007)	0.730	.733
PNFI	>0.50 (Mulaik, 2007)	0.803	.807
SRMR	<0.08 (Hu & Bentler, 1999)	0.046	.054
RMSEA	<0.08 (Browne and Cudeck, 1993)	0.066	.068

Note: N=726.

Table 6.

Second-order CFA for research model with sample items.

Sample Items	Mean	Factor loading	R^2
HEO	HEO	HEO	HEC
A1: I like research new things.	3.75	0.732***	0.536
A2.	3.71	0.773***	0.598
A3.	3.68	0.752***	0.566
A4.	3.74	0.674***	0.454
A5.	3.92	0.684***	0.468
A6.	3.59	0.644***	0.415
GEC	GEC	GEC	GEC
B1: I am familiar with computer system and I believe it is helpful to my entrepreneurship.	3.25	0.595***	0.354
B2.	3.17	0.727***	0.529
B3.	3.31	0.743***	0.552
B4.	3.41	0.743***	0.552
B5.	3.33	0.766***	0.58'
EOC	EOC	EOC	EOC
C1: I can deal with marketing via my own media relationships.	3.31	0.781***	0.610

Sample Items	Mean	Factor loading	R^2
C2.	3.40	0.815***	0.664
C3.	3.40	0.771***	0.594
C4.	3.31	0.784***	0.615
C5.	3.35	0.742***	0.551
C6.	2.98	0.686***	0.471
MER	MER	MER	MER
D1: I can build relationship with members in a new joined group.	3.56	0.767***	0.588
D2.	3.42	0.764***	0.584
D3.	3.45	0.843***	0.711
D4.	3.56	0.818***	0.669
D5.	3.68	0.742***	0.551
D.	3.72	0.702***	0.493
MEC	MEC	MEC	MEC
E1: I am willing to put effort in environmental protection.	3.92	0.743***	0.552
E2.	3.93	0.800***	0.640
E3.	3.86	0.840***	0.706
E4.	3.86	0.818***	0.669
E5.	3.83	0.840***	0.706
E6.	3.74	0.727***	0.529

Note: n=726, *** p<.001.

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