

**Development and Validation of a Questionnaire to Measure Social Competencies
for Undergraduate Students**

**Appendix
(DATA SET)**

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Table A1
Demographic characteristics of the participants (N = 955)

Characteristics	Frequency	%
<i>Gender</i>		
Male	191	20.00
Female	764	80.00
<i>Age</i>		
Lower than 19	38	3.98
19	116	12.15
20	111	11.62
21	257	26.91
22	227	23.77
Higher than 22	205	21.47
Non-respondent	1	0.10
<i>GPA</i>		
Lower than 2.00	37	3.76
2.00–2.50	184	19.27
2.51–3.00	275	28.80
3.01–3.50	276	28.90
3.51–4.00	148	15.50
Non-respondent	35	3.70
<i>Major</i>		
Marketing	279	29.21
Business administration/management	309	32.36
Commercial innovation	8	0.85
Accounting	131	13.72
Computer / information	58	6.07
Digital management	10	1.05
Financial	46	4.82
Tourism and Hospitality	6	0.63
Logistic and Supply chain	37	3.87
Mice management	5	0.52
Industrial management	28	2.93
Human resource management	37	3.87
Non-respondent	1	0.10
<i>Year of study</i>		
First-year	237	24.82
Second-year	81	8.48
Third-year	235	24.61

Characteristics	Frequency	%
Fourth-year	391	40.94
Higher fourth-year	11	1.15
<i>Father's education level</i>		
Primary	336	35.18
Secondary	361	37.80
Vocational training	68	7.12
University	160	16.75
Non-respondent	30	3.14
<i>Mother's education level</i>		
Primary	313	32.44
Secondary	388	40.63
Vocational training	62	6.49
University	164	17.17
Non-respondent	28	2.93
<i>Family's average income</i> (1 USD to THB = 33.76, exchange rate as of 20 April 2022)		
Lower than 296.21 USD (10,000.05 THB)	140	14.66
296.21 – 593 USD (10,000.05 – 20,019.68 THB)	380	39.79
594 – 1,185 USD (20,053.44 – 40,005.60 THB)	194	20.31
1,186 – 1,778 USD (40,039.36 – 60,025.28 THB)	108	11.31
1,779 – 2,370 USD (60,059.04 – 80,011.20 THB)	27	2.83
2,371 – 2,745 USD (80,044.96 – 100,030.88 THB)	39	4.08
Higher than 2,745 USD (100,030.88 THB)	28	2.93
Non-respondent	39	4.08

Source. Own research.

Table A2

Summary of previous studies that developed scales to assess social competencies

Author(s)	Country	Methodology				Scale validation /issues		
		Literature review	Framework development	Questionnaire	EFA	CFA	SEM	
Schoon (2009)	Germany	✓		✓				Measuring social competencies, measurement
Sharma (2012)	India			✓				Measuring social and emotional intelligence
Guerra et al. (2014)	USA		✓	✓	✓	✓		Social-emotional skills, The practice model
Aguilar-Raab et	Germany		✓	✓	✓	✓		Measuring social

Author(s)	Country	Methodology		Questionnaire	EFA	CFA	SEM	Scale validation /issues
		Literature review	Framework development					
al. (2015)								relationship, Different social systems Construction and evaluation social system scale
Leganés-Lavall and Pérez-Aldeguer (2016)	Spain			✓	✓	✓	✓	Social competence in higher education questionnaire (CCSES), Interpersonal skills, Intrapersonal skills
Juntorn et al. (2017)	Thailand			✓				The social competence scale
Efthymiou and Konstantinos (2018)	UK			✓				The social competence scale
Handoyo and Rabimann (2018)	Indonesia	✓		✓				Social competencies
Trevisan et al. (2018)	Canada			✓				Multidimensional social competencies scale
Genc and Kozak (2020)	Turkey			✓			✓	Emotional and social competencies scales
Wen et al. (2020)	China			✓	✓	✓		Effects of perceived constraints and negotiation

Author(s)	Country	Methodology			EFA	CFA	SEM	Scale validation /issues
		Literature review	Framework development	Questionnaire				
Xiao et al. (2020)	China			✓			✓	on learned helplessness, scale development Social capital, sleep quality in individuals
Dal Bò et al. (2021)	Italy					✓		Development and initial validation, new scale for social competency assessment
Planas-Lladó et al. (2021)	Spain			✓				An analysis of teamwork based on self and peer evaluation in higher education
Cebolles-Salinas et al. (2022)	Spain			✓		✓		Social networks, emotions, Socio-emotional interaction competencies
Okike (2022)	Nigeria			✓				Social competency on social media
Setyadi et al. (2022)	Indonesia						✓	Social competency, Managerial competency
Heim et al. (2023)	Germany			✓	✓		✓	Measuring informal workplace

Author(s)	Country	Methodology						Scale validation /issues
		Literature review	Framework development	Questionnaire	EFA	CFA	SEM	
Peng et al. (2023)	China						✓	learning outcomes, residency, a validation study Attitude, digital competencies and tool, effect of gender, age and working experiences on influencing factors and ICT integration.

Source. Own research.

Table A3

Descriptive Statistics of SOCS (initial 59 items, N = 955)

Descriptions of the items	Min	Max	M	SD	SK	KU	Variance	Adopted source/ Authors
1. I can assess situations, identify problems and evaluate solutions.	1	5	3.84	0.82	-0.16	-0.51	0.67	Aithal P. and Aithal S. (2020)
2. I recognise the many dimensions of a problem and can determine a root cause.	1	5	3.81	0.82	-0.16	-0.45	0.67	
3. I can solve almost all problems that arise when using digital technology.	1	5	3.87	0.88	-0.48	-0.02	0.78	
4. I work/co-operate well with other students and team leaders.	1	5	4.16	0.82	-0.66	-0.09	0.68	Mardi et al. (2020)
5. I can lead a team work at university or workplace.	1	5	3.68	0.96	-0.31	-0.34	0.93	Pérez-Yus et al. (2020)
6. I have the skills of negotiating/persuading.	1	5	3.73	0.86	-0.21	-0.23	0.75	
7. I care about other people's feelings.	1	5	4.35	0.77	-0.95	0.33	0.59	

Descriptions of the items	Min	Max	<i>M</i>	<i>SD</i>	<i>SK</i>	<i>KU</i>	Variance	Adopted source/ Authors
8. I compliment others' accomplishments.	2	5	4.52	0.72	-1.33	0.89	0.52	Authors
9. I get along with students who are different from myself.	1	5	4.08	0.81	-0.46	-0.42	0.65	
10. I think that helping each other benefits society.	2	5	4.48	0.74	-1.22	-0.53	0.55	Lin and Gao (2020)
11. I listen and ask questions in order to understand instructions and other people's points of view.	1	5	4.14	0.79	-0.54	-0.34	0.63	Mantzouranis et al. (2019)
12. I can speak, listen, read and write English clearly.	1	5	3.06	1.05	0.04	-0.40	1.11	
13. I have a deep understanding of what other people are talking about.	1	5	3.88	0.81	-0.19	-0.56	0.66	Authors
14. I understand others when they disagree with me.	1	5	3.97	0.81	-0.31	-0.41	0.65	
15. When friends have problems, they always talk to me.	1	5	3.99	0.88	-0.71	-0.51	0.77	
16. I can use social media sites to become more sociable.	1	5	4.03	0.86	-0.58	-0.06	0.73	Namazindost and Nasri (2019)
17. I can use social media sites to get information regarding current social events.	1	5	4.23	0.81	-0.77	-0.02	0.66	
18. I can use social media sites for strengthening interpersonal relationships.	1	5	3.95	0.83	-0.42	-0.15	0.69	Authors
19. I prefer using social media sites to attending social gatherings.	1	5	3.78	0.93	-0.49	-0.07	0.87	
20. I can use social media sites to create income jobs.	1	5	3.84	1.00	-0.63	-0.04	1.00	
21. I can act as a mediator in conflict situations.	1	5	3.89	0.88	-0.37	-0.36	0.77	
22. I can deal with conflicts head on.	1	5	3.74	0.85	-0.33	-0.18	0.72	
23. I can deal objectively with team conflicts.	1	5	3.83	0.84	-0.20	-0.51	0.70	
24. I really try to interact positively with people I have to deal with at work.	1	5	4.20	0.81	-0.60	-0.60	0.65	
25. I make sure I take breaks to maintain my strength	1	5	4.14	0.83	-0.68	0.04	0.70	Ramos-Villagrasa et al. (2019)

Descriptions of the items	Min	Max	<i>M</i>	<i>SD</i>	<i>SK</i>	<i>KU</i>	Variance	Adopted source/ Authors
and energy when I'm working hard.								
26. I know my personal strengths and make sure I use them regularly in my work.	1	5	4.11	0.82	-0.47	-0.60	0.66	Authors
27. I am true to my time values.	1	5	4.29	0.81	-0.95	0.52	0.66	
28. I am true to my own values.	1	5	4.37	0.79	-0.99	0.29	0.62	
29. I believe honesty is the basis for trust.	1	5	4.48	0.76	-1.23	0.59	0.57	
30. I always keep my promises.	1	5	4.24	0.80	-0.73	-0.14	0.63	
31. I worked hard in university to improve myself as a person.	1	5	3.97	0.99	-0.77	0.13	0.99	Lisinski ene et al. (2019)
32. I have always felt that my hard work would pay off in the end.	1	5	4.19	0.85	-0.76	0.04	0.71	
33. I have tried to work hard in school so that I could have a better future.	1	5	4.02	0.89	-0.64	0.14	0.79	
34. I decide to do things on the spur of the moment.	1	5	3.88	0.91	-0.54	0.03	0.83	Authors
35. When something is going to affect me, I learn as much about it as I can.	1	5	4.12	0.79	-0.48	-0.40	0.62	
36. If I want something I work hard to get it.	1	5	4.13	0.86	-0.71	-0.05	0.75	
37. I take initiative immediately even when others don't.	1	5	3.88	0.88	-0.31	-0.48	0.78	Tomičić Furjan et al. (2020) Gustanti and Ayu (2021) Tkalac Verčič et al. (2021)
38. Usually, I do more than I am asked to do.	1	5	3.96	0.85	-0.39	-0.36	0.73	
39. I am able to communicate easily and effectively with others.	1	5	3.95	0.85	-0.47	-0.07	0.73	
40. I am feeling more optimistic and positive than usual.	1	5	3.96	0.89	-0.61	-0.16	0.79	Authors
41. Feel more confident about myself today than I usually do.	1	5	3.84	0.91	-0.41	-0.21	0.83	
42. I am able to present my work clearly and confidently.	1	5	3.65	0.95	-0.34	-0.26	0.91	

Descriptions of the items	Min	M a x	<i>M</i>	<i>SD</i>	<i>SK</i>	<i>KU</i>	Variance	Adopted source/ Authors
43. I can speak English in front of the public.	1	5	2.96	1.24	0.01	-0.94	1.54	
44. I always do what is actually voluntary.	1	5	4.20	0.80	-0.65	-0.25	0.64	
45. I am completely responsible for everything that results from my actions.	1	5	4.29	0.79	-0.84	0.10	0.63	
46. I am in full control of what I do.	1	5	4.03	0.85	-0.51	-0.19	0.72	
47. I act calmly in pressured situations.	1	5	3.90	0.94	-0.58	-0.14	0.89	
48. I welcome suggestions for improvements from my team.	1	5	4.28	0.79	-0.75	-0.28	0.62	
49. My moods are predictable.	1	5	3.56	1.12	-0.56	-0.27	1.25	
50. I observe myself.	1	5	4.08	0.81	-0.41	-0.66	0.66	
51. I have had to revisit difficult past experiences.	1	5	4.15	0.84	-0.74	0.13	0.70	
52. I have learnt about myself and how I see the world.	1	5	4.02	0.82	-0.44	-0.26	0.67	
53. I analyse possible solutions and their ramifications quickly to select the most appropriate one.	1	5	3.92	0.84	-0.34	-0.33	0.71	
54. I am able to achieve total focus on the situation to act quickly.	1	5	4.00	0.86	-0.59	0.10	0.74	Mahdi et al. (2020)
55. I quickly decide on the actions to take to resolve the problem.	1	5	3.98	0.82	-0.27	-0.73	0.67	
56. I review processes to see if work can be improved.	1	5	4.08	0.81	-0.56	-0.02	0.66	
57. I prioritise future workloads.	1	5	4.08	0.82	-0.55	-0.15	0.67	Authors
58. I can learn very quickly.	1	5	3.86	0.88	-0.39	-0.16	0.77	
59. I have a clear goal in life.	1	5	4.06	0.90	-0.66	-0.05	0.81	

Source. Own research.

Table A4
EFA Results

Items	Description of the factors and items	Factor Loadings						h^2
		1 (SRS)	2 (REL)	3 (AWR)	4 (TWB)	5 (NET)	6 (COM)	
<i>Factor 1: Self-responsibility skills (SRS) (21 items, SRS1–SRS21)</i>								
SRS1	I review processes to see if work can be	0.655						0.573

Items	Description of the factors and items	Factor Loadings						h ²
		1 (SRS)	2 (REL)	3 (AWR)	4 (TWB)	5 (NET)	6 (COM)	
SRS2	improved. I prioritise future workloads.	0.653						0.592
SRS3	I observe myself.	0.651						0.593
SRS4	I quickly decide on the actions to take to resolve the problem.	0.635						0.589
SRS5	I analyse possible solutions and their ramifications quickly to select the most appropriate one.	0.627						0.605
SRS6	I have learnt about myself and how I see the world.	0.622						0.578
SRS7	I am able to achieve total focus on the situation to act quickly.	0.613						0.584
SRS8	I welcome suggestions for improvements from my team.	0.588						0.567
SRS9	I have had to revisit difficult past experiences.	0.583						0.511
SRS10	I am completely responsible for everything that results from my actions.	0.561						0.609
SRS11	I have a clear goal in life.	0.547						0.445
SRS12	When something is going to affect me, I learn as much about it as I can.	0.534						0.552
SRS13	I act calmly in pressured situations.	0.524						0.439
SRS14	I am in full control of what I do.	0.517						0.502
SRS15	I can learn very quickly.	0.500						0.522
SRS16	I always do what is actually voluntary	0.469						0.549
SRS17	Usually, I do more than I am asked to do.	0.460						0.522
SRS18	Feel more confident about myself today than I usually do.	0.459						0.540
SRS19	I take initiative immediately even when others don't.	0.440						0.480
SRS20	If I want something I	0.413						0.492

Items	Description of the factors and items	Factor Loadings						h ²
		1 (SRS)	2 (REL)	3 (AWR)	4 (TWB)	5 (NET)	6 (COM)	
SRS21	work hard to get it. I am able to communicate easily and effectively with others.	0.407						0.506
<i>Factor 2: Social relationship skills (REL) (8 items, REL22–REL29)</i>								
REL22	I think that helping each other benefits society.		0.745					0.622
REL23	I compliment others' accomplishments.		0.687					0.574
REL24	I care about other people's feelings.		0.632					0.503
REL25	I believe honesty is the basis for trust.		0.575					0.581
REL26	I listen and ask questions in order to understand instructions and other people's points of view.		0.566					0.549
REL27	I can use social media sites to get information regarding current social events.		0.504					0.521
REL28	I get along with students who are different from myself.		0.475					0.524
REL29	I work/co-operate well with other students and team leaders.		0.434					0.501
<i>Factor 3: Self-awareness skills (AWR) (10 items, AWR30–AWR39)</i>								
AWR30	I worked hard in university to improve myself as a person.			0.589				0.501
AWR31	I am true to my time values.			0.585				0.594
AWR32	I decide to do things on the spur of the moment.			0.576				0.524
AWR33	I have tried to work hard in school so that I could have a better future.			0.568				0.527
AWR34	I have always felt like my hard work would pay off in the end.			0.545				0.506
AWR35	I make sure I take breaks to maintain my strength and energy when I'm working			0.545				0.611

Items	Description of the factors and items	Factor Loadings						h ²
		1 (SRS)	2 (REL)	3 (AWR)	4 (TWB)	5 (NET)	6 (COM)	
AWR36	hard. I am true to my own values.			0.520				0.594
AWR37	I know my personal strengths and make sure I use them regularly in my work.			0.477				0.548
AWR38	I really try to interact positively with people I have to deal with at work.			0.467				0.578
AWR39	I always keep my promises.			0.461				0.552
<i>Factor 4: Teamwork-building skills (TWB) (5 items, TWB40–TWB44)</i>								
TWB40	I can lead a team work at university or workplace.				0.694			0.604
TWB41	I can assess situations, identify problems and evaluate solutions.				0.689			0.630
TWB42	I recognise the many dimensions of a problem and can determine a root cause.				0.643			0.585
TWB43	I have the skills of negotiating/persuading.				0.632			0.548
TWB44	I am able to present my work clearly and confidently.				0.449			0.589
<i>Factor 5: Social networking skills (NET) (10 items, NET45–NET54)</i>								
NET45	I prefer using social media sites to attending social gatherings.					0.683		0.593
NET46	I can use social media sites for strengthening interpersonal relationships.					0.677		0.619
NET47	I can use social media sites to become more sociable.					0.641		0.626
NET48	I can use social media sites to create income jobs.					0.539		0.440
NET49	I can act as a mediator in conflict situations.					0.531		0.566
NET50	I can deal objectively with team conflicts.					0.502		0.561
NET51	I understand others what they disagree					0.474		0.515

Items	Description of the factors and items	Factor Loadings						h ²
		1 (SRS)	2 (REL)	3 (AWR)	4 (TWB)	5 (NET)	6 (COM)	
NET52	with me. I have a deep understanding of what other people are talking about.					0.457		0.517
NET53	When friends have problems, they always talk to me.					0.451		0.425
NET54	I can deal with conflicts head on.					0.435		0.535
<i>Factor 6: Communication skills (COM) (4 items, COM55–COM58)</i>								
COM55	I can speak English in front of the public.						0.701	0.721
COM56	My moods are predictable.						0.558	0.364
COM57	I can speak, listen, read and write English clearly.						0.539	0.537
COM58	I am feeling more optimistic and positive than usual.						0.408	0.437
Eigenvalue		22.44	3.48	2.33	1.39	1.32	1.10	-
Explained Variance (%)		38.03	5.89	3.95	2.36	2.24	1.87	-
Cumulative Variance (%)		38.03	43.92	47.87	50.23	52.47	54.34	-
Cronbach's alpha		0.857	0.883	0.867	0.867	0.862	0.912	-

Note. h² = communality.

Source. Own research.

Table A5

CFA Results of the SOCS

Constructs	Items	Factor Loading (unstandardised)	Factor Loading (Standardised)	P-value	Residual Variance	R-Square	CR	AVE
Self-responsibility skills (<i>M</i> = 4.04, <i>SD</i> = 0.59)	SRS1	1.000	0.722	0.000	0.478	0.522	0.94	0.46
	SRS2	1.023	0.733	0.000	0.460	0.540	7	2
	SRS3	0.988	0.713	0.000	0.490	0.510		
	SRS4	1.010	0.725	0.000	0.464	0.536		
	SRS5	1.028	0.718	0.000	0.482	0.518		
	SRS6	1.017	0.729	0.000	0.461	0.539		
	SRS7	1.082	0.738	0.000	0.481	0.519		
	SRS8	0.863	0.643	0.000	0.590	0.410		
	SRS9	0.919	0.645	0.000	0.586	0.414		
	SRS10	0.911	0.675	0.000	0.547	0.453		
	SRS11	0.914	0.598	0.000	0.640	0.360		
	SRS12	0.951	0.708	0.000	0.501	0.499		
	SRS13	0.988	0.616	0.000	0.616	0.384		
	SRS14	0.974	0.673	0.000	0.544	0.456		
	SRS15	0.990	0.665	0.000	0.556	0.444		

Constructs	Items	Factor Loading (unstandardised)	Factor Loading (Standardised)	P-value	Residual Variance	R-Square	CR	AVE
Social relationship skills ($M = 4.30$, $SD. = 0.55$)	SRS16	0.927	0.683	0.000	0.534	0.466	0.86 0	0.43 6
	SRS17	0.987	0.682	0.000	0.531	0.469		
	SRS18	1.010	0.652	0.000	0.562	0.438		
	SRS19	0.963	0.643	0.000	0.583	0.417		
	SRS20	0.932	0.635	0.000	0.596	0.404		
	SRS21	0.954	0.659	0.000	0.561	0.439		
	REL22	1.000	0.694	0.000	0.511	0.489		
	REL23	0.957	0.680	0.000	0.532	0.468		
	REL24	0.992	0.662	0.000	0.565	0.435		
	REL25	0.914	0.621	0.000	0.571	0.429		
Self-awareness skills ($M = 4.14$, $SD. = 0.62$)	REL26	1.058	0.683	0.000	0.556	0.444	0.90 3	0.48 2
	REL27	1.005	0.633	0.000	0.588	0.412		
	REL28	0.999	0.633	0.000	0.615	0.385		
	REL29	1.077	0.670	0.000	0.579	0.421		
	AWR30	1.000	0.608	0.000	0.639	0.361		
	AWR31	0.962	0.715	0.000	0.501	0.499		
	AWR32	0.972	0.644	0.000	0.593	0.407		
	AWR33	0.941	0.640	0.000	0.591	0.409		
	AWR34	0.932	0.665	0.000	0.551	0.449		
	AWR35	1.078	0.780	0.000	0.392	0.608		
Teamwork-building skills ($M = 3.74$, $SD. = 0.69$)	AWR36	0.908	0.696	0.000	0.520	0.480	0.84 0	0.51 2
	AWR37	0.981	0.726	0.000	0.479	0.521		
	AWR38	0.992	0.742	0.000	0.441	0.559		
	AWR39	0.938	0.710	0.000	0.484	0.516		
	TWB40	1.000	0.714	0.000	0.511	0.489		
Social networking skills ($M = 3.89$, $SD. = 0.61$)	TWB41	0.896	0.754	0.000	0.441	0.559	0.89 0	0.44 8
	TWB42	0.865	0.726	0.000	0.483	0.517		
	TWB43	0.889	0.706	0.000	0.501	0.499		
	TWB44	0.936	0.677	0.000	0.538	0.462		
	NET45	1.000	0.623	0.000	0.623	0.377		
	NET46	0.971	0.679	0.000	0.562	0.438		
	NET47	1.008	0.683	0.000	0.530	0.470		
	NET48	0.936	0.544	0.000	0.708	0.292		
	NET49	1.073	0.711	0.000	0.505	0.495		
	NET50	1.065	0.739	0.000	0.460	0.540		
Communication skills ($M = 3.39$, $SD. = 0.76$)	NET51	0.942	0.680	0.000	0.541	0.459	0.68 8	0.36 9
	NET52	0.987	0.707	0.000	0.489	0.511		
	NET53	0.942	0.624	0.000	0.605	0.395		
	NET54	1.001	0.684	0.000	0.503	0.497		
	COM55	1.000	0.773	0.000	0.760	0.240	0.68 8	0.36 9
	COM56	0.483	0.414	0.000	0.828	0.172		
	COM57	0.759	0.691	0.000	0.810	0.190		
	COM58	0.443	0.479	0.000	0.537	0.463		

Source. Own research.

Table A6

Results of the Independent Sample t-test: Comparison of the means of Social Competency Skills Between Males and Females

Social competencies skills	Male <i>M</i>	<i>SD</i>	Female <i>M</i>	<i>SD</i>	t-test	p-value
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Self-responsibility skills (SRS)	3.96	0.60	4.06	0.59	-2.131*	0.033
Social relationship skills (REL)	4.06	0.61	4.16	0.62	-1.987*	0.047
Self-awareness skills (AWR)	3.31	0.79	3.41	0.76	-1.597	0.111
Teamwork-building skills (TWB)	4.19	0.59	4.33	0.54	-3.098**	0.002
Social networking skills (NET)	3.77	0.68	3.74	0.69	0.610	0.542
Communication skills (COM)	3.79	0.62	3.91	0.61	-2.470*	0.014

Note. * $p < .05$; ** $p < .01$.

Source. Own research.

Table A7

The Results of One-Way ANOVA: Comparison of the Means of Social Competency Skills between Family Income

Social competencies' skills	Family income	M	SD	df	F-test	p-value
Self-responsibility skills (SRS)	Lower than 296.21 USD (10,000.05 THB)	4.01	0.58	7	0.378 n.s.	0.916
	296.21 – 593 USD (10,000.05 – 20,019.68 THB)	4.03	0.58			
	594 – 1,185 USD (20,053.44 – 40,005.60 THB)	4.05	0.61			
	1,186 – 1,778 USD (40,039.36 – 60,025.28 THB)	4.03	0.56			
	1,779 – 2,370 USD (60,059.04 – 80,011.20 THB)	4.06	0.61			
	2,371 – 2,745 USD (80,044.96 – 100,030.88 THB)	4.01	0.71			
	Higher than 2,745 USD (100,030.88 THB)	4.19	0.49			
	Non-respondent	4.07	0.62			
Social relationship skills (REL)	Lower than 296.21 USD (10,000.05 THB)	4.30	0.53	7	0.409 n.s.	0.897
	296.21 – 593 USD (10,000.05 – 20,019.68 THB)	4.29	0.55			
	594 – 1,185 USD (20,053.44 – 40,005.60 THB)	4.32	0.58			
	1,186 – 1,778 USD (40,039.36 – 60,025.28 THB)	4.31	0.50			
	1,779 – 2,370 USD (60,059.04 – 80,011.20 THB)	4.25	0.63			
	2,371 – 2,745 USD (80,044.96 – 100,030.88 THB)	4.31	0.64			
	Higher than 2,745 USD (100,030.88 THB)	4.39	0.45			
	Non-respondent	4.31	0.59			
Self-awareness skills (AWR)	Lower than 296.21 USD (10,000.05 THB)	4.13	0.59	7	0.317 n.s.	0.946
	296.21 – 593 USD (10,000.05 – 20,019.68 THB)	4.14	0.62			
	594 – 1,185 USD (20,053.44 – 40,005.60 THB)	4.14	0.62			
	1,186 – 1,778 USD (40,039.36 – 60,025.28 THB)	4.11	0.60			
	Higher than 2,745 USD (100,030.88 THB)					

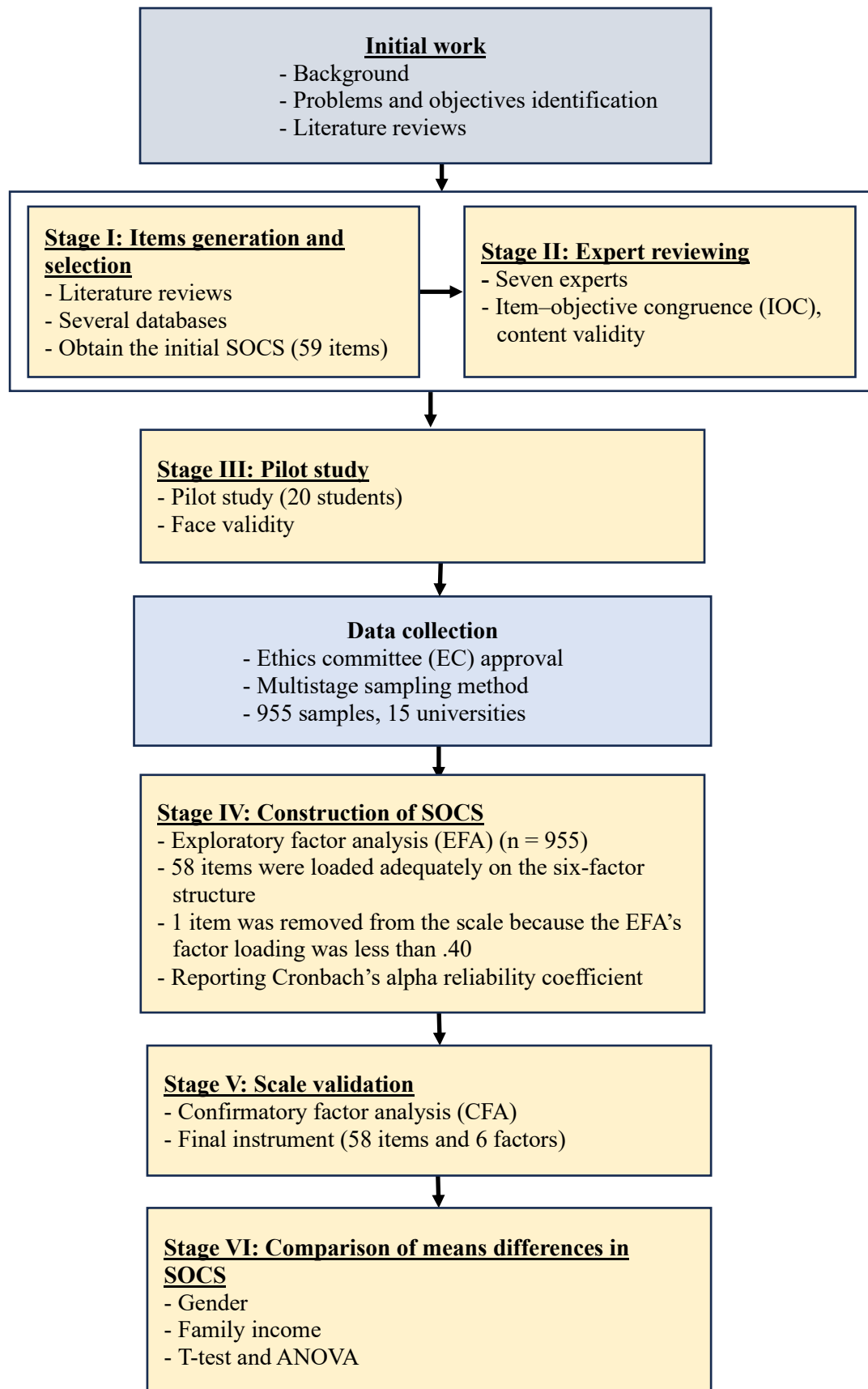
Social competencies' skills	Family income	M	SD	df	F-test	p-value
Teamwork-building skills (TWB)	1,779 – 2,370 USD (60,059.04 – 80,011.20 THB)	4.22	0.59	7	0.174 n.s.	0.990
	2,371 – 2,745 USD (80,044.96 – 100,030.88 THB)	4.13	0.74			
	Higher than 2,745 USD (100,030.88 THB)	4.31	0.48			
	Non-respondent					
	Lower than 296.21 USD (10,000.05 THB)	3.67	0.67			
	296.21 – 593 USD (10,000.05 – 20,019.68 THB)	3.71	0.70			
	594 – 1,185 USD (20,053.44 – 40,005.60 THB)	3.82	0.68			
	1,186 – 1,778 USD (40,039.36 – 60,025.28 THB)	3.73	0.67			
	1,779 – 2,370 USD (60,059.04 – 80,011.20 THB)	3.87	0.64			
	2,371 – 2,745 USD (80,044.96 – 100,030.88 THB)	3.80	0.76			
Social networking skills (NET)	Higher than 2,745 USD (100,030.88 THB)	3.97	0.57	7	1.407 n.s.	0.199
	Non-respondent	3.68	0.67			
	Lower than 296.21 USD (10,000.05 THB)	3.85	0.57			
	296.21 – 593 USD (10,000.05 – 20,019.68 THB)	3.86	0.63			
	594 – 1,185 USD (20,053.44 – 40,005.60 THB)	3.94	0.61			
	1,186 – 1,778 USD (40,039.36 – 60,025.28 THB)	3.89	0.63			
	1,779 – 2,370 USD (60,059.04 – 80,011.20 THB)	3.93	0.64			
	2,371 – 2,745 USD (80,044.96 – 100,030.88 THB)	3.92	0.69			
	Higher than 2,745 USD (100,030.88 THB)	4.07	0.55			
	Non-respondent	3.85	0.56			
Communication skills (COM)	Lower than 296.21 USD (10,000.05 THB)	3.37	0.73	7	0.786 n.s.	0.599
	296.21 – 593 USD (10,000.05 – 20,019.68 THB)	3.39	0.75			
	594 – 1,185 USD (20,053.44 – 40,005.60 THB)	3.42	0.78			
	1,186 – 1,778 USD (40,039.36 – 60,025.28 THB)	3.33	0.81			
	1,779 – 2,370 USD (60,059.04 – 80,011.20 THB)	3.52	0.72			
	2,371 – 2,745 USD (80,044.96 – 100,030.88 THB)	3.44	0.91			
	Higher than 2,745 USD (100,030.88 THB)	3.38	0.91			
	Non-respondent	3.33	0.64			

Note. n.s. = non-significant.

Source. Own research.

Figure A1

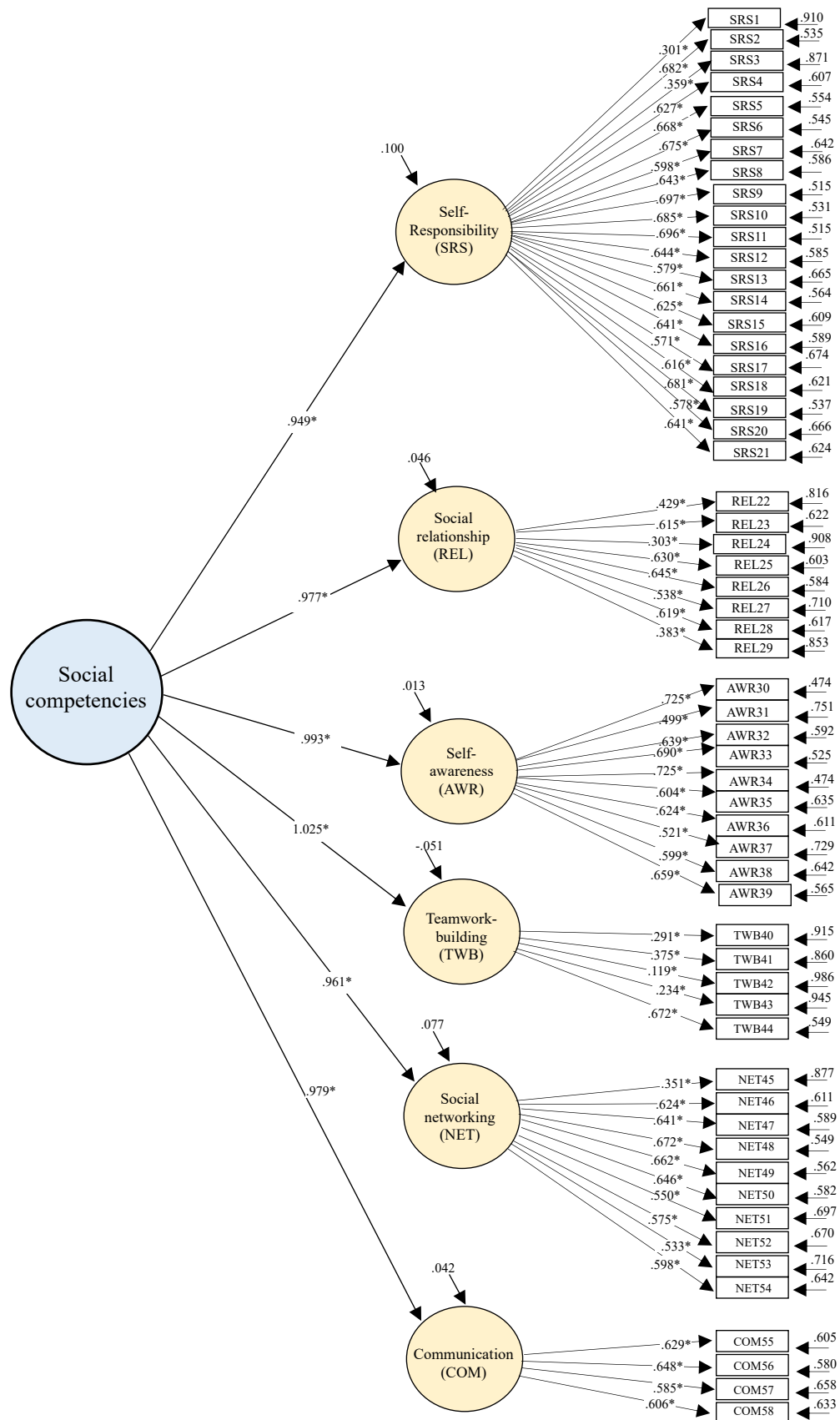
Stages of development and validation of the proposed SOCS



Source. Own research.

Figure A2

The Final Second-Order CFA Model of the SOCS with Standardised Estimates



Source. Own research.

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