



# ACADEMIC COMPETENCES IN RELATION TO APPROACHES TO LEARNING AND CAREER SUCCESS

Tarja Tuononen, PhD student  
Centre for University Teaching and learning  
Supervisors: Anna Parpala and Sari Lindblom



# RESEARCH QUESTIONS

1. How graduates evaluate their academic competences at the time of their graduation?
2. How evaluations of academic competences are related to graduates' approaches to learning?
3. How evaluations of academic competences are related to their career success?

→ A mixed-method study

# LONGITUDINAL DESIGN



- 1023 graduates filled in the HowULearn-questionnaire  
- 89 Master's graduates were interviewed

At the time of graduation

57 of those who were interviewed at the time of their graduation filled in a follow-up questionnaire

After three years of graduation

- Most of the graduates represented the humanities, social sciences and behavioural sciences.



# ACADEMIC COMPETENCES AND APPROACHES TO LEARNING

- The highest scores were in the competences of Seeing different perspectives and Critical thinking and the lowest scores were in Collaboration and communication skills and Developing new ideas.

Competences and approaches to learning n = 1023	Mean Scale 1-5	SD
<i>Academic competences</i>		
1. Applying knowledge	3.71	.96
2. Collaboration and communication skills	3.43	1.08
3. Analysing and structuring information	4.28	.73
<b>4. Seeing different perspectives</b>	<b>4.35</b>	.75
<b>5. Critical thinking</b>	<b>4.35</b>	.76
6. Making arguments and looking for solutions	4.25	.75
7. Developing new ideas	3.61	.96
<i>Approaches to learning</i>		
8. Deep approach	3.81	.68
9. Surface approach	2.21	.76
10. Organised studying	3.56	.76



# COMPETENCES IN RELATION TO LEARNING

Academic competences	1	2	3	4	5	6	7	8	9
1. Applying knowledge									
2. Collaboration and communication skills	0.35								
3. Analysing and structuring information	0.35	0.30							
4. Seeing different perspectives	0.33	0.29	0.63						
5. Critical thinking	0.29	0.24	0.58	0.72					
6. Making arguments and looking for solutions	0.30	0.21	0.56	0.57	0.59				
7. Developing new ideas	0.39	0.33	0.39	0.42	0.45	0.51			
8. Deep approach	0.27	0.10	0.33	0.34	0.36	0.35	0.35		
9. Organised studying	0.20	0.15	0.21	0.15	0.17	0.18	0.15	0.31	
10. Surface approach	-0.28	-0.10	-0.24	-0.18	-0.15	-0.22	-0.23	-0.31	-0.22

Note: All correlations are significant at the level 0.01



# DESCRIPTIONS OF ACADEMIC COMPETENCES

- The graduates provided various qualitatively different evaluations of how their competences had developed during their university studies.
- Most of the graduates described various competences, for example, critical thinking, application of knowledge and collaboration and communication skills → **Rich evaluations of academic competences**

“Well, I think that the studies have developed my competences quite well, for example, my own thinking and my ability to see different perspectives, analyse and bring something new, and also my ability to think critically. All have been developed.”

- Some graduates described only practical skills such as communication skills, language skills and IT-skills. Some had difficulties to describe any competences or they perceived that they had developed no competences during studies. → **Limited evaluations of academic competences**

“Well it is quite limited, or at least it is difficult for me to analyse. Probably basic language skills and IT skills.”

## Phenomenon level

Academic competences:  
 1.1 Detailed analyses of demanding competences  
 1.2 Limited descriptions of practical competences  
 1.3 Difficulties describing competences

1.1 → Rich descriptions (RICH)  
 1.2 + 1.3 → Limited descriptions (LIMITED)

Confidence in success in working life:  
 2.1 High confidence  
 2.2 Low confidence  
 2.3 No confidence

2.1 → High confidence (HIGH)  
 2.2 + 2.3 → Low confidence (LOW)

Usefulness of work experience:  
 3.1 High-level cognitive benefits  
 3.2 Practical benefits  
 3.3 No perceived benefits (BENEFITS)

## Individual level

RICH/HIGH  
 (n = 35)

BENEFITS:

High-level cognitive and practical (14)

High-level cognitive (12)

practical (9)

RICH/LOW  
 (n = 2)

BENEFITS:

practical (2)

LIMITED/HIGH  
 (n = 11)

BENEFITS:

practical (9)

no perceived (2)

LIMITED/LOW  
 (n = 10)

BENEFITS:

practical (7)

no perceived (3)



# ACADEMIC COMPETENCES IN RELATION TO LEARNING

- Rich evaluations of academic competences were related to descriptions of deep study processes.
- Limited evaluations of academic competences were related to surface approach to learning and deep approach to learning.
- Graduates in the Rich group emphasised their own activity in learning competences whereas graduates in the Limited group did not.

“I’ve chosen presentation courses and writing courses and I think that they have been very useful. I have learned writing skills and presentation skills from these courses.”

“Book exams were the easiest way to study. Writing an essay would have required a deep understanding and writing skills.”





# EMPLOYMENT

- Most of the graduates with rich evaluations of competences had more own academic work (72%) whereas 39% the graduates with limited descriptions had own academic work after three years of graduation
- Unemployment had been experienced in both groups
- There was a slight difference in average length of unemployment period among the groups:

	Rich evaluation group			Limited evaluation group		
	M	SD	max	M	SD	max
Average length of unemployment period (months)	7.8	6.4	17	8.9	11.4	32



# JOB SATISFACTION

- There was no statistically significant difference in job satisfaction between Rich and Limited evaluation groups.

Item	Rich evaluation group (n = 29)		Limited evaluation group (n = 28)		t	p
	M	SD	M	SD		
Scale 1-5						
Job satisfaction	4.24	1.09	3.58	1.28	1.93	.059



# CHALLENGES IN WORKING LIFE

- Most of the challenges in working life were related to employment, generic skills and factors related to workplace.
  - There was statistically significant difference in employment ( $X^2 = 7.007$ ,  $df = 1$ ,  $p = .008$ ). Graduates in Limited evaluation group mentioned **employment as a challenge** more often (11 mentions) than graduates in Rich evaluation group (4 mentions).

# REASONS FOR DIFFICULTIES TO FIND EMPLOYMENT

- A total of 52 % (n = 30) of graduates had experienced difficulties to find employment after the graduation.

Items Scale 1-5	Rich evaluation group (N = 12)		Limited evaluation group (N = 18)		t	p
	M	SD	M	SD		
<b>Poor employment situation in field</b>	<b>3.08</b>	<b>1.51</b>	<b>4.39</b>	<b>1.04</b>	<b>-2.82</b>	<b>p &lt;.05*</b>
Lack of work experience	2.92	.10	3.61	1.29	-1.58	p >.05
Inadequate networks	3.17	1.47	3.06	1.39	.21	p >.05
Degree (subjects)	2.92	1.31	3.39	1.09	-1.07	p >.05
Uncertainty of own competences	2.17	1.34	2.94	1.21	-1.65	p >.05
<b>Unclarity of own goals</b>	<b>1.83</b>	<b>1.11</b>	<b>3.11</b>	<b>1.32</b>	<b>-2.75</b>	<b>p &lt;.05*</b>



# REFERENCE

- Tuononen, T., Parpala, A. & Lindblom-Ylänne, S. (2017). The transition from university to working life - An exploration of graduates perceptions of their academic competences. In Higher Education Transitions -Theory and Research. Kyndt, E. Donche, V., Trigwell, K. & Lindblom-Ylänne, S. (eds.) Routledge:Taylor & Francis Group, 238-253.