

過錄編碼簿 (Codebook)

題號	變項名稱	變項說明	選項數值說明	備註
	ID	Participant's number	Continuous number	
	Online	Data collection method	0 – paper survey 1 – online survey	
1	Doctoral students' experience – Faculty mentorship: My mentor ...			
	DEM_impt_01	... creates learning opportunities that increased in complexity over time	Degree of importance: 1 – not at all important 2 – slightly important 3 – important 4 – fairly important 5 – very important	
	DEM_impt_02	... creates opportunities in which I learned to connect theory with practice		
	DEM_impt_03	... provides guidance toward degree completion		
	DEM_impt_04	... provides constructive feedback on my dissertation		
	DEM_impt_05	... gives feedback on my dissertation in a timely manner		
	DEM_impt_06	... promotes my development as a researcher (provides research opportunities)		
	DEM_impt_07	... promotes my development as a teacher (provides teaching opportunities)		
	DEM_impt_08	... promotes my development as a scholar (provides conference / publication opportunities)		
	DEM_impt_09	... provides advice on my research		
	DEM_impt_10	... helped me clarify my research topic		
	DEM_impt_11	... shows enthusiasm for my research topic		
	DEM_impt_12	... considers my personal circumstances		
2	Doctoral students' experience – Intellectual community: A community (students/classmates within the doctoral program) that ...			
	DEC_impt_01	... engages in the lively exchange of ideas	Degree of importance: 1 – not at all important 2 – slightly important 3 – important 4 – fairly important 5 – very important	
	DEC_impt_02	... shares intellectual resources (articles, books, ...)		
	DEC_impt_03	... shares opportunities for professional advancement (information on conference, seminar, ...)		
	DEC_impt_04	... helps develop professional relationships with others in the field or industry (networking)		
	DEC_impt_05	... shares opportunities for scholarship development (co-author, co-presentation, group research)		
	DEC_impt_06	... shares information regarding scholarship/financial aids		

	DEC_impt_07	... values intellectual contribution from new members		
	DEC_impt_08	... nurtures its members' intellectual curiosity		
	DEC_impt_09	... is large enough for members to learn from each other		
	DEC_impt_10	... provide guidance and support for new members/classmates		
3	Doctoral students' experience – Curricular engagement: During the course of my study, I am able to ...			
	DES_impt_01	... learn adequate research methodology techniques	Degree of importance: 1 – not at all important 2 – slightly important 3 – important 4 – fairly important 5 – very important	
	DES_impt_02	... understand theoretical knowledge		
	DES_impt_03	... build my publication skills		
	DES_impt_04	... register in any class according to my interest		
	DES_impt_05	... express my opinions, comments, and give suggestions with regards to the course program		
	DES_impt_06	... build my presentation skills		
	DES_impt_07	... collaborate and work with others		
	DES_impt_08	... expand my professional network		
	DES_impt_09	... enhance my career planning skills		
	DES_impt_10	... practice my teaching skills		
	DES_impt_11	... enhance my communication skills		
	DES_impt_12	... develop my research grant writing skills		
	DES_impt_13	... develop my project management skills		
	DES_impt_14	... understand the ethical norms in doing research		
	DES_impt_15	... enhance my leadership potential		
	DES_impt_16	... better understand the purpose of higher education		
	DES_impt_17	... better understand my school's mission		
	DES_impt_18	... develop my institutional citizenship		
	DES_impt_19	... develop my problem solving skills		
	DES_impt_20	... participate in policy making process		
	DES_impt_21	... develop my negotiation skills		

	DES_impt_22	... develop ethics and integrity		
	DES_impt_23	... balance my priorities		
	DES_impt_24	... motivate for lifelong learning		
	DES_impt_25	... become creative		
	DES_impt_26	... understand how to become an entrepreneur		
4	Doctoral efficacy: I am able to ...			
	efficacy_01	... carry out a research study	Degree of confidence: 1 – not at all confident 2 – slightly confident 3 – confident 4 – fairly confident 5 – very confident	
	efficacy_02	... write manuscript for peer-reviewed publication		
	efficacy_03	... teach disciplinary knowledge to undergraduate students		
	efficacy_04	... apply expertise in addressing practical problems		
	efficacy_05	... work collaboratively with other scholars		
	efficacy_06	... transmit knowledge to a group of students		
	efficacy_07	... communicate with students of different competencies and characteristics		
	efficacy_08	... carry out administrative management tasks		
	efficacy_09	... complete all the required courses		
	efficacy_10	... cope with the competing demands from work, study, and home		
	efficacy_11	... surpass difficult moments in life (positive: marriage, childbirth; negative: illness, death in the family)		
	efficacy_12	... cope with the hours needed in studying		
	efficacy_13	... realize that there are things that I don't know		
	efficacy_14	... have the intelligence to complete the degree		
	efficacy_15	... develop a passion and desire for learning		
	efficacy_16	... finish what I started		
	efficacy_17	... get good grades		
	efficacy_18	... have the support of my family and friends		
5	Attitude towards doctoral education			
	attitude_01	This is a poor time for any person to enroll in a doctoral program in my field (R)	Level of agreement:	

	attitude_02	If I had to do it over again, I would not enroll in a doctoral education (R)	1 – strongly disagree	
	attitude_03	My career is a source of personal strain (R)	2 – disagree	
	attitude_04	Teaching and research are hardly compatible with each other (R)	3 – neutral	
	attitude_05	There are various range of jobs for a doctoral graduate	4 – agree	
	attitude_06	I am satisfied with the expected level of salary for a doctoral graduate	5 – strongly agree	
	attitude_07	Taking up a doctoral education is a very worthwhile investment	(R) – reverse coded	
	attitude_08	Overall, my doctoral education experience is worth the time that I spend		
6	Career ideologies			
	career_01	Higher education is best promoted on the basis of market-demand and user-pays principles	Level of agreement:	
	career_02	Higher education is best promoted on the basis of educational need and academic standards principles	1 – strongly disagree	
	career_03	Universities are first and foremost learning institutions focused on intellectual rigor and scholarship	2 – disagree	
	career_04	Universities are first and foremost business institutions focused on income generation and cost minimization	3 – neutral	
	career_05	The primary purpose of academic work is to encourage scholarship and student learning	4 – agree	
	career_06	The primary purpose of academic work is to generate income via external research grants and industry linkages	5 – strongly agree	
	career_07	Academics need to offer students greater product choice as consumers		
	career_08	Academics need to offer students structured learning focused programs		
7	Graduation requirements: Based on your understanding, before you can graduate you need to ...			
	req_01	... take a prescribed set of courses	0 – no	
	req_02	... write a thesis or dissertation	1 – yes	
	req_03	... receive intensive faculty guidance for your research		
	req_04	... chose your own research topic		
	req_05	... receive a scholarship during your studies		
	req_06	... receive an employment contract (for teaching or research) during your studies		
	req_07	... work at a research center not belonging to school		
	req_08	... work outside the school		

	req_09	... fund your doctoral training by yourself (or family)		
	req_10	... receive training in instructional skills or learned about teaching methods		
	req_11	... involve in research projects with faculty or senior researchers		
	req_12	... write a monograph for your dissertation		
	req_13	... compile book chapters and/or journal articles for your dissertation		
	req_14	... publish an article in a peer-reviewed journal		
	req_15	... present a paper in a conference		
	req_16	... conduct a survey for your data collection		
	req_17	... conduct interviews for your data collection		
	req_18	... pass a comprehensive examination		
8	Dissertation preference: For my dissertation, I am more inclined to do a ...			
	nature_01	Basic (theoretical) or Applied (practice-oriented)	1 - Basic 2 - Applied Missing value – no answer	
	nature_02	Socially-oriented (intended for the betterment of the society) or Commercially-oriented (intended for technology transfer)	1 - Socially-oriented 2 - Commercially-oriented Missing value – no answer	
	nature_03	Local in scope or International in scope	1 - Local 2 - International Missing value – no answer	
	nature_04	Based in one discipline or Interdisciplinary (or multidisciplinary)	1 – Single 2 - Multiple Missing value – no answer	
9	Affiliation: Who is the most influential in deciding on the ...			
	aff_a	... teaching content of the graduate program	1 – mentor	
	aff_b	... research topic of the students	2 – chair	

	aff_c	... academic activities of the graduate program	3 – faculty 4 – students 5 – outside evaluators	
10	Empowerment of doctoral students: How influential are doctoral students in shaping academic policies within the ...			
	empower_01	Graduate program	Degree of likelihood: 1 – rare 2 – unlikely 3 – possible 4 – likely 5 – almost certain	
	empower_02	College		
	empower_03	School		
11	Institutional management: My graduate program has ...			
	mgmt_01	... a competent leader	Level of agreement: 1 – strongly disagree 2 – disagree 3 – neutral 4 – agree 5 – strongly agree	
	mgmt_02	... strong emphasis on the institution's mission		
	mgmt_03	... good communication between management (administration/office staff) and faculty		
	mgmt_04	... a top-down management style		
	mgmt_05	... collegiality in decision-making processes		
	mgmt_06	... a strong teaching performance orientation		
	mgmt_07	... a strong research performance orientation		
mgmt_08	... a cumbersome administrative process			
12	Institutional resource: As I understand, my school ...			
	resource_01	... allocate resources based on the performance of the graduate program (number of publications, grants, ...)	Level of agreement: 1 – strongly disagree 2 – disagree 3 – neutral 4 – agree 5 – strongly agree	
	resource_02	... allocate funding based on the numbers of students		
	resource_03	... consider research quality when hiring new faculty		
	resource_04	... consider teaching quality when hiring new faculty		
	resource_05	... consider practical relevance/applicability of the work done when hiring new faculty		
	resource_06	... consider work experience outside academia (within the industry) when hiring new faculty		

	resource_07	... consider foreign degree when hiring new faculty		
	resource_08	... consider alumni when hiring new faculty		
13	Future career prospect			
	future_iden_01	Teaching only position	Degree of likelihood: 1 – rare 2 – unlikely 3 – possible 4 – likely 5 – almost certain	
	future_iden_02	Research only position		
	future_iden_03	Teaching and research position – more inclined on teaching		
	future_iden_04	Teaching and research position – more inclined on research		
	future_iden_05	Industry		
	future_iden_06	Government		
	future_iden_07	Entrepreneurship (start own business)		
14	Future career preferences: In my future job, I want to ...			
	work_prefer_01	... develop new ideas, processes or products, which are rooted in research	Level of agreement: 1 – strongly disagree 2 – disagree 3 – neutral 4 – agree 5 – strongly agree	
	work_prefer_02	... work independently, while taking responsibility for my actions		
	work_prefer_03	... develop and maintain my professional networks or collaborations		
	work_prefer_04	... effectively plan, manage, and deliver projects		
	work_prefer_05	... work constructively with colleagues		
	work_prefer_06	... have the ability to obtain external funding		
15	Career decisions: My career decision is based on ...			
	career_decision_01	... salary	Level of agreement: 1 – strongly disagree 2 – disagree 3 – neutral 4 – agree 5 – strongly agree	
	career_decision_02	... job security		
	career_decision_03	... career opportunities		
	career_decision_04	... institutional prestige		
	career_decision_05	... having opportunities to learn and enhance my competences		
	career_decision_06	... having personal independence in teaching		
	career_decision_07	... having personal independence in research		
	career_decision_08	... having interest on the job itself		

16	Self-esteem Scale		
	esteem_01	On the whole, I am satisfied with myself	Level of agreement: 1 – strongly disagree 2 – disagree 3 – neutral 4 – agree 5 – strongly agree (R) – reverse coded
	esteem_02	At times I think I am no good at all (R)	
	esteem_03	I feel that I have a number of good qualities	
	esteem_04	I am able to do things as well as most other people	
	esteem_05	I feel I do not have much to be proud of (R)	
	esteem_06	I certainly feel useless at times (R)	
	esteem_07	I feel that I'm a person of worth, at least on an equal plane with others	
	esteem_08	I wish I could have more respect for myself (R)	
	esteem_09	All in all, I am inclined to feel that I am a failure (R)	
esteem_10	I take a positive attitude toward myself		
17	gender	Gender	0 – female 1 – male
18	birth_year	Birth year	Year
19	phd_school_type	Current school type	1 – national/public 2 – private
20	phd_level	Years in doctoral education	Number of years
21	ma_year	Master education year graduate	Year Missing value – no answer
22	ma_same_school	Master education – Same school as now	0 – no 1 – yes
23	ma_taiwan	Master education – Taiwan	0 – no 1 – yes
24	conference_local	Academic Scholarly Performance: Conference local	Numbers or how many
25	conference_intl	Academic Scholarly Performance: Conference international	Numbers or how many
26	paper_chinese	Academic Scholarly Performance: Chinese article	Numbers or how many

27	paper_english	Academic Scholarly Performance: English article	Numbers or how many	
28	book_chinese	Academic Scholarly Performance: Chinese book	Numbers or how many	
29	book_english	Academic Scholarly Performance: English book	Numbers or how many	
30	sole_author	How many are sole authors?	Numbers or how many	
31	field	What is your field of study?	Field of study: 1 - Social Science 2 - Arts and Humanities 3 - Medical 4 - Natural Sciences 5 - Engineering	
32	instructor_lic	Instructor certificate (university level)	0 - no 1 - yes	
33	teacher_lic	Teacher certificate (grade school or high school level)	0 - no 1 - yes	
34	scholarship	Do you currently have a scholarship	0 - no 1 - yes	
35	partner_work	Wife/partner career in academia	0 - no 1 - yes	
36	partner_edu	Wife/partner education level	1 - high school or lower 2 - college or university 3 - master's degree 4 - doctoral degree Missing value - no answer	
37	father_work	Father career in academia	0 - no 1 - yes	
38	father_edu	Father education level	1 - high school or lower	

			2 – college or university 3 – master’s degree 4 – doctoral degree Missing value – no answer	
39	mother_work	Mother career in academia	0 – no 1 – yes	
40	mother_edu	Mother education level	1 – high school or lower 2 – college or university 3 – master’s degree 4 – doctoral degree Missing value – no answer	
41	work_status	Current employment status	1 – full time 2 – part-time 3 – student only	
42	work_employer	Current employment sector	1 – national/public 2 – private Missing value – no answer	
43	work_teaching	Current nature of employment: teaching	0 – no 1 – yes Missing value – no answer	
44	work_research	Current nature of employment: research	0 – no 1 – yes Missing value – no answer	
45	work_admin	Current nature of employment: administrative	0 – no 1 – yes Missing value – no answer	

46	work_others	Current nature of employment: others	0 – no 1 – yes Missing value – no answer	
47	work_fulltime_exp	Total work experiences, since college graduate (in years): Fulltime	Number of years	
48	work_parttime_exp	Total work experiences, since college graduate (in years): Part-time	Number of years	
49	thesis_mentor	Do you have a thesis/dissertation adviser	0 – no 1 – yes	
50	fellow_num	Number of doctoral students that your mentor supervise	Number of individuals Missing value – no answer	
51	proposal	Have you undergone your dissertation proposal	0 – no 1 – yes	
52	work_academic	Desire to work in academia	0 – no 1 – yes	