

# PHILIPPINE GRADUATE TRACER STUDY 4

Melba V. Tutor

Aniceto C. Orbeta, Jr.

James Matthew B. Miraflor

13 February 2020

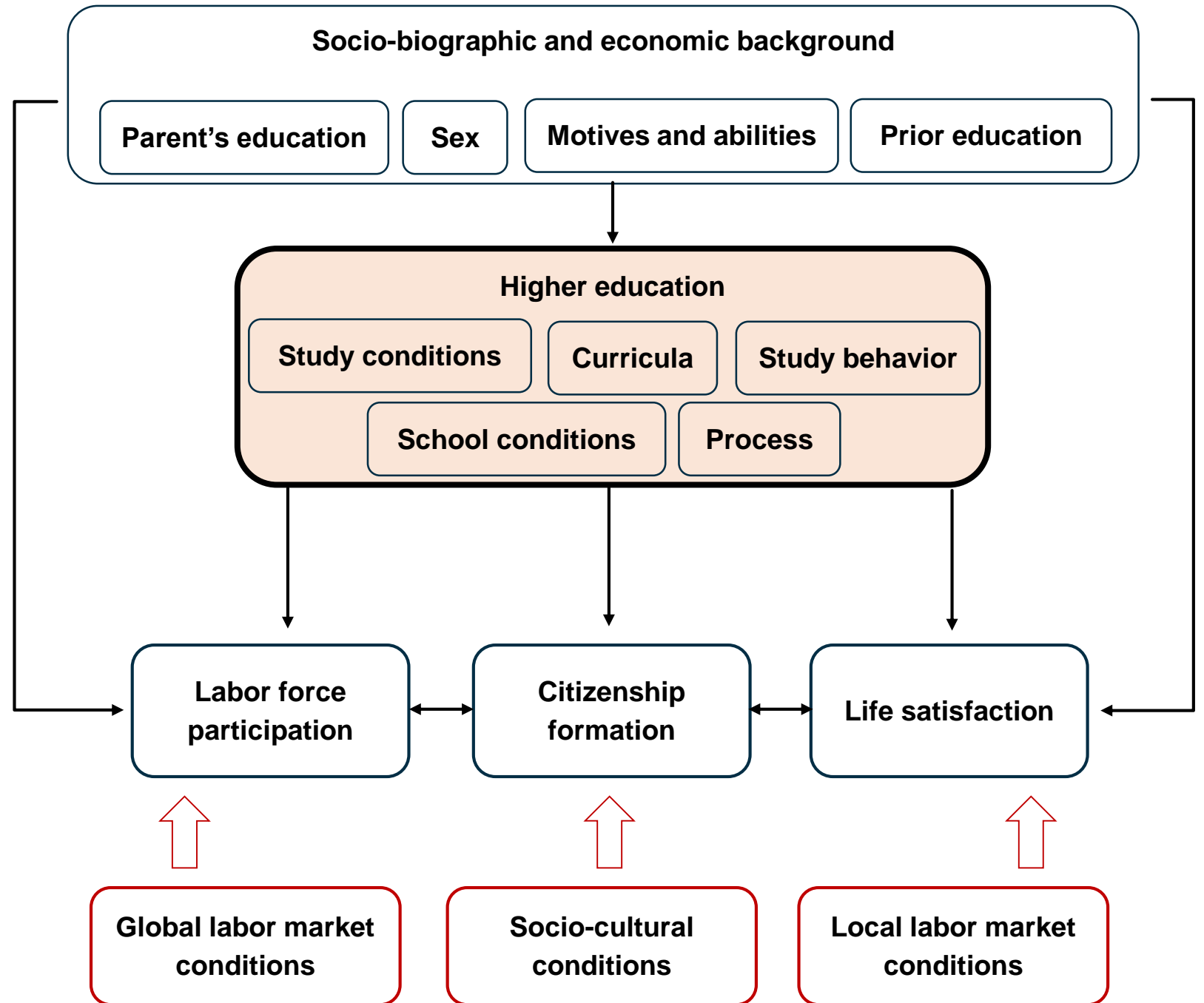
# Outline

- I. Research questions
- II. Conceptual framework
- III. Methodology
- IV. Results

# Primary research questions

- What has been the **college learning experience** of higher education graduates in regard to specific aspects of college life?
- What has been their **experience after college graduation** on the whole and on specific aspects of post-college life?
  - Do they think there is a **mismatch** between what they had learned in college and the work they are doing now or in their first job after college?
- To what extent **does better college experience influence post-college experience?**

# Framework



# Methodology

- AY 2009-2011 graduates; representative at the regional level, with public and private HEI disaggregation
- Total sample size is 35,297
- Face to face interview methodology using structured questionnaire (Graduate personal and family background; College experience; Work Experience; Socio-Political Participation; Life satisfaction)
- GTS management by CHED Regional Offices
- PIDS support

# Data collection

Enumeration Results				
Region	Original sample	Additional sample	Enumerated	
			Frequency	%
<b>PH</b>	35,297	16,362	11,547	32.7
<b>CAR</b>	2,819		355	12.6
<b>1</b>	2,637		1,145	43.4
<b>2</b>	2,126		536	25.2
<b>3</b>	2,059	2,348	429	20.8
<b>4A</b>	2,205		912	41.4
<b>4B</b>	1,224		1	0.1
<b>5</b>	2,057		993	48.3
<b>6</b>	2,093		532	25.4
<b>7</b>	2,855		749	26.2
<b>9</b>	2,051	2,230	1,222	59.6
<b>10</b>	2,297	2,643	1,208	52.6
<b>11</b>	3,529	2,803	1,341	38.0
<b>12</b>	2,517	2,891	536	21.3
<b>NCR</b>	2,619	2,648	278	10.6
<b>CARAGA</b>	2,209	799	1,310	59.3

# RESULTS

# COLLEGE EXPERIENCE



PROGRAM GRADUATED IN

# More than 70% of graduates concentrated in top 15 courses

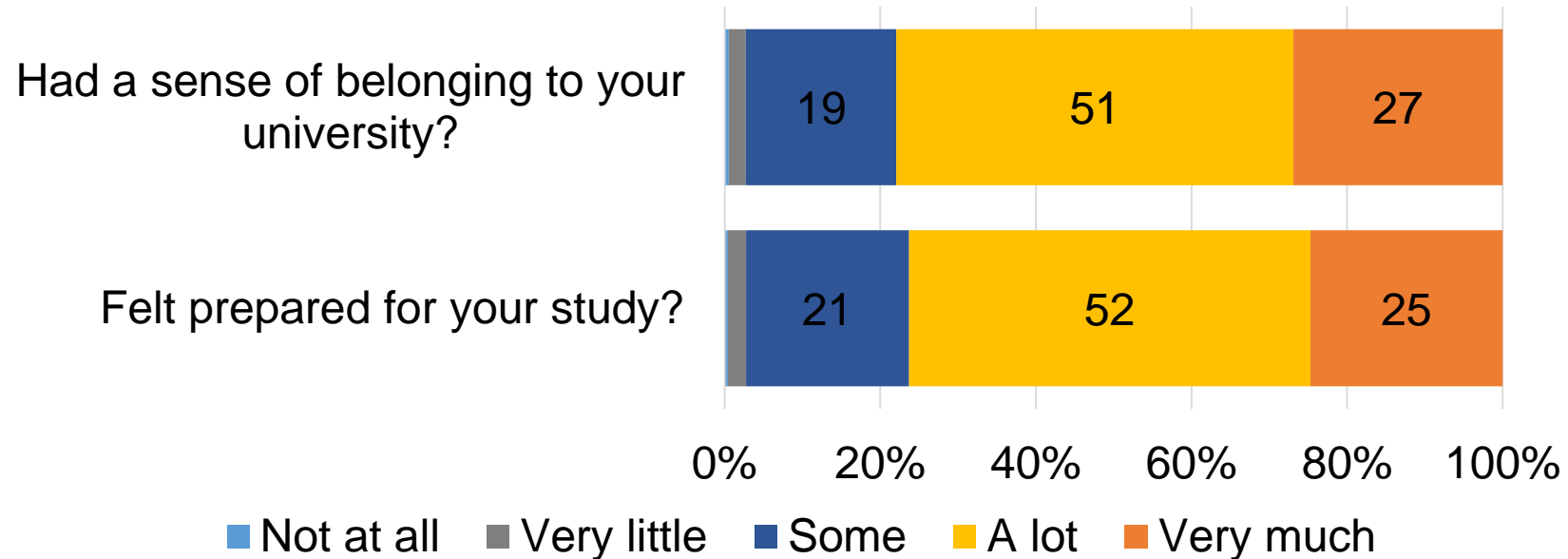
	Female		Male
BS in Nursing	24.6	BS in Nursing	17.6
Bachelor of Elementary Education	11.7	BS in Criminal Justice/Criminology	9.7
BS in Business Administration	7.7	BS in Information Technology	6.7
Bachelor of Secondary Education	7.6	BS in Business Administration	5.3
BS in Commerce	6.4	Bachelor of Secondary Education	4.5
BS in Information Technology	4.6	BS in Commerce	4.5
BS in Hotel and Restaurant Mgmt	4.1	Bachelor of Elementary Education	4.3
BS in Computer Science	3.4	BS in Computer Science	4.1
BS in Accountancy	2.7	BS in Industrial Technology	4.1
BS in Criminal Justice/Criminology	1.6	BS in Hotel and Restaurant Mgmt	3.6
BS in Industrial Technology	1.1	BS in Civil Engineering	2.0
BS in Psychology	1.1	BS in Accountancy	1.8
BS in Biology	0.9	BS in Marine Transportation	1.8
BS in Tourism	0.8	BS in Agriculture	1.7
Bachelor of Arts	0.8	BS in ECE	1.5

# Immediate employment and career advancement main reasons for degree choice

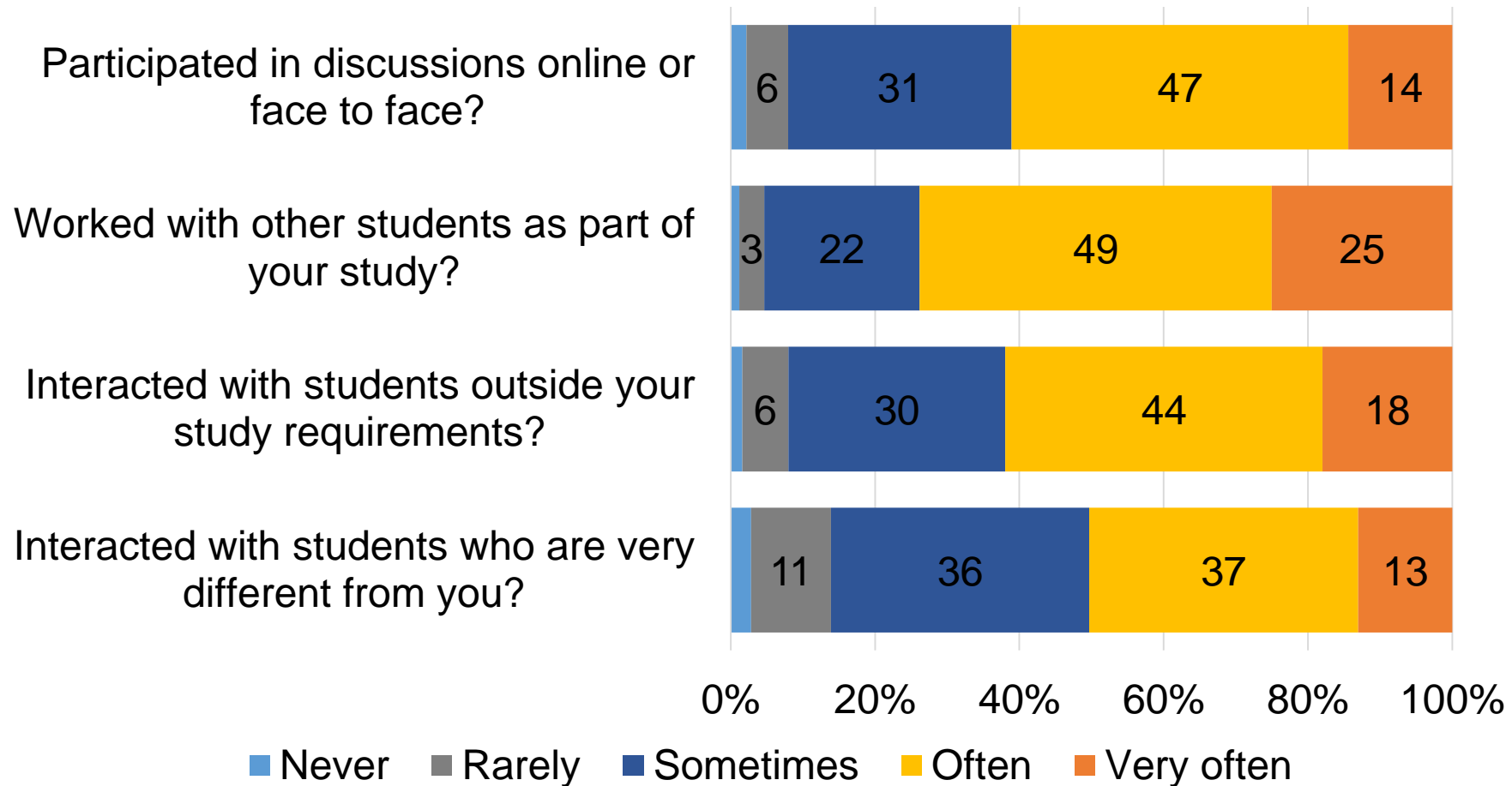
	Total
Immediate employment prospects	73.7
Prospect of career advancement	71.1
Strong passion for profession	68.9
Availability in chosen HEI	67.7
Prestige of the profession	67.4
Attractive compensation	64.9
Affordable for the family	63.9
Influence of parents/relatives	63.2
Good grades in high school	62.1
Overseas employment prospect	53.8
Inspired by a role model	51.3
Peer influence	42.8
CHED priority course	20.3
No particular choice	16.9
Personal choice / desired course	3.4

# LEARNER ENGAGEMENT

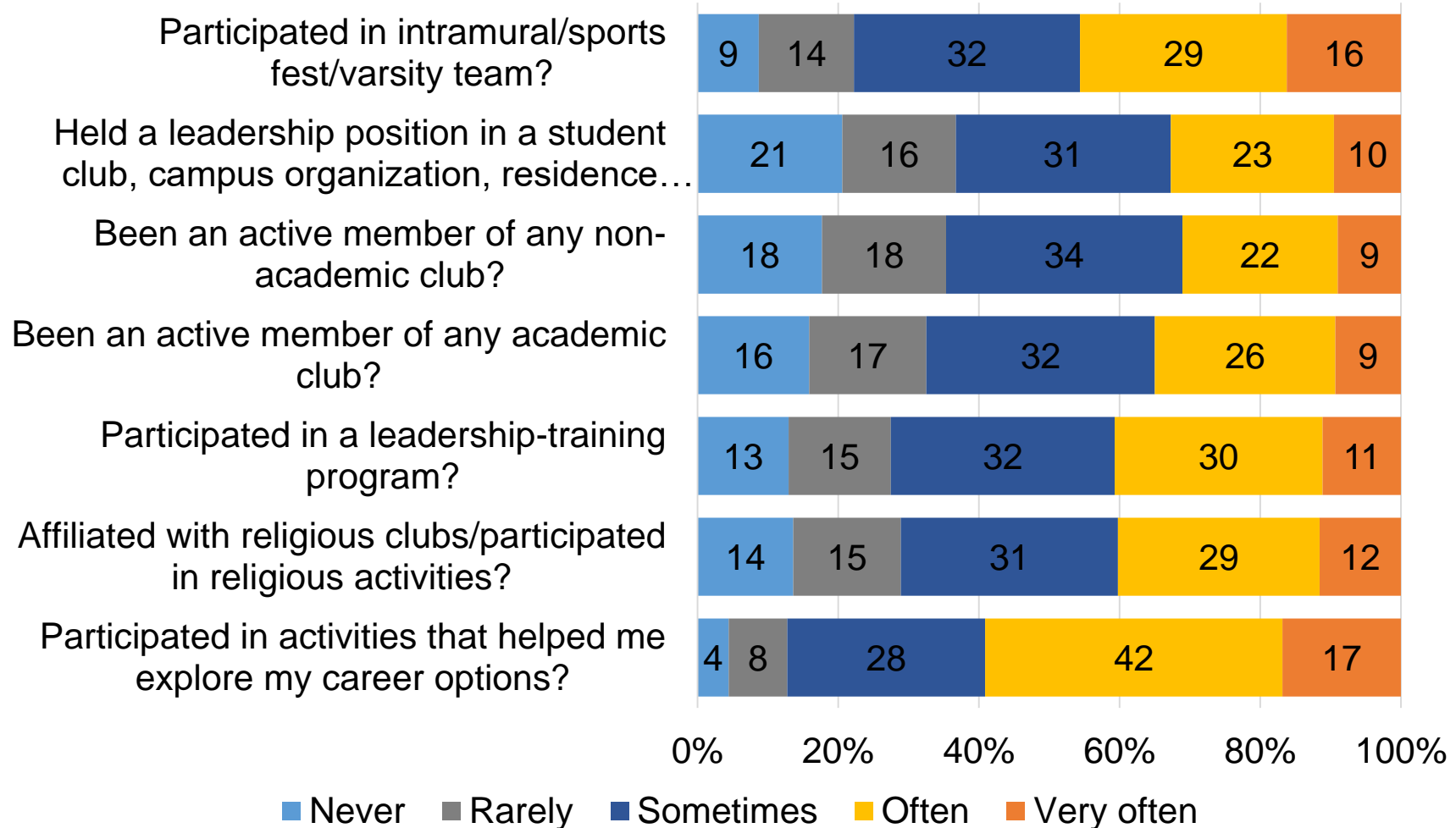
# Sense of belongingness and preparedness are not too strong



# Interaction with students are mainly for academic requirements



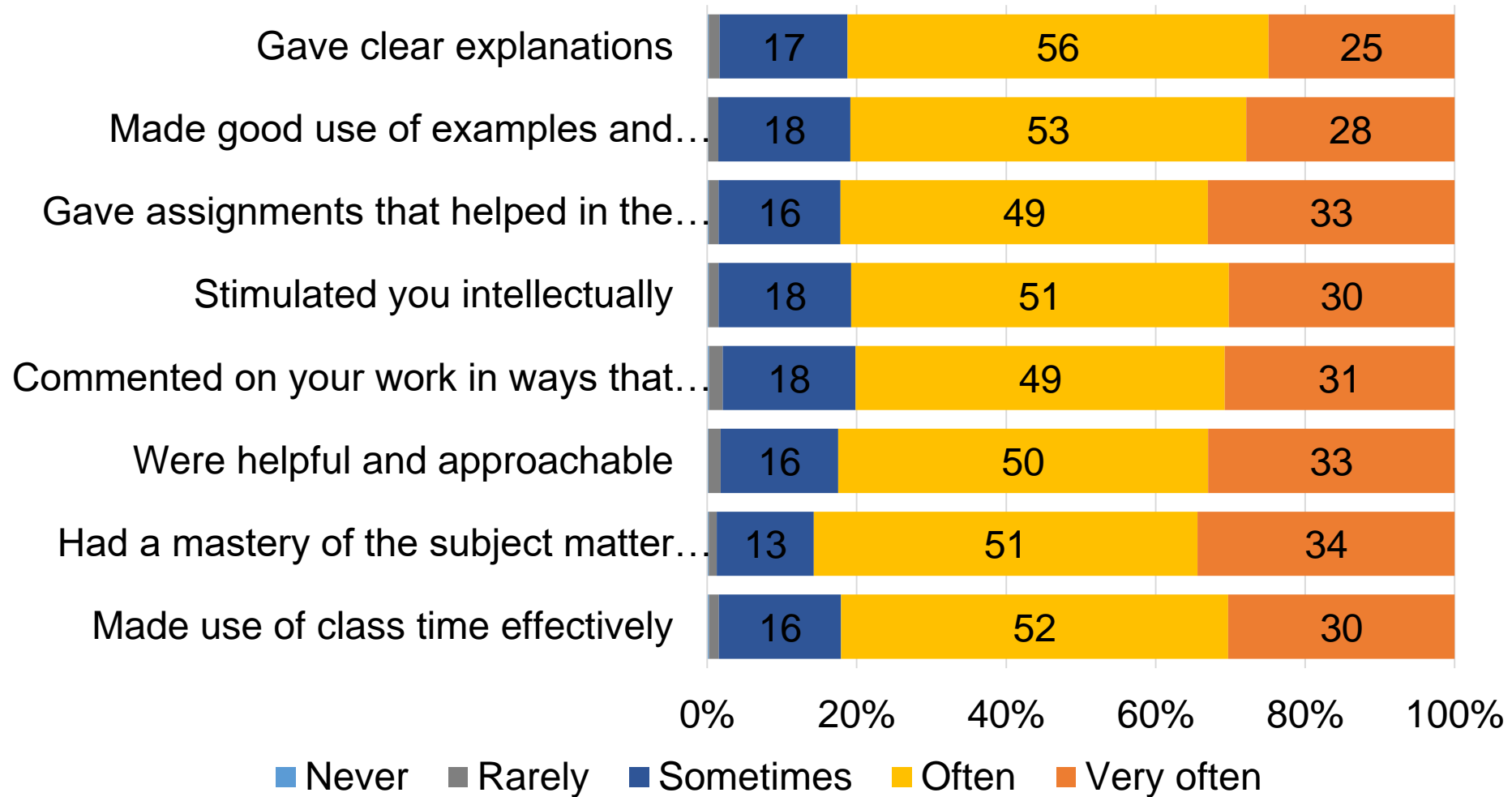
# Low participation in extra-curricular activities



FACULTY

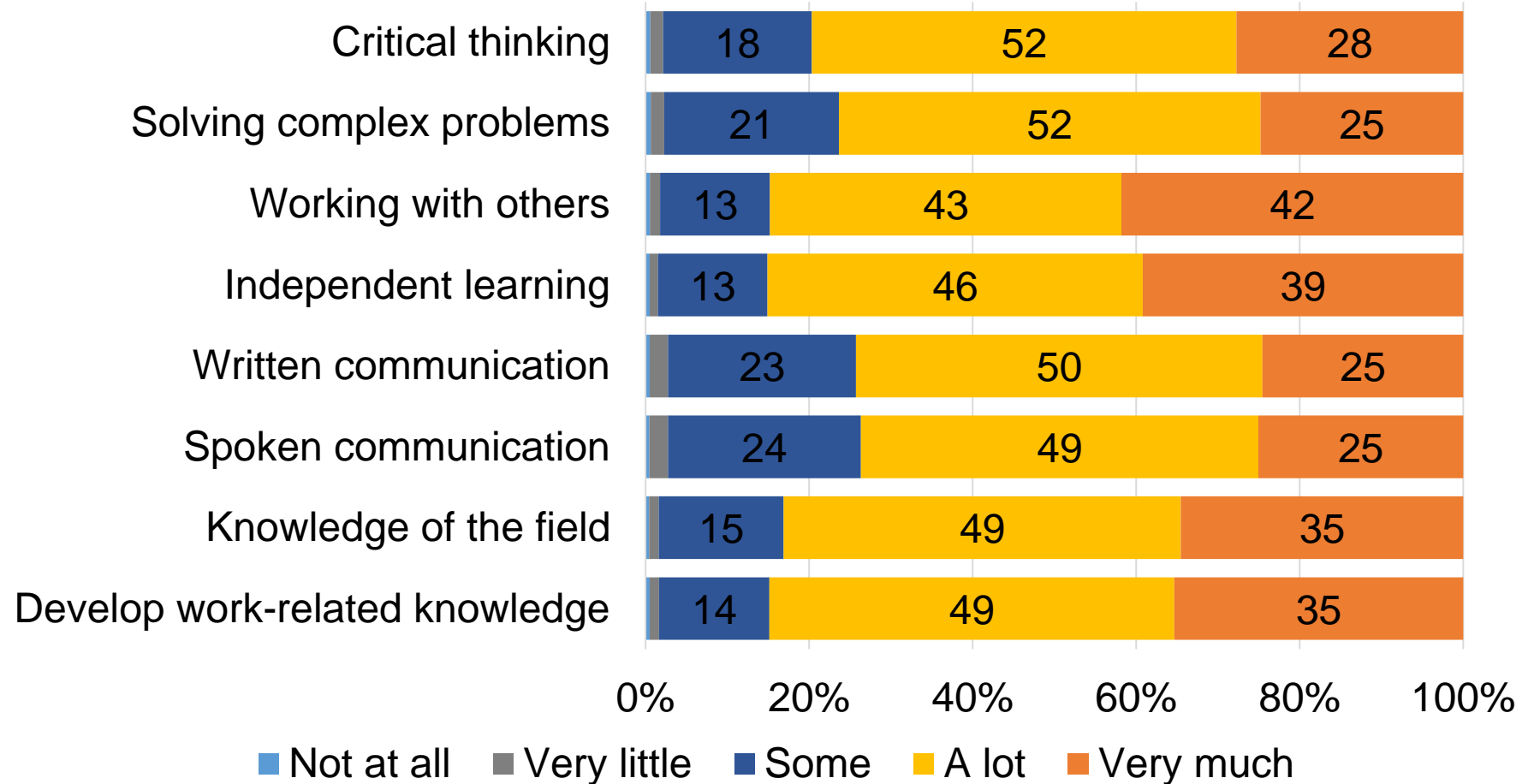


# Graduates are very satisfied with their faculty



# SKILLS DEVELOPMENT

# Working with others and learning independently rated highest



# Graduates have a strong belief that they were not trained well on communication

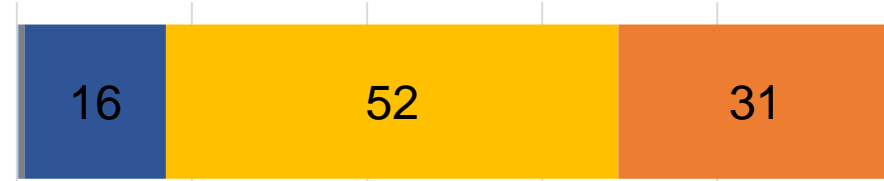
## Courses/training programs that should be added in curriculum

	Total	Public	Private
	%	%	%
Communication courses	46.9	50.4	45.0
Occupational skills	36.2	37.4	35.4
IT courses	34.1	35.2	33.3
Human Resource courses	19.8	19.9	20.0
Internship	18.2	19.8	17.2
Language courses	11.7	11.1	11.9
CV writing	7.2	6.7	7.5

# OVERALL COLLEGE EXPERIENCE

# College experience had the strongest effect on personal and intellectual growth

Your college experience has helped you connect what you have learned in the classroom with real life situations.



Your college experience has helped you translate what you have learned inside the classroom into action.



Your college experience has had a positive influence on your intellectual growth and interest in ideas.



Your college experience has had a positive influence on your personal growth, attitudes, and values.



0% 20% 40% 60% 80% 100%

■ Strongly Disagree ■ Disagree ■ Neutral ■ Agree ■ Strongly Agree

# POST-COLLEGE EXPERIENCE

# EMPLOYMENT PROFILE



# Graduates of private HEIs begin job search later, take a longer time to get hired

	No. of months started search after grad		No. of months looked for work		No. of months started work after grad	
	Mean	Median	Mean	Median	Mean	Median
Total	4.9	0	8.1	4.0	12.9	9.0
Public	3.5	0	7.6	3.0	11.2	6.0
Private	5.7	0	8.4	4.0	13.9	10.0
Male	5.0	0	8.2	4.0	13.1	9.0
Female	4.8	0	8.0	4.0	12.8	9.0
With PRC license	6.2	0	8.5	4.0	14.8	12.0
Without PRC license	3.4	0	7.6	3.0	10.8	5.0

# Nursing graduates land on their first job 18 months after graduation, on average

	% of graduates	No. of months started search after grad		No. of months looked for work		No. of months started work after grad	
		Mean	Median	Mean	Median	Mean	Median
Health	22.7	8.5	4.0	9.7	6.0	18.1	15.0
Business And Administration	19.0	3.4	0	7.1	3.0	10.3	5.0
Teacher Training And Education Science	16.5	3.7	0	7.4	2.0	11.3	6.0
Computing/Information Technology	9.8	2.8	0	7.8	4.0	10.3	5.0
Engineering And Engineering Trades	8.7	5.1	0	7.2	3.0	12.2	9.0
Personal Services	5.4	3.3	0	8.4	4.0	11.1	6.0
Security Services	5.1	7.3	0	10.7	7.0	18.1	15.0
Agriculture, Forestry And Fishery	2.7	2.1	0	6.7	4.0	8.9	7.0
Social And Behavioral Science	2.3	3.9	0	6.6	2.0	10.5	4.0
Journalism And Information	1.3	3.1	0	6.5	2.0	9.4	4.0

86 out of 100 in the labor force, 75 are employed

	GTS			LFS 2014 Q4		
	LFPR	Emp Rate	UnEmp Rate	LFPR	Emp Rate	UnEmp Rate
Total PH	86.1	88.2	11.8	83.5	85.1	14.9
CAR	86.2	80.7	19.3	75.7	77.1	22.9
<b>REGION I</b>	83.0	78.6	21.4	76.4	79.6	20.4
REGION II	87.7	91.5	8.5	82.7	83.4	16.6
REGION III	88.8	88.4	11.6	85.7	84.2	15.8
REGION IV-A	85.0	90.8	9.2	87.6	87.2	12.8
REGION V	89.6	87.7	12.3	81.1	87.6	12.4
REGION VI	86.1	91.1	8.9	78.4	83.6	16.4
REGION VII	88.5	90.8	9.2	86.7	85.3	14.7
<b>REGION IX</b>	85.5	84.1	15.9	74.7	86.4	13.6
<b>REGION X</b>	82.5	88.6	11.4	86.1	83.0	17.0
<b>REGION XI</b>	88.4	94.1	5.9	86.5	88.5	11.5
REGION XII	89.2	92.3	7.7	76.3	84.7	15.3
NCR	91.4	97.2	2.8	88.7	87.8	12.2
<b>REGION XIII</b>	82.7	86.2	13.8	80.1	85.5	14.5

# Secondary Educ and Accountancy grads have the highest LFPRs and employment rates

	% of graduates	Labor force participation	Employment	Unemployment
Bachelor of Science in Nursing	21.6	82.9	85.3	14.7
Bachelor of Elementary Education	8.6	89.1	90.4	9.6
Bachelor of Science in Business Adminis	6.7	83.7	90.1	9.9
Bachelor of Secondary Education	6.3	91.3	93.6	6.4
Bachelor of Science in Commerce	5.6	88.8	91.1	8.9
Bachelor of Science in Information Tech	5.5	88.5	89.9	10.1
Bachelor of Science in Criminal Justice	5.0	87.2	82.5	17.5
Bachelor of Science in Hotel and Restau	3.9	82.9	82.8	17.2
Bachelor of Science in Computer Science	3.7	86.7	86.0	14.0
Bachelor of Science in Industrial Techn	2.4	85.6	83.5	16.5
Bachelor of Science in Accountancy	2.3	90.9	94.2	5.8

# 52% are professionals / associate professionals

	Total	Public	Private	Male	Female
	%	%	%	%	%
Armed Forces Occupations	0.4	0.5	0.4	0.6	0.3
Managers	8.3	6.6	9.4	8.4	8.4
Professionals	38.1	40.4	36.6	32.7	42.2
Technicians and Associate Professionals	13.9	13.2	14.4	17.3	11.3
Clerical Support Workers	21.7	21.1	22.1	17.3	25.2
Service and Sales Workers	12.9	12.1	13.3	15.4	10.8
Skilled Agricultural, Forestry, and Fishery Workers	0.5	0.5	0.5	0.9	0.2
Craft and Related Trades Workers	1.4	2.5	0.8	2.6	0.5
Plant and Machine Operators, and Assemblers	1.5	1.3	1.6	2.7	0.5
Elementary Occupations	1.3	1.9	1.0	2.1	0.7

# Breakdown of elementary occupations held by graduates

<b>Elementary occupations</b>	<b>N</b>	<b>%</b>
Cleaners and helpers in offices, hotels	16	14
Manufacturing laborers not elsewhere cl	15	13
Building construction laborers	12	11
Hand packers	12	11
Civil engineering laborers	11	10
Domestic cleaners and helpers	9	8
Messengers, package deliverers and lugg	8	7
Crop farm laborers	5	4
Mixed crop and livestock farm laborers	4	4
Kitchen helpers	3	3
Meter readers and vending-machine colle	3	3
Mining and quarrying laborers	2	2
Freight handlers	2	2
Shelf fillers	2	2
Fast food preparers	2	2
Elementary workers not elsewhere classi	2	2

Median wage per day is Php460, slightly higher for males

	GTS			LFS 2014 Q4		
	Total	Male	Female	Total	Male	Female
Total PH	460	490	454	466	500	466
Armed Forces Occupations	800	809	800	864	909	545
Managers	500	500	500	615	700	577
Professionals	600	618	600	600	600	600
Technicians and Associate Professionals	420	415	423	466	467	466
Clerical Support Workers	400	400	390	460	466	454
Service and Sales Workers	400	538	340	370	423	350
Skilled Agricultural, Forestry, Fishery Workers	316	317	310	-		
Craft and Related Trades Workers	329	346	309	346	350	340
Plant and Machine Operators and Assemblers	538	600	338	350	350	337
Elementary Occupations	301	301	313	267	279	250

# EDUCATION-OCCUPATION MATCHING



# Job-education mismatch

- Some signs: graduates (a) feel that they did not sufficiently develop communication, critical thinking, and problem-solving skills; (b) less than 70% think that their college degree is relevant to their first job; (c) less than half of them consider occupational skills, which they learned in college, as the main reason for landing their first or current jobs; (d) around a fourth of them think that outdated skills learned in college is keeping them from getting a good job.

# Note on methodology

- compare current occupations vis-à-vis their baccalaureate program - “horizontal” mismatch, or the appropriateness of the degree completed with the job
- Limitation - lack of information regarding core skills learned from a degree that is of use to all possible occupations
- focus analysis on programs that require a professional license. These courses typically have more defined “matched” occupations

# Overall, half of graduates with PRC-required courses are in jobs that match their degree

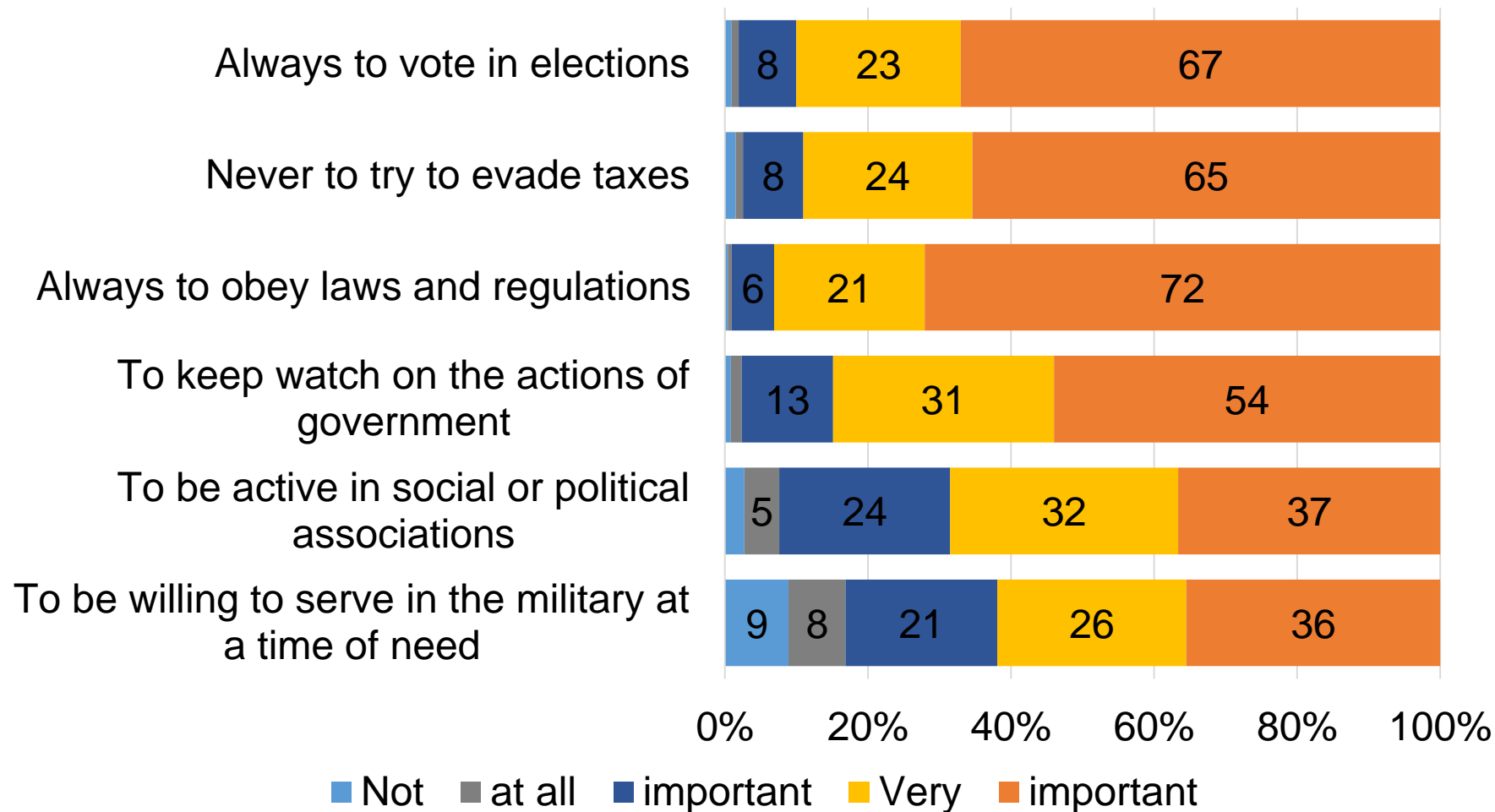
	% of graduates	Match	Not match
		%	%
BS in Nursing	21.6	52.8	47.2
Bachelor of Elementary Education	8.6	62.8	37.2
Bachelor of Secondary Education	6.3	60.8	39.2
BS in Criminal Justice/Criminology	5.0	48.7	51.3
BS in Accountancy	2.3	26.5	73.5
BS in Civil Engineering	1.2	46.6	53.4
BS in Agriculture	1.1	17.1	82.9
BS in Electronics and Communications Engineering	0.8	11.4	88.6
BS in Electrical Engineering	0.6	25.9	74.1
BS in Mechanical Engineering	0.6	26.4	73.6
BS in Elementary and Secondary Education	0.5	58.1	41.9
BS in Social Services/Social Work	0.5	46.8	53.2
BS in Architecture	0.4	45.5	54.5
BS in Customs Administration	0.3	4.2	95.8
BS in Pharmacy	0.3	65.4	34.6

# “Not-matched” occupations by Nursing graduates

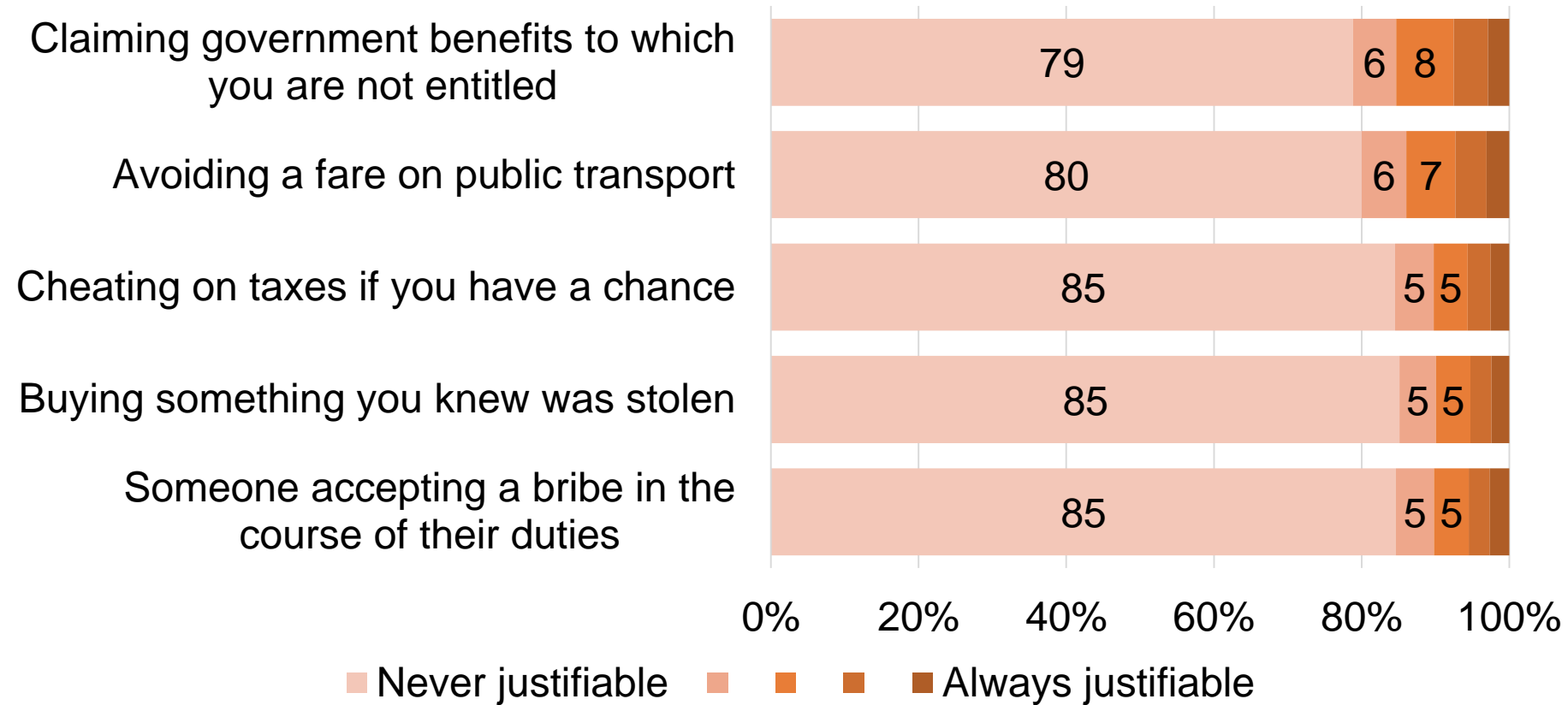
	% (N=820)
Contact centre information clerks	11.0
Retail and wholesale trade managers	8.0
General office clerks	6.2
Cashiers and ticket clerks	3.5
Health care assistants	3.2
Police officers	3.2
Nursing associate professionals	2.4
Technical and medical sales professionals	2.1
Shopkeepers	1.8
Teaching professionals not elsewhere classified	1.7
Shop sales assistants	1.7
Commercial sales representatives	1.6
Services managers not elsewhere classified	1.5
Secondary education teachers	1.5
Social work associate professionals	1.5
Data entry clerks	1.5

# SOCIO-POLITICAL PARTICIPATION

# Good citizenship is mostly associated with voting, obeying laws, and paying taxes



# Graduates have a clear belief on what is ethical behavior



# Graduates barely participate in political and social actions; have low participation in groups

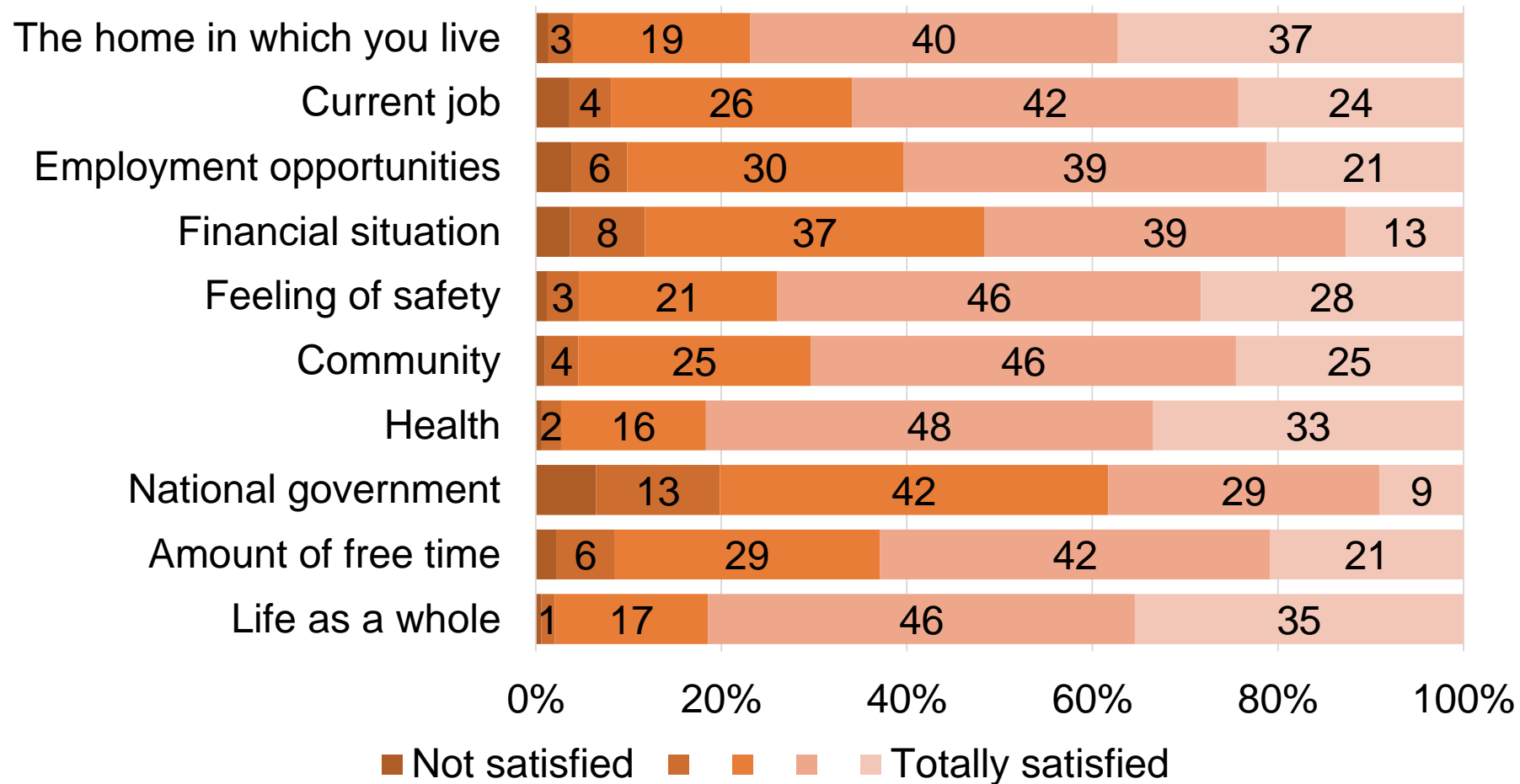
<b>Participation in political and social action</b>	<b>% Yes</b>
Donated money or goods for a social cause	47.31
Signed a petition to support an ordinance or a bill	9.72
Bought certain products for political, ethical, environmental reasons	9.24
Joined an Internet political forum or discussion group	8.47
Attended a political meeting or rally	7.04
Took part in a demonstration	6.82
Boycotted certain products for political, ethical, environmental reasons	6.73
Contacted, or attempted to contact, a politician or a civil servant to express your views	5.72
Contacted or appeared in the media to express your views	5.08

<b>Participation in groups</b>	<b>% Yes</b>
A church or other religious organization	37.06
A sports, leisure or cultural group	23.91
Another voluntary association	21.86
A trade union, business, or professional association	21.39
A political party	6.12



# LIFE SATISFACTION

# Graduates are most satisfied with their health and their homes; quite lukewarm with their current job and employment opportunities



How satisfied are you with the following aspects for your life?

# RELATIONSHIP OF COLLEGE EXPERIENCE TO POST-COLLEGE OUTCOMES

# Note on methodology

- explore the extent to which college experience influence post-college outcomes
- summarize the information from the different aspects of college and post-college experience using principal component analysis

PCA allows us to represent a set of variables into a smaller set – linear combinations of variables – that captures their variability

# Note on methodology

- Run regressions of the form  $\mathbf{Y} = F(\alpha + \beta' \mathbf{X} + \lambda' \mathbf{Z} + \varepsilon)$ , where  $\mathbf{Y}$  is any of the post-college indexes;  $\mathbf{X}$  is the set of college experience indexes that are hypothesized to affect  $\mathbf{Y}$ ;  $\mathbf{Z}$  is a set of student characteristics,  $\varepsilon$  is the error term, and  $F()$  is the functional form of the estimating equation that will depend on the nature of the dependent variable of interest.

# Learner engagement and overall college experience indexes have the largest effects on life satisfaction

<b>Regression of life satisfaction index on college experience</b>			
	Coef.	Std. err.	p-value
Learner Engagement Index	0.120	0.013	0.000
Intra-curricular Index	0.099	0.021	0.000
Teaching Quality Index	0.087	0.015	0.000
Support Services Index	0.077	0.016	0.000
Non-Core Support Services Index	-0.042	0.029	0.143
Overall College Experience Index	0.148	0.019	0.000
Practicality of College Experience Index	0.079	0.034	0.020
R-squared	0.135		
N. of cases	6584		

# Learner engagement, support services, and overall college experience have significant effect on the odds of being employed

Logistic regression of employment on college experience			
	Odds Rat.	Std. err.	p-value
Learner Engagement Index	1.095	0.022	0.000
Intra-curricular Index	0.966	0.030	0.263
Teaching Quality Index	0.972	0.022	0.208
Support Services Index	0.941	0.023	0.011
Non-Core Support Services Index	1.032	0.046	0.478
Overall College Experience Index	1.083	0.031	0.005
Practicality of College Experience Index	1.030	0.056	0.582
Pseudo R-squared	0.048		
Prob > chi2	0.000		
N. of cases	7280		

# SUMMARY OF FINDINGS



# Summary of findings

- Graduates are concentrated in a few courses
- College life is mostly focused on academic activities
- Labor force participation and median wage similar to LFS counterparts; females tend to hold less-paying job within occupation groups
- Job-education mismatch seems pervasive

# Summary of findings

- Socio-political life is not active. Their contribution to the public good is confined to voting, obeying laws, and paying taxes
- Despite being concerned about their earnings and financial condition, overall life satisfaction is still high
- Positive college experience is strongly associated with private and public returns to higher education

# Some recommendations

- Labor market information must reach students in earlier stages of secondary education to allow them to better assess among alternative career paths vis-à-vis their preferences.
- College instruction must be thoroughly improved in order to substantially develop communication, critical thinking, and problem-solving skills
- CHED and HEIs can formulate improvements to a student's college life that will have desirable effects beyond employment.



**PHILIPPINE INSTITUTE FOR DEVELOPMENT STUDIES**

*SURIAN SA MGA PAG-AARAL PANGKAUNLARAN NG PILIPINAS*

Service through  
policy research

# Thank You

---

WEBSITE: [www.pids.gov.ph](http://www.pids.gov.ph)

FACEBOOK: [facebook.com/PIDS.PH](https://facebook.com/PIDS.PH)

TWITTER: [twitter.com/PIDS\\_PH](https://twitter.com/PIDS_PH)

EMAIL: [aorbeta@mail.pids.gov.ph](mailto:aorbeta@mail.pids.gov.ph)