NUS National University of Singapore | Social Service Research Centre
Faculty of Arts & Social Sciences

IWP IN-WORK POVERTY
Challenges of Getting By Among The Young

LABOUR MARKET POLARIZATION & YOUNG WORKERS

14 Oct 2024 @ Singapore Economic Policy Forum: Opportunities Amidst Challenges

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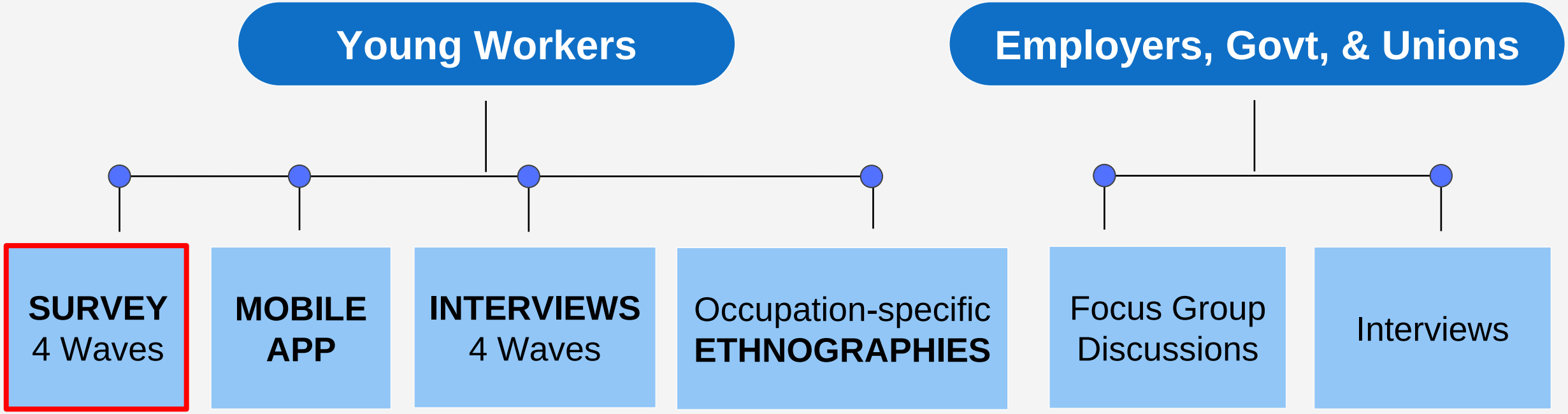
Presentation Outline

1. Overview of research project on In-Work Poverty among the Young
2. Polarity in education, Wage & occupation
3. Training inequality
4. Work-based time poverty
4. Conclusion & implications

Study Overview

Project funded by the 2018 & 2022 Social Science Research Thematic Grant.

Aim: To understand the experiences of young working low-income Singaporeans



Data for today's presentation: First **two** waves of surveys.

Teamwork!

Surveys

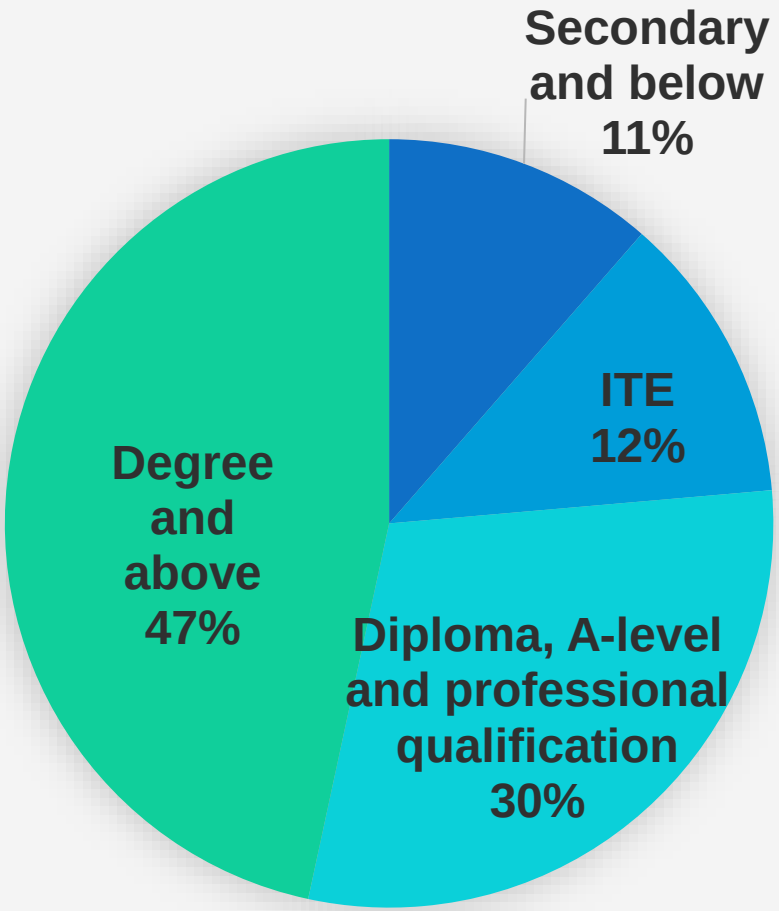
Wave 1: Oct 2020 – Mar 2021
1905 respondents aged 21-38

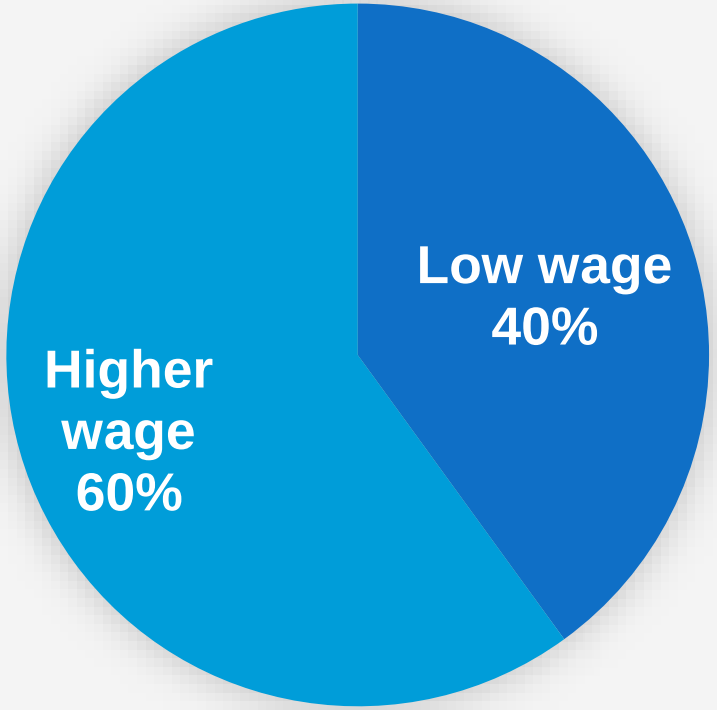
Retention rate = 73%

Wave 2: Nov 2021 – May 2022
1389 respondents aged 22-39

	Target	**Comparison**
	Low income & low educated	Higher income or higher educated
Number in wave 1	980	925
Number in wave 2	640	749

Education and wage profile

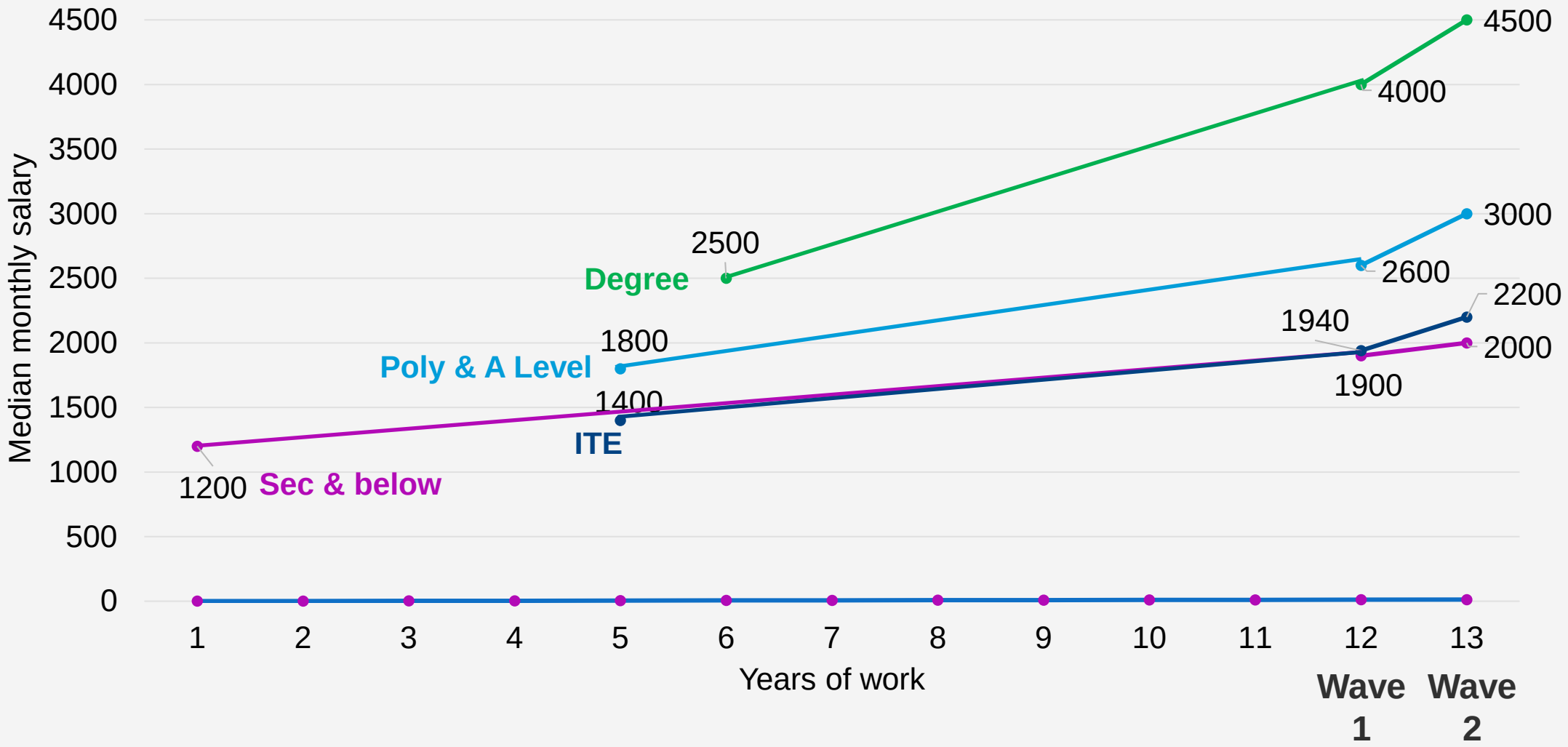




ITE = Institute of Technical Education
Secondary & below includes GCE O-level, N-level, and primary education

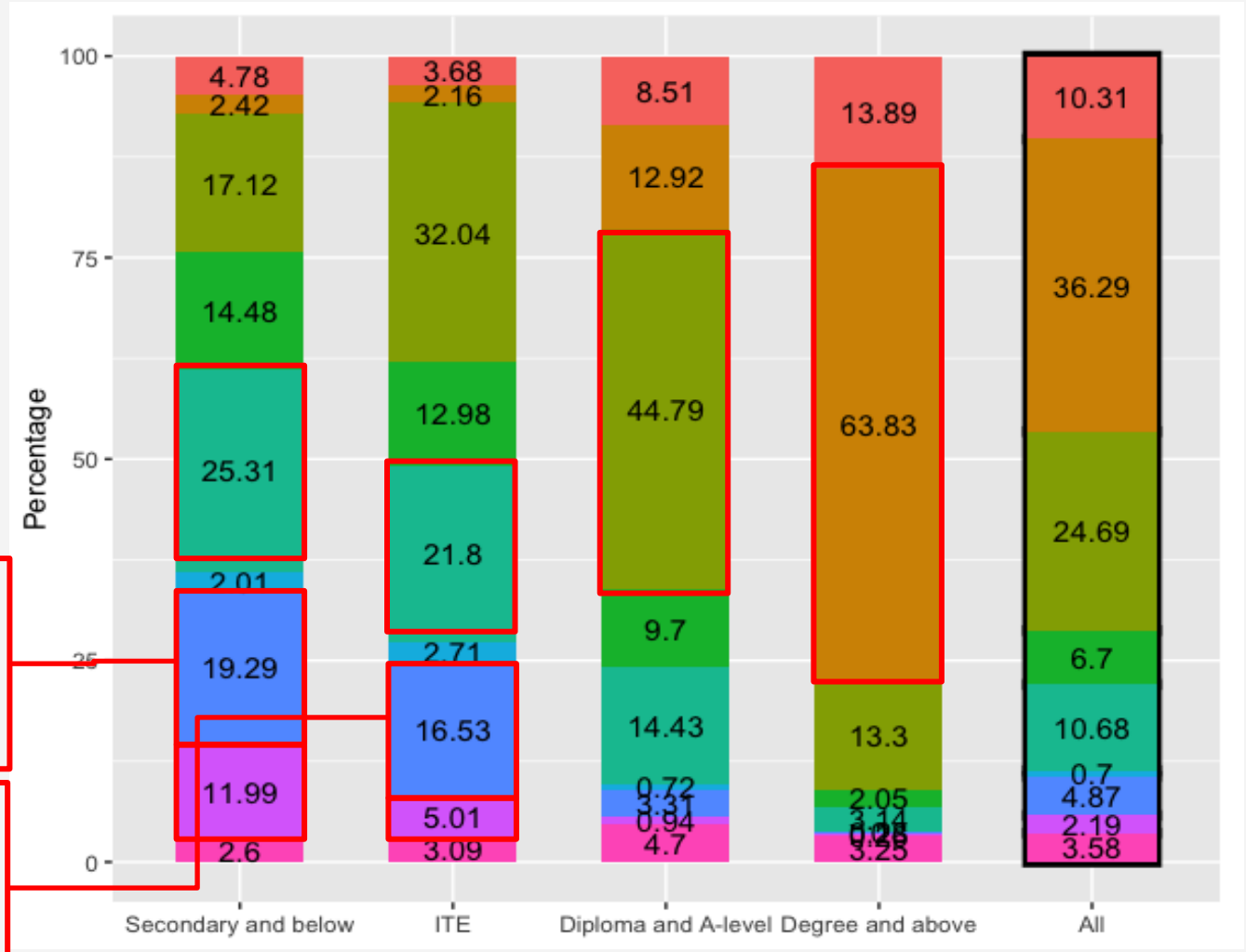
Low wage = earnings below $2,340 pm for full-time and $1,170 for part-time

Wage trajectory by highest education



Occupation status

Higher educated have higher occupational status.



57% are self-employed platform workers

68% are self-employed platform workers

Occupation (SSOC-Sample)

- Managers and working proprietors
- Professionals
- Associate professionals and technicians
- Clerical support workers
- Service and sales workers
- Craftsmen and related trades workers
- Plant and machine operators and assemblers
- Cleaners, labourers, and related workers
- Other occupations

Policy Implications

Continued challenge of:

- narrowing college premium and
- improving job prospects and wage progression of ITE graduates.

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Training

Ng et al. (2023). Training for Mobility. In Proceedings.

Ng & Tan (in preparation).

Research Questions

Who is more likely to attend training?

Who benefits more from training?

Sample Profile

Sample size = 1,043 respondents:

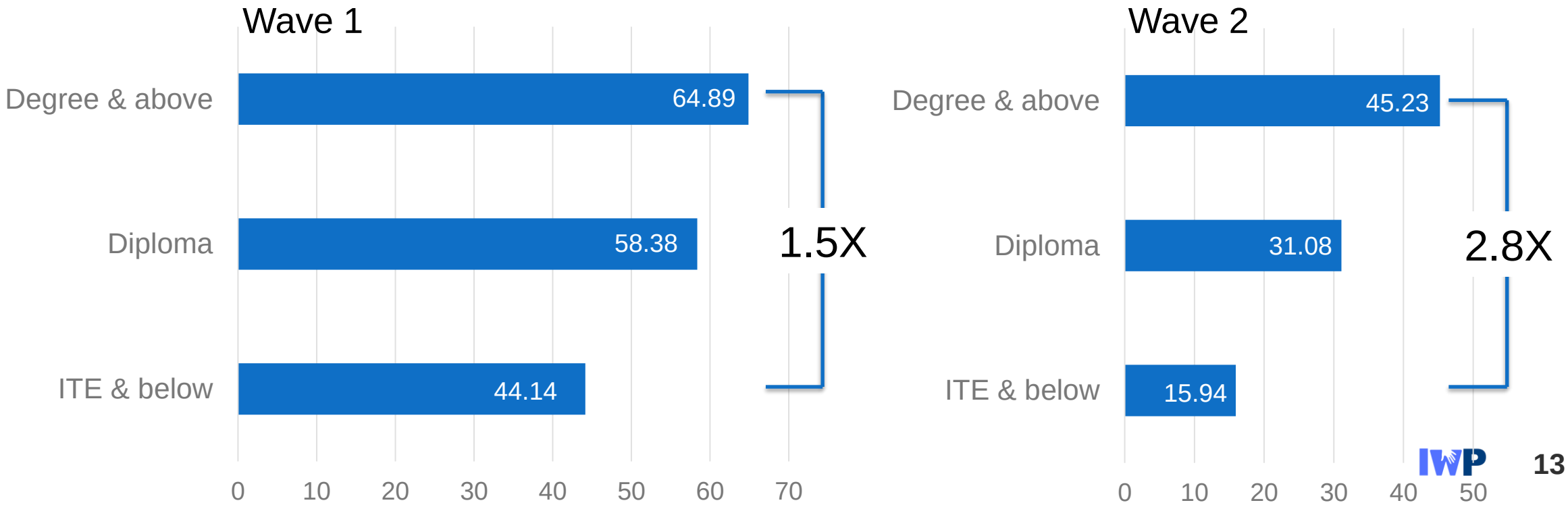
- Completed waves 1 and 2,
- Valid wage and work data

Training participation decreased from waves 1 & 2, More unequal training participation rates in W2

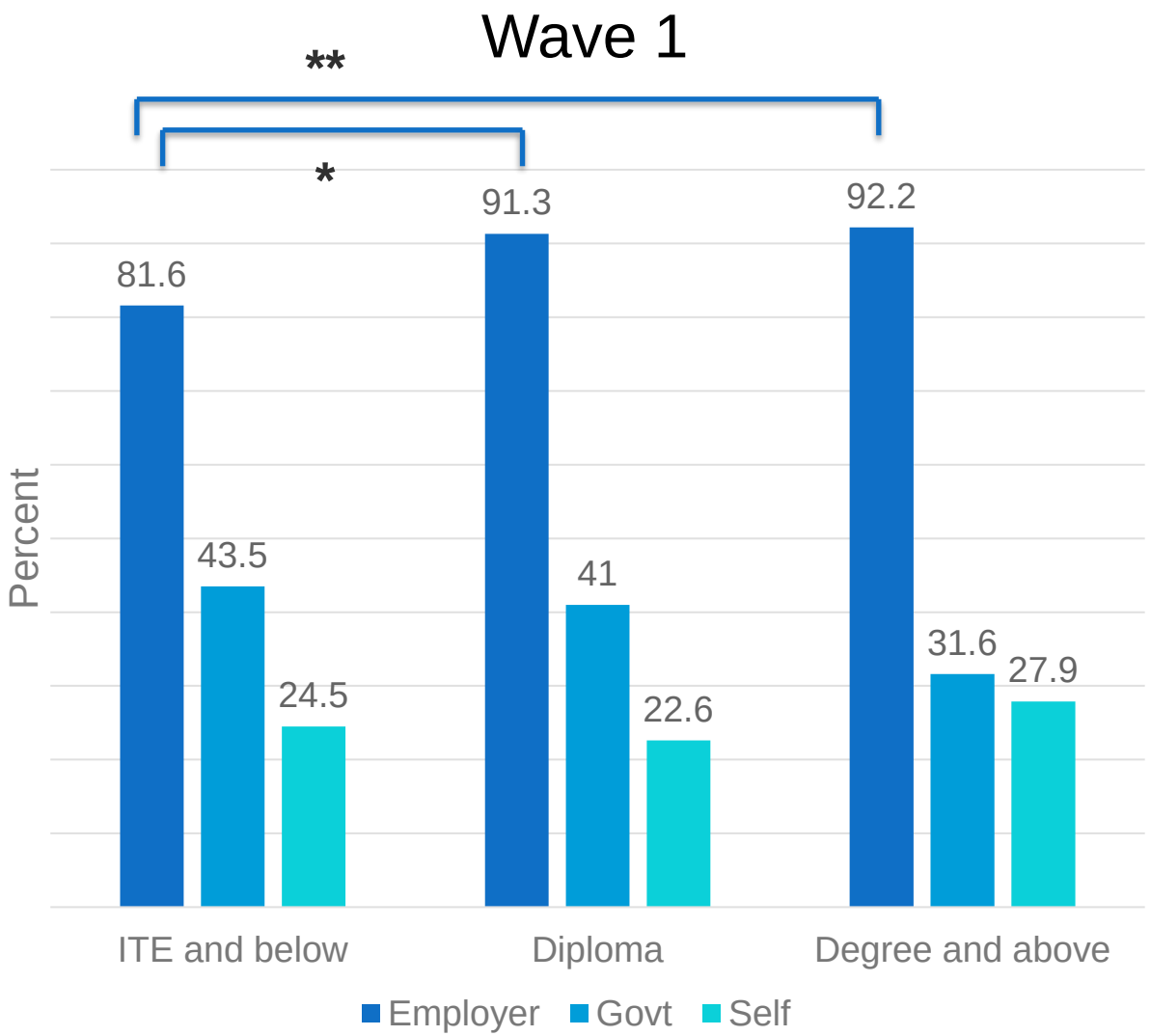
Training participation in the past 12 months

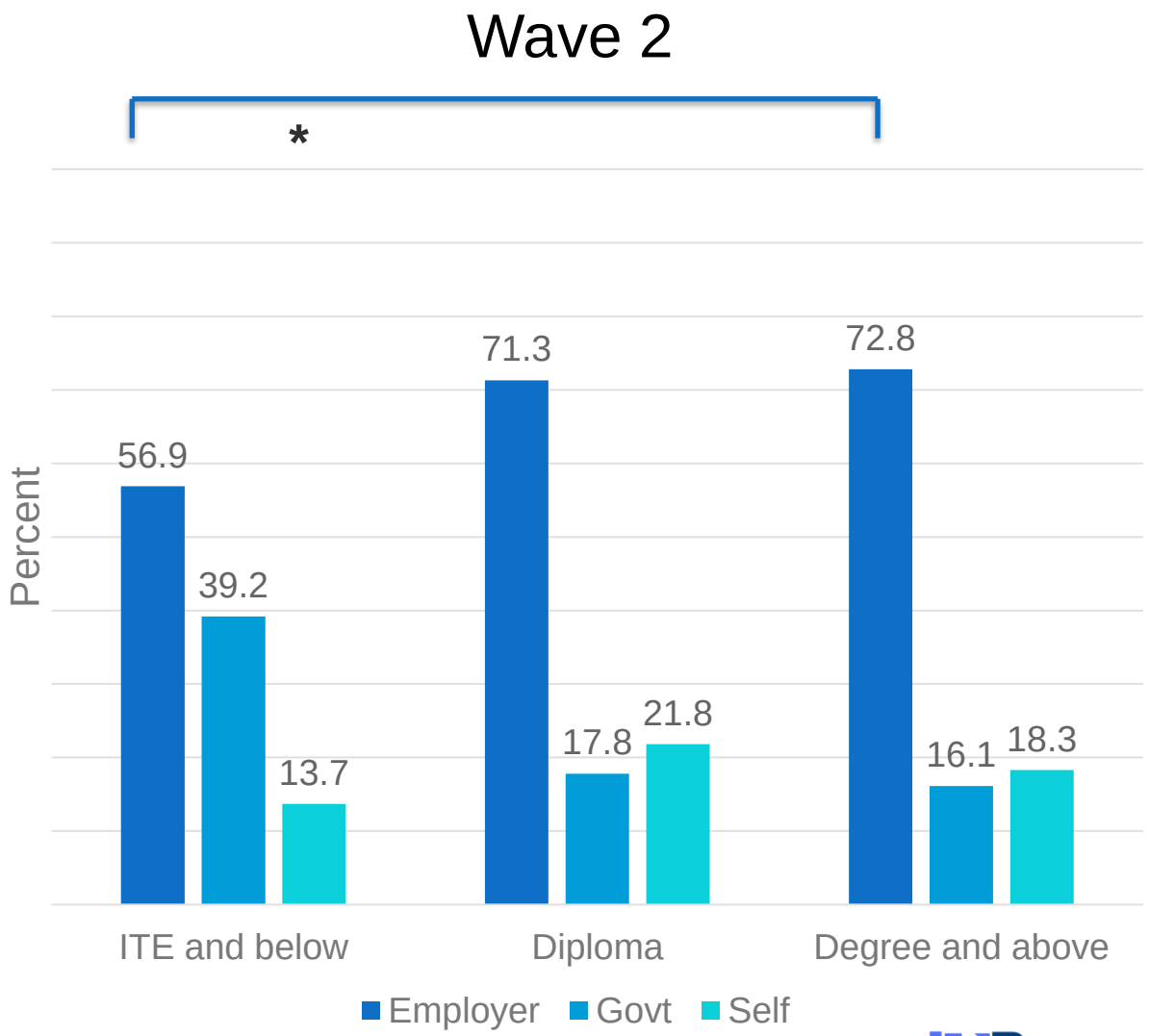
Wave 1 (%)	Wave 2 (%)
56.2	31.8

By education level (%)



Unequal sources of funding for training





Differences significant at *5%, **1%.

Socioeconomic Determinants of Training

Main variables:

- Education level, PMET status, years of work

Mediator: Employer funding of training

Control variables:

- Consistently high training ratings
- Whether changed jobs, whether obtained higher education
- Race, sex, marital status, whether have children

Higher-Educated were more likely to complete training, mediated by employer funding of training

	Wave 1 Training Completion		Wave 2 Training Completion	
	(1)	(2)	(1)	(2)
ITE and below	–0.14**	0.14	–0.26***	–0.11**
	(0.053)	(0.026)	(0.051)	(0.034)
Diploma	–0.058	–0.0042	–0.15***	–0.067*
	(0.043)	(0.022)	(0.040)	(0.027)
Non-PMETs	–0.029	0.012	–0.043	0.027
	(0.048)	(0.024)	(0.047)	(0.031)
Executives & Technicians	–0.026	–0.012	0.015	0.027
	(0.045)	(0.022)	(0.041)	(0.027)
Years in Workforce	–0.0041	0.0018	0.0016	0.0031
	(0.0033)	(0.0022)	(0.0030)	(0.0020)
Employer Funding for Training	-	0.86***	-	0.83***
	-	(0.015)	-	(0.023)

***p<.001, **p<.01, *p<.05.
Base: Bachelor's degree and above, professionals and managers, no employer funding.

Effect of Training on Wages

- Difference-in-differences (DiD) regression
  - Addresses time-invariant factors that are unobservable in the data
- Controlled for
  - Education level, PMET status, years of work
  - Employer funding of training, consistently high training ratings
  - Whether changed jobs, whether obtained higher education
  - Race, sex, marital status, whether have children

DiD Results

Training in wave 1 increased

wave 1 wage by 9%
and wave 2 wage by 12%

when employer funding is controlled for.

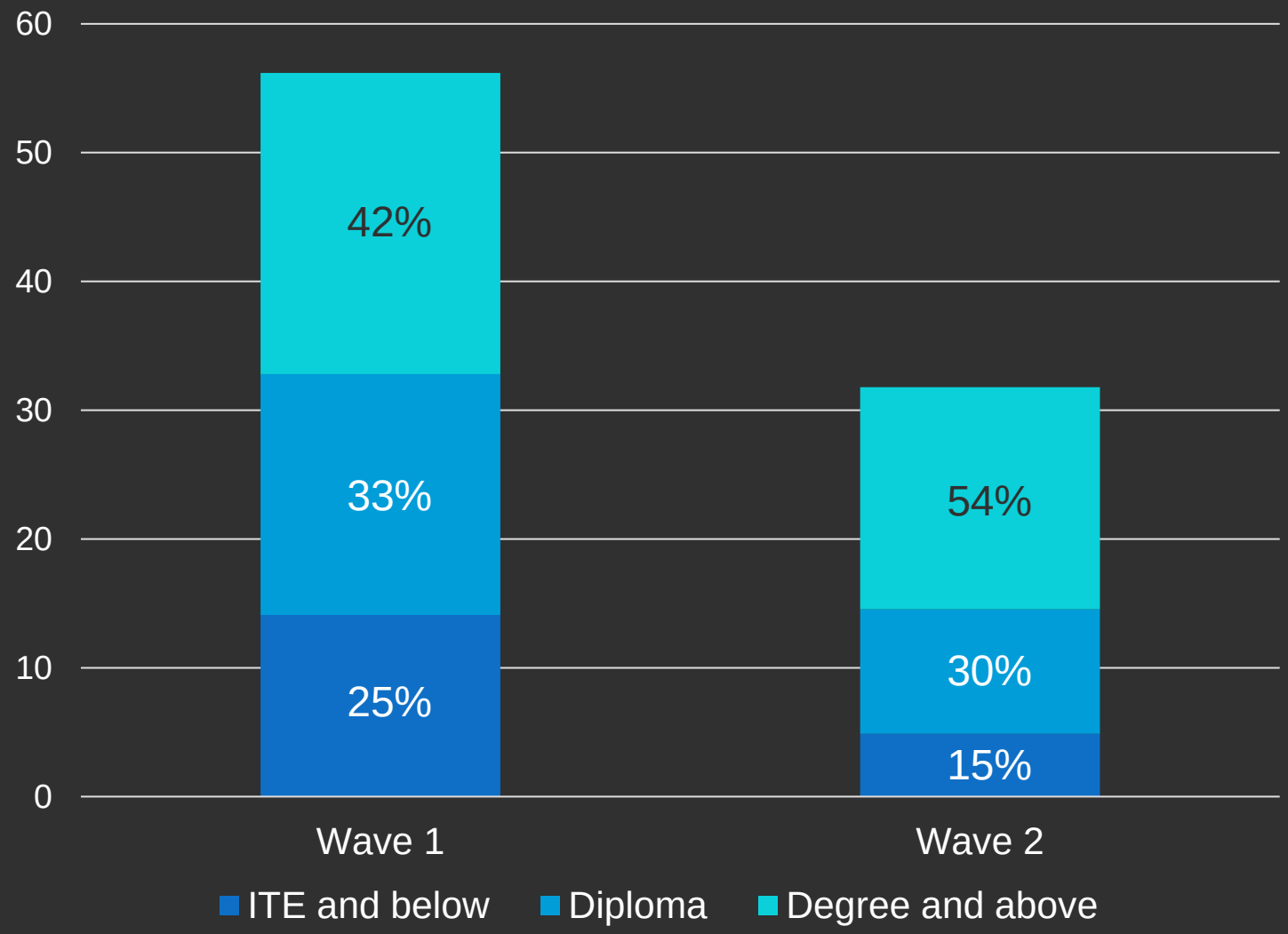
Effect driven by respondents who

- have longer work experience
- have lower education of ITE (technical education) and below

No effect from wave 2 training

Why does wave 1 training increase wages but not wave 2 training?

Scale and composition



More trainees with ITE & below qualifications in Wave 1 (during Covid-19)

Consistent with Dauth (2020) and Heinrich and Mueser (2014)

Conclusion from Training Analysis

- Lower training participation **BUT** greater training benefits to lower educated **DURING COVID**

=> How to encourage employer investments in the training of lower educated?

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Time Poverty

Reference:

Chung, Tan & Ng (in proceedings)

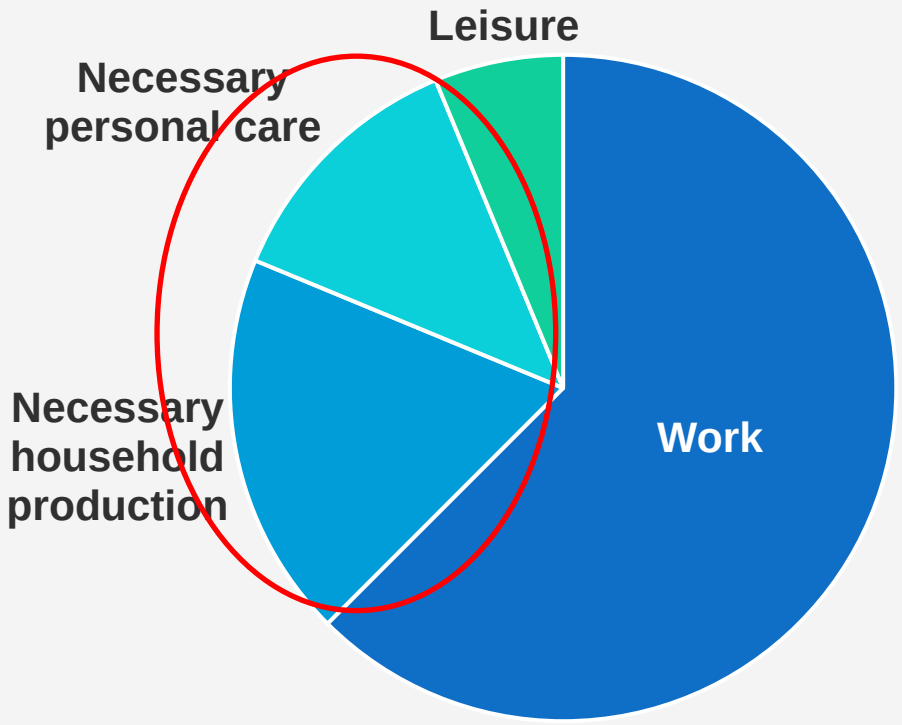
Ng, Tan & Chung (2024)

Literature on Time Poverty is Limited

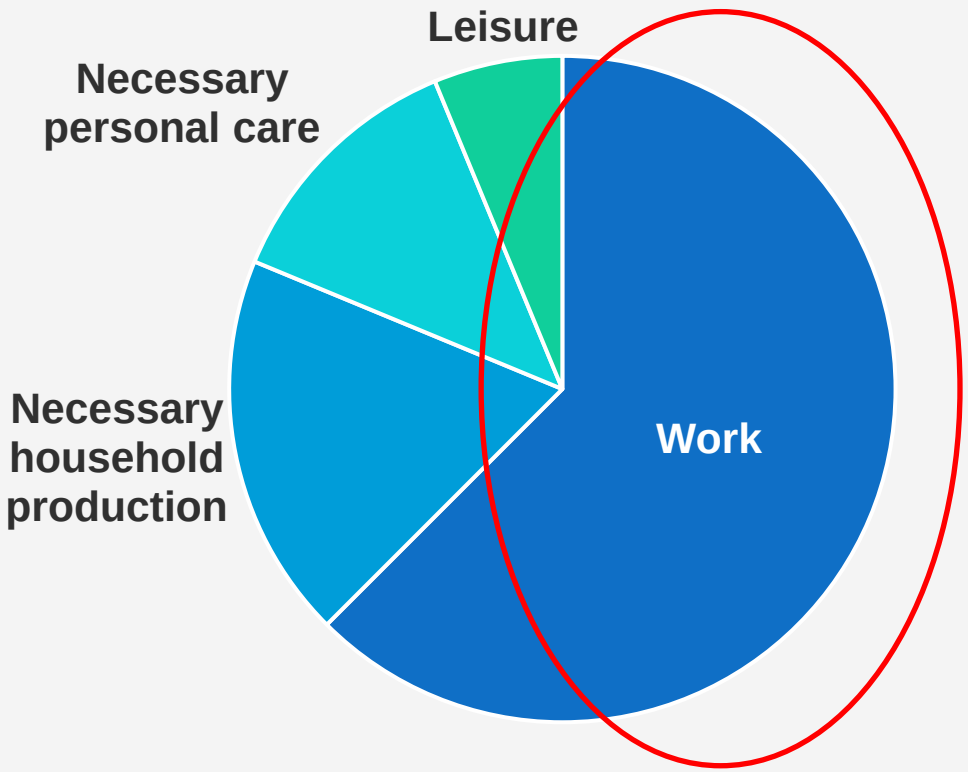
Definition: **“too many things to do”** but **insufficient time to complete them** (Giurge, Whillans, & West, 2020)

Focus on women
- Single parents
- In developing context

(Vickery, 1977)



Conceptualising Work-based Time Poverty



Eurofound Framework (2017) for Working Time Quality:

- Duration (long hours)
- Atypical working time (nonstandard hours)
- Working time arrangements and flexibility (uncontrollable hours)

Implications for psychological well-being, training & work-family balance

1. Create a Time Poverty Measure

Method: Factor Analysis

From Eurofound (2017):

Long hours

Nonstandard hours

Uncontrollable hours

Exploratory Factor Analysis suggested Two Factors

EUROFOUND	Variable	Factor 1	Factor 2
Long Hours	Long hours per week (>48 hours per week)	0.5030	0.0193
Long Hours	Work >10h a day (at least several times a week)	0.6522	0.0825
Nonstandard Hours	Work late at night (at least several times a week)	0.55	0.133
Nonstandard Hours	Work weekends (at least 3 weekends a month)	0.3185	0.3345
Nonstandard Hours	Work shifts (any job)	0.1944	0.4128
Uncontrollable Hours	Working time changes with short notice	0.0287	0.3235
Uncontrollable Hours	Rarely/never take breaks at own time	0.0504	0.2191

X

Poor model fit

✓

Two Factor model

Time Poverty Indicators by Wage Level

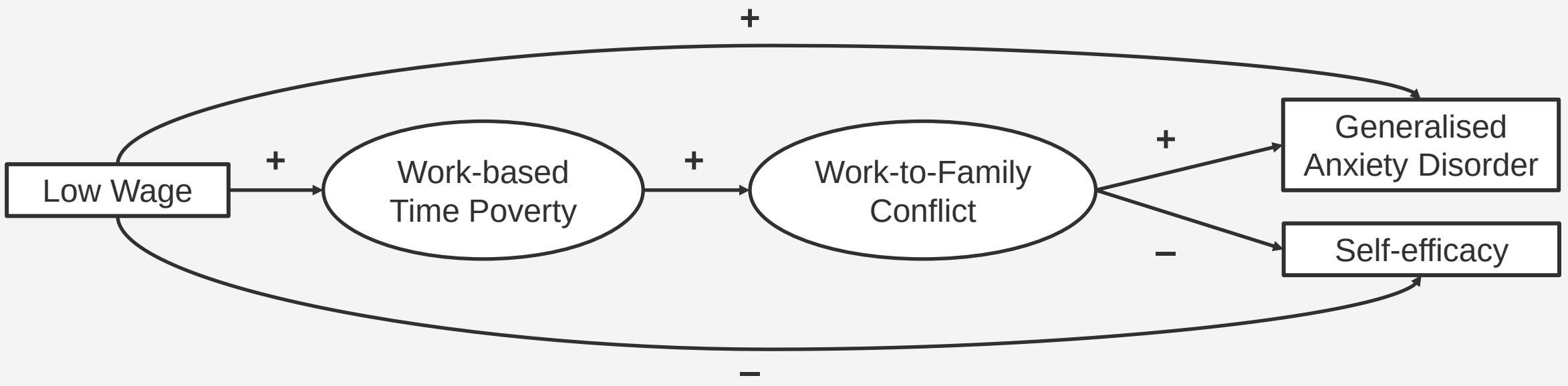
Variable	Low Wage (%)	Higher Wage (%)	Sig
Long hours per week (>48)	22.96	24.04	
Work >10h a day (≥ several times a week)	26.79	25.61	
Work late at night (≥ several times a week)	18.64	21.69	
Work weekends (≥ 3 weekends a month)	29.45	16.68	***
Work shifts	29.12	18.55	***
Working time changes with short notice	29.95	23.55	**
Rarely/never take breaks at own time	24.13	19.82	*

***p<.001, **p<.01, *p<.05

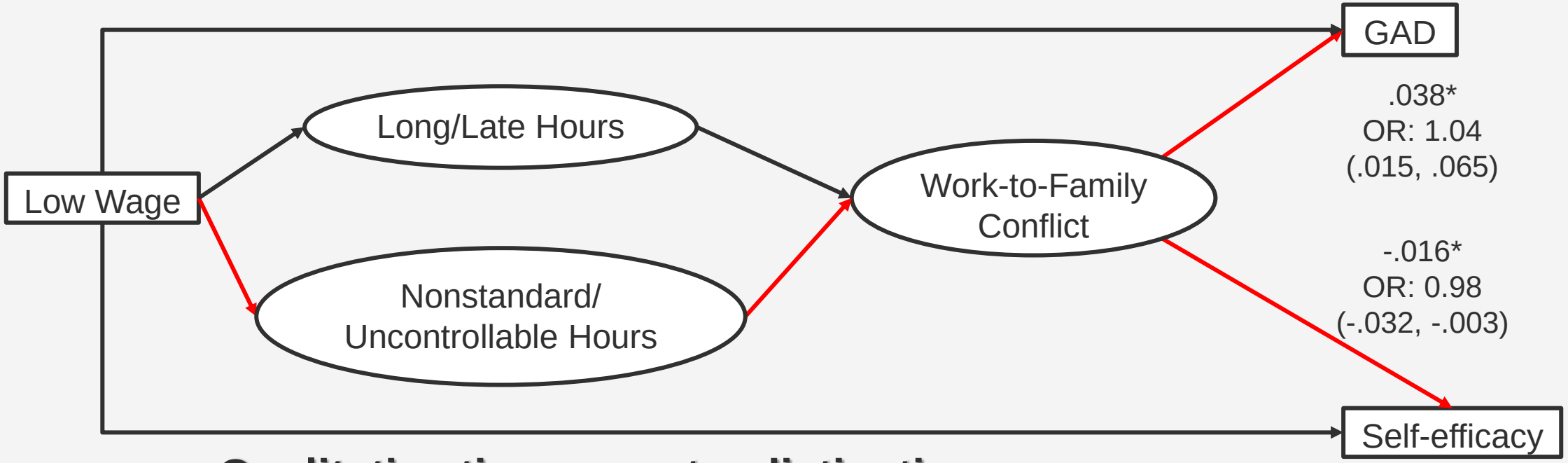
2: Study Mediating Effects of Time Poverty on the Relationship between Low Wage and Psychological Well-being

Method: Structural Equation Modelling

Hypothesized Model:



Low-Wage Affects Through Nonstd/UnCtrl Hrs, not Long/Late Hours



Qualitative time poverty: distinctive characteristic of low wage

Only mediation paths for **Nonstandard/ Uncontrollable hours** are significant.

Controls: Part-time, female, Chinese, married, age, number of children

*p<.05. Red bold arrows represent significant indirect effects.

Time Poverty Conclusions

1. Time poverty can be measured as

☒ 3 factors: long, nonstandard and uncontrollable hours

☑ 2 factors: long/late hours and nonstandard/uncontrollable hours

2: Low wage affects GAD and self-efficacy through **nonstandard/ uncontrollable hours** and work-to-family conflict, but not long/late hours.

* Qualitative time poverty that characterizes low wage work, and adversely affects individuals in low wage work.

Implications

Give more attention to the quality of working time in public discourse and among employers

- In terms of nonstandard/uncontrollable hours

Improve wages for low-wage workers

- If not, they work longer and/or nonstandard hours for higher wages

Vicious cycle of being young, low waged, and time poor

Qualitative time poverty

Increase work-to-family conflict

Increases anxiety

Decreases self-efficacy

Decreases time and ability for training

Worsens functioning at work

Need training to improve wages

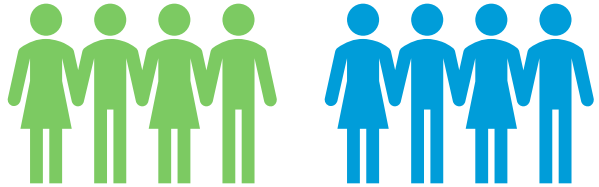
Need to build family & care for young children

Implications

Wage improvements of bottom earners key

Flexi-work a must

Even/especially for low wage workers

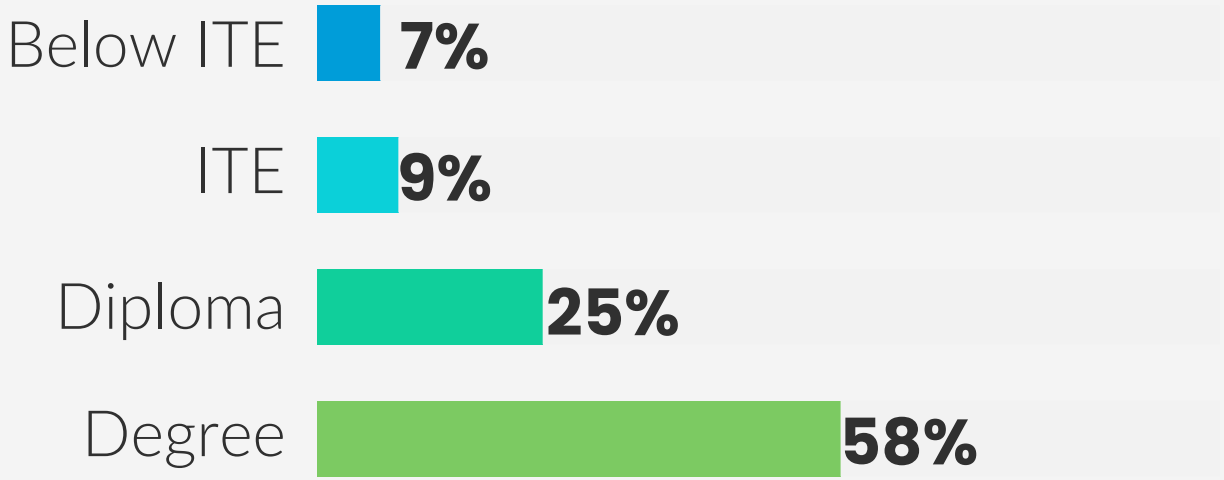


A repertoire of interventions to enable young people

Different for high and low-educated/waged

Educational Distribution of Young Workers

HIGHEST QUALIFICATION of 25-29 Year Olds, 2022



Estimates from Department of Statistics 2023

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THANK YOU

Thank you co-authors, research assistants and project team members.