

MENDAKI SYMPOSIUM 2023

RETHINKING WORK

Guest of Honour:
Dr Tan See Leng

Minister for Manpower and Second Minister for Trade and Industry



MENDAKI SYMPOSIUM 2023

RETHINKING WORK

Thursday,
13 July 2023

Session 1
Evolving Career Landscapes



Guest of Honour and Panellist **Dr Tan See Leng**

*Minister for Manpower
Second Minister for Trade and Industry*

Dr Tan See Leng was appointed as the Minister for Manpower and Second Minister for Trade and Industry on 15 May 2021. Prior to this, Dr Tan was the Minister in the Prime Minister's Office, Second Minister for Trade and Industry and Second Minister for Manpower from 27 July 2020.

Dr Tan has served on the boards of several medical committees including Singapore Ministry of Health's Medishield Life Review Committee. He also sat on the Advisory Board of Lee Kong Chian School of Business at Singapore Management University and has guest lectured at many international symposiums including the Harvard Business School's series on healthcare entrepreneurship.

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Panellist **Dr Walter Edgar Theseira**

*Associate Professor of Economics,
School of Business, Singapore University of Social Sciences*

Walter Edgar Theseira is Associate Professor of Economics, School of Business, Singapore University of Social Sciences. His Ph.D. is in Applied Economics and Managerial Science from the Wharton School, University of Pennsylvania. He has published in the Proceedings of the National Academy of Sciences and the Journal of Economic Behaviour and Organisation. He has advised Government agencies on economics research and is a Board Member of the Competition and Consumer Commission of Singapore. He served as a Nominated Member of Parliament, 13th Parliament of Singapore.

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Panellist **Ms Fadhilah Abdul Rahman Zamawi**

*Assistant Director, Economic Policy,
National Trades Union Congress (NTUC)*

Fadhilah is the Assistant Director of Economic Policy at National Trades Union Congress (NTUC), where she works closely with government, union and employer stakeholders to design and develop high-level strategies for NTUC's entry into supporting Skilled Tradespeople through the Career Progression Model (CPM) and related initiatives. She is also currently the Programme Director under MENDAKI Club, where she leads the Self Discovery and Career Awareness Programme which aims to provide students with access to opportunities to broaden their thinking about their future.

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Moderator **Mr Johann Johari**

*Assistant Director,
Planning, Yayasan MENDAKI*

Johann Johari is the Assistant Director of Planning where he oversees Organisational Development and Digital and Information Technology. Prior to that, he was the Assistant Director of Future Ready, which engages youth and young professionals in equipping them for the future of work. Mr Johann has served in MENDAKI for 15 years. Mr Johann holds a Masters in Non-Profit Management from the Singapore University of Social Sciences (SUSS). He also holds a BA in Economics and Political Science from the University of Western Australia (UWA).

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Session 2
Family Friendly, Equal
Opportunity Workplaces



Panellist **Dr Irene Y.H. Ng**

*Associate Professor of Social Work,
National University of Singapore*

Irene Y.H. Ng is an Associate Professor of Social Work and Steering Committee Chair of the Social Service Research Centre in the National University of Singapore. She holds a joint Ph.D. in Social Work and Economics from the University of Michigan. Her research areas include poverty and inequality, intergenerational mobility, and social welfare policy. Her current research projects include a study of in-work poverty among the young; social safety nets in East Asia; and the development of universal digital access. She is active in the community, serving or having served in committees in the Ministry of Social and Family Development, National Council of Social Service, Ministry of Manpower, and various voluntary welfare organizations. She is currently the Vice-Chair of the Board of Youth Guidance Outreach Services.

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Panellist

Mr Abdul Samad Bin Abdul Wahab

*Vice-President,
National Trades Union Congress (NTUC)*

Mr Abdul Samad started his union journey in 2006 with Union of Power and Gas Employees (UPAGE) and became General Secretary in 2015. He was also elected to the NTUC Central Committee. In 2019, he was elected again and appointed Vice President since then. He is currently working in SP Group as a Principal Technical Officer, where he provides consultation to agencies, consultants and contractors to protect power cables and gas pipes to prevent disruption. He has been chairing two committees in NTUC such as Membership, Oil Petroleum Energy Chemical (OPEC) Cluster from 2019. Earlier in 2015, he chaired the NTUC Care & Share Committee. He was appointed as Nominated Member of Parliament in 2021 for two and a half years. He is also currently a board member at Skills Future Singapore (SSG) and NTUC Learning Hub.

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Panellist **Ms Hazlina Abdul Halim**

*President,
Persatuan Pemudi Islam Singapura (PPIS)*

Hazlina Abdul Halim is President of the Singapore Muslim Women's Association (PPIS), an organisation dedicated to inspiring women and strengthening families. PPIS and Oaks Plus Limited runs 17 centres for women, families, and children - including seven early childhood education and two student care centres, two family service centres, a divorce support specialist agency, a fostering agency, as well as centres for young marriages and stepfamilies. Under her leadership, PPIS published its first-ever research publication on the Aspirations of Muslim Women, built Singapore's first secular Halfway House for females, launched a post-graduate scholarship for women in partnership with LBKM, developed a new initiative called Women Space, and established Oaks Plus Limited which runs early childhood education centres. She's also the CEO of Make-A-Wish Foundation, a charity which transforms lives one wish at a time.

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Moderator **Ms Atiqah Halim**

*Deputy Director,
Future Ready, Yayasan MENDAKI*

Atiqah Halim has over 15 years of public service experience in people, leadership, and organisational development. She is passionate about developing communities and enabling individuals and families to thrive and has recently completed a graduate diploma in Positive Psychology. She is also a certified life and career coach. Atiqah currently heads the Future Ready department in MENDAKI and is constantly looking at ways to inspire and future proof our Malay/Muslim youth and workforce.

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RETHINKING WORK

Thursday,
13 July 2023

Session 3
Integrating Education & Work



Panellist **Ms Iryani Halip**

*Senior Executive,
Research & Design, Yayasan MENDAKI*

Iryani Halip is a Senior Research Officer at Yayasan MENDAKI. After completing her Bachelor's in Mathematical Science at Nanyang Technological University, Iryani gained research interests primarily focused on the behavioural insights affecting employment and employability of youth and adults. She oversaw Yayasan MENDAKI's Employment & Employability Study 2021.

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Panellist **Dr Silin Yang**

*Deputy Director,
Strategy, National Trades Union Congress (NTUC)*

As the Deputy Director (Strategy) of the National Trades Union Congress, Dr Silin Yang conducts strategic research studies to identify emerging trends that impact workers and the Labour Movement. Silin holds a Doctor of Philosophy and has close to 20 years of experience in the education sector. Her experience teaching primary school pupils, higher education students, and adult learners is the source of her deep interest in training and learning. Her current research focuses on adult learning, underemployment, and the future of human capital. She is also the founding editor of the Singapore Labour Journal and sits on the advisory committee of the SIT Teaching and Learning Academy.

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Integrating Education & Work



Panellist **Dr Gog Soon Joo**

*Chief Skills Officer,
SkillsFuture Singapore*

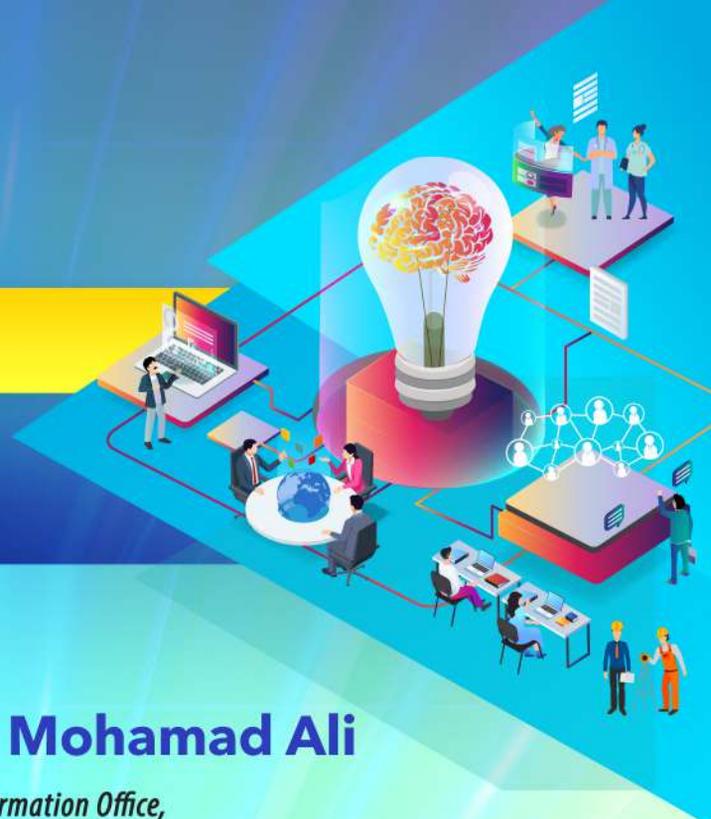
Dr Soon-Joo Gog is the Chief Skills Officer at the SkillsFuture Singapore, and has held a number of posts in Singapore government. She leads a team of Jobs-Skills Analysts, Data Scientists, and Futurists, to identify global trends that impact business, jobs and skills. Soon-Joo and her team work with local and international partners to prototype solutions in the areas of future of work, future of learning and future skills. Her research interests include capitalism in the digital economy, new economy firms, skills ecosystems and skills policies.

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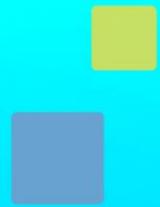
Moderator **Mr Sufyan Bin Mohamad Ali**

*Senior Executive, Digital Transformation Office,
Singapore Malay Chamber of Commerce and Industry (SMCCI)*

Sufyan Bin Mohamad Ali is a Senior Executive at the Digital Transformation Office of the Singapore Malay Chamber of Commerce & Industry (SMCCI). With a Bachelor's degree in Mechanical Engineering and certifications in Google UX Design and Strategic Technology and Operation Roadmapping (STORM), Sufyan brings a strong technical background to his role. He is dedicated to helping businesses embrace digital platforms/services/features like TikTok Shop, Canva, Meta Business Suite and many more. As a mentor for Tech For Good (T4G), Sufyan is committed to empowering persons with disabilities and the elderly through technology. With his ability to translate complex tech concepts into simple terms, Sufyan facilitates effective communication. He aspires to support Malay/Muslim businesses in their digital transformation journey, making a positive impact within his community. Sufyan's passion for lifelong learning and problem-solving makes him a valuable asset in driving digital transformation.

Session 1

Evolving Career Landscapes

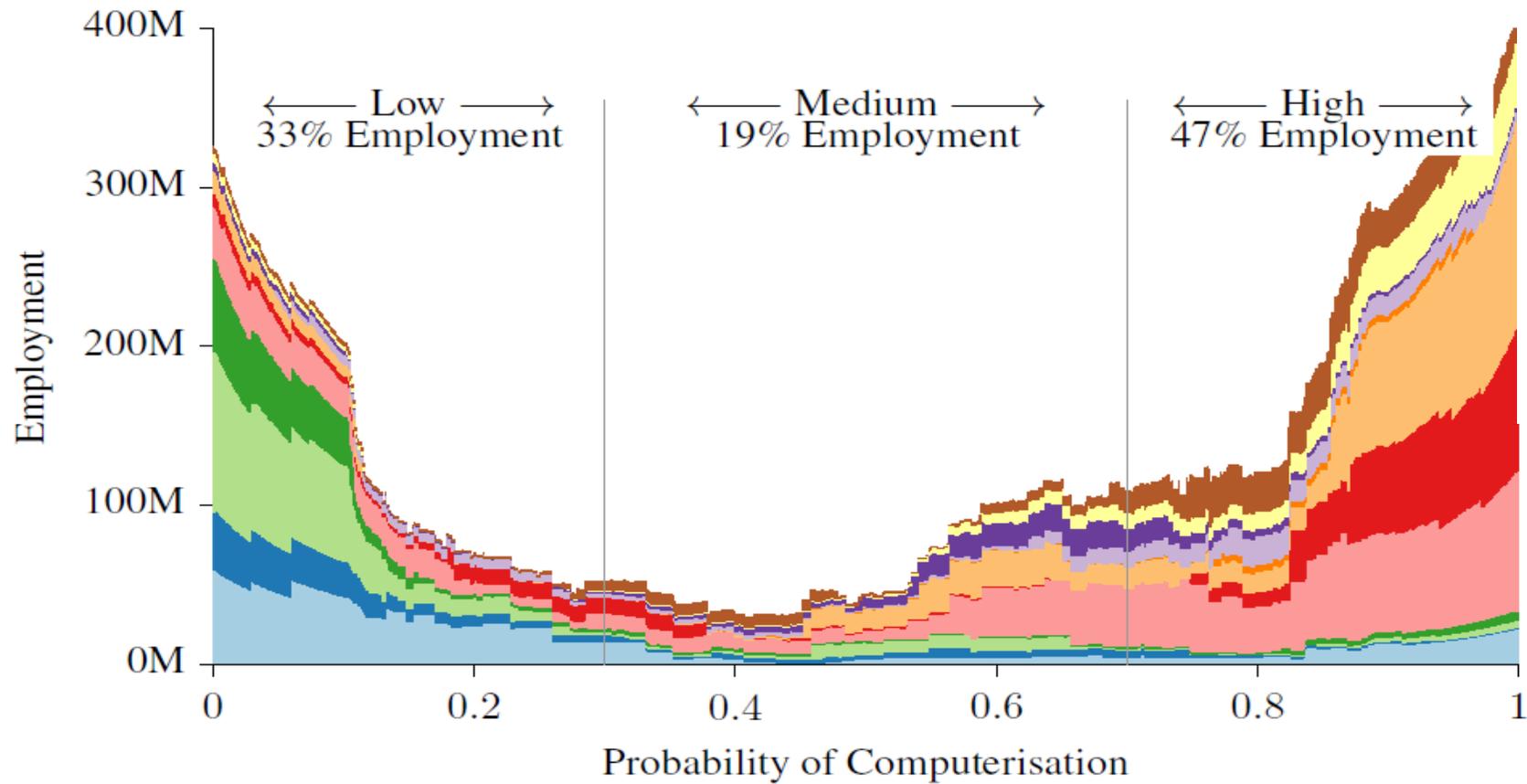


Are Differences Destiny?

Reviewing the Skills Distribution of the Malay Community in the Context of the Future Economy

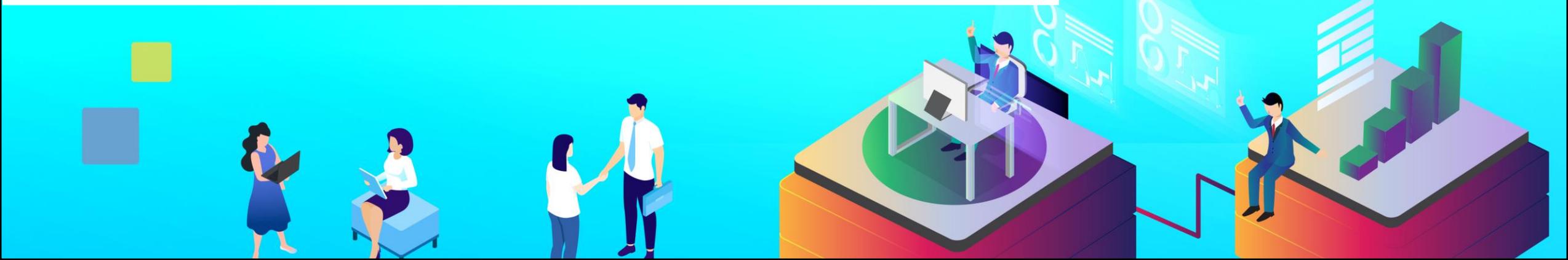
Dr Walter Edgar Theseira
Associate Professor of Economics
Singapore University of Social Sciences
waltertheseira@suss.edu.sg





- Management, Business, and Financial
- Computer, Engineering, and Science
- Education, Legal, Community Service, Arts, and Media
- Healthcare Practitioners and Technical
- Service
- Sales and Related
- Office and Administrative Support
- Farming, Fishing, and Forestry
- Construction and Extraction
- Installation, Maintenance, and Repair
- Production
- Transportation and Material Moving

What does the future of jobs hold?



What does the future of jobs hold?

- Frey and Osborne (2017) assessed U.S. jobs for the risk of computerisation based on three limitations of AI / technology.
- (1) Fine perception and manipulation; Machines have difficulty with fine motor control – they can plow fields but not pick fruit.
- (2) Creative intelligence; AI has difficulty writing songs or creating art.
- (3) Social intelligence; AI has difficulty relating to people.
- Based on this, Frey and Osborne predicted 47% of US jobs were at imminent risk of computerisation.
- The proportion today is probably far higher, given advances in Generative AI.



Skill-Biased Technological Change and the Future Economy

- We are undergoing a massive, technology-driven shift in industry and labour markets, enabled by advances in robotics, big data, machine learning, AI.
- Such technological shifts are nothing new. History suggests economies readily absorb shifts in labour demand (e.g. US agricultural labour force fell from 41% in 1900 to 2% in 2000), but who gains and loses is an open question.



Skill-Biased Technological Change and the Future Economy

- Many economists believe both the high-skill and low-skill ends of the labour market will experience an increase in demand:
 - High-skill workers will gain productivity because their skills are complemented by technology;
 - Lower-skill workers will be demanded for services that are hard to replace with technology.
- However, this raises concerns that medium-skill workers will be increasingly replaced by technology, forcing them to 'upgrade' or 'downgrade' their jobs.



The Impact of the Future Economy on the Malay Community

- How will these changes affect the Malay ethnic group labour force and community in Singapore?
- I will address this by:
 - reviewing (broadly) how the skills distribution of the Malay labour force has adapted to previous periods of economic change in the Singapore economy;
 - reviewing early evidence of the impact of technological and economic change on returns to skills in Singapore;
 - and conclude by discussing some possible steps forward to understand the skills and occupational context of the Malay community and the pathways for taking advantage of the future economy.



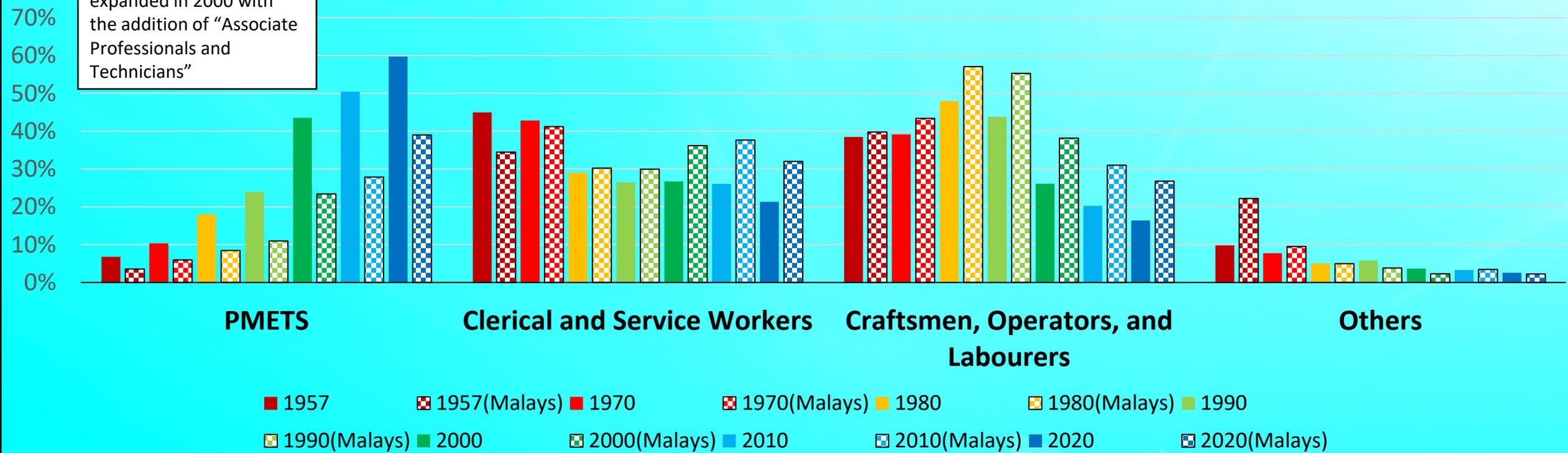
I: Economic Development, Skills and Occupational Distributions, 1957-2020



Distribution of Singapore and Malay Ethnic Group Labour Force by Broad Occupational Categories, 1957 – 2020

Source: Singapore Census, Department of Statistics, various years

The PMET category was expanded in 2000 with the addition of "Associate Professionals and Technicians"



PMETS

Clerical and Service Workers

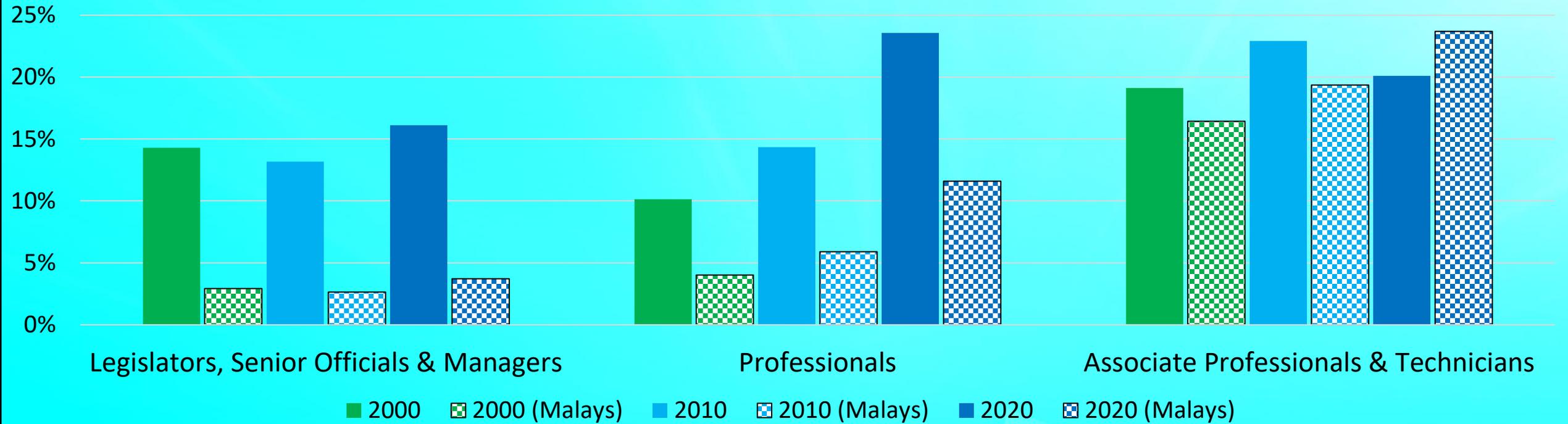
Craftsmen, Operators, and Labourers

Others

■ 1957 ■ 1957(Malays) ■ 1970 ■ 1970(Malays) ■ 1980 ■ 1980(Malays) ■ 1990
■ 1990(Malays) ■ 2000 ■ 2000(Malays) ■ 2010 ■ 2010(Malays) ■ 2020 ■ 2020(Malays)



Distribution of Singapore and Malay Ethnic Group Labour Force within PMET Category, 2000-2020



Overview of the Singapore and Malay Ethnic Group Labour Force

- Before independence, the Malay community was severely under-represented in high-skill occupation positions (3.3% were professionals, and 0.3% were in management, compared with 5.1% and 1.7% of the labour force). A significant portion of the community - 22% - did work that was not classifiable in standard occupations, including the armed forces.
- During Singapore's first phase of post-independence economic development (1970-1990), there was significant growth in mid-skilled work in manufacturing and also growth in higher-skill PMET positions. Although the Malay community transitioned rapidly out of non-classifiable occupations, and into mid-skilled occupations, the community lagged in transitioning to high-skill work (from 5.9% as PMETS in 1970 to 11% in 1990, compared with 10.3% to 24% for the labour force), and became over-represented in medium to lower skilled work.



Overview of the Singapore and Malay Ethnic Group Labour Force

- In the most recent phase of economic development (2000-2020), the resident labour force transitioned to a majority-PMET structure (59.8% by 2020), with the Malay community following closely (39% by 2020). A significant occupational skills / position gap remains for the Malay community, particularly in the Management category (3.7% for Malays vs 16.1% of the labour force); and the Professionals category (11.6% for Malays vs 23.6% of the labour force).

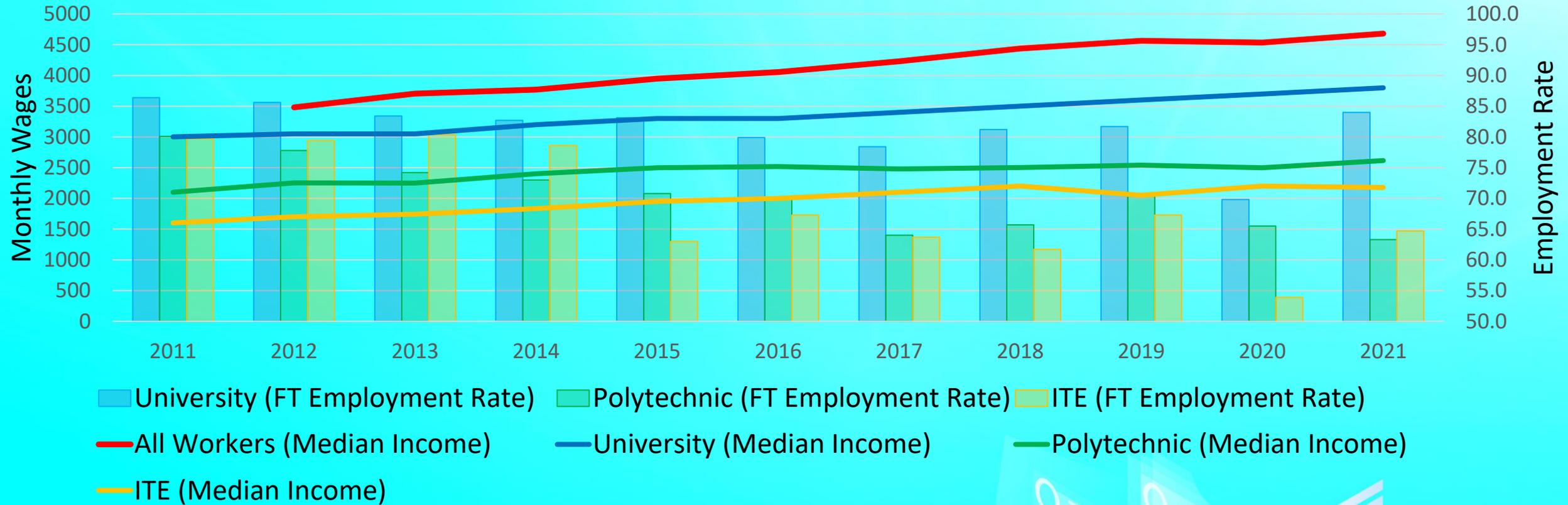


II: Recent Developments in Returns to Skills, and High-Skill Education in Singapore



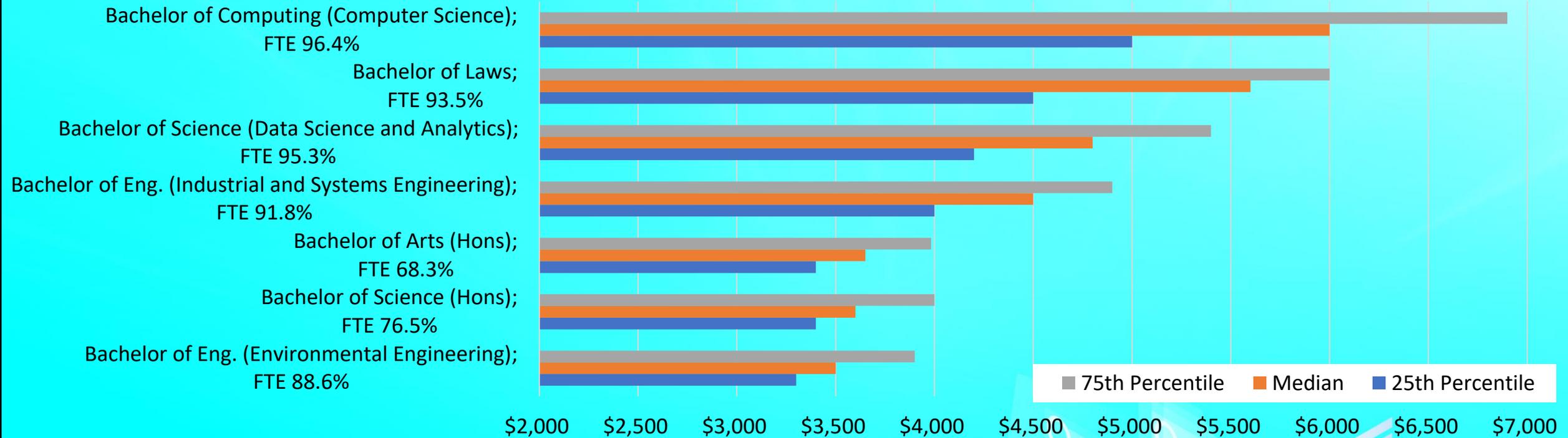
Jobs: The Graduate Employment and Starting Pay Gap

Source: Ministry of Manpower and Ministry of Education



Starting Graduate Salaries in 2021, Selected Disciplines, National University of Singapore

Source: Graduate Employment Survey, Ministry of Education

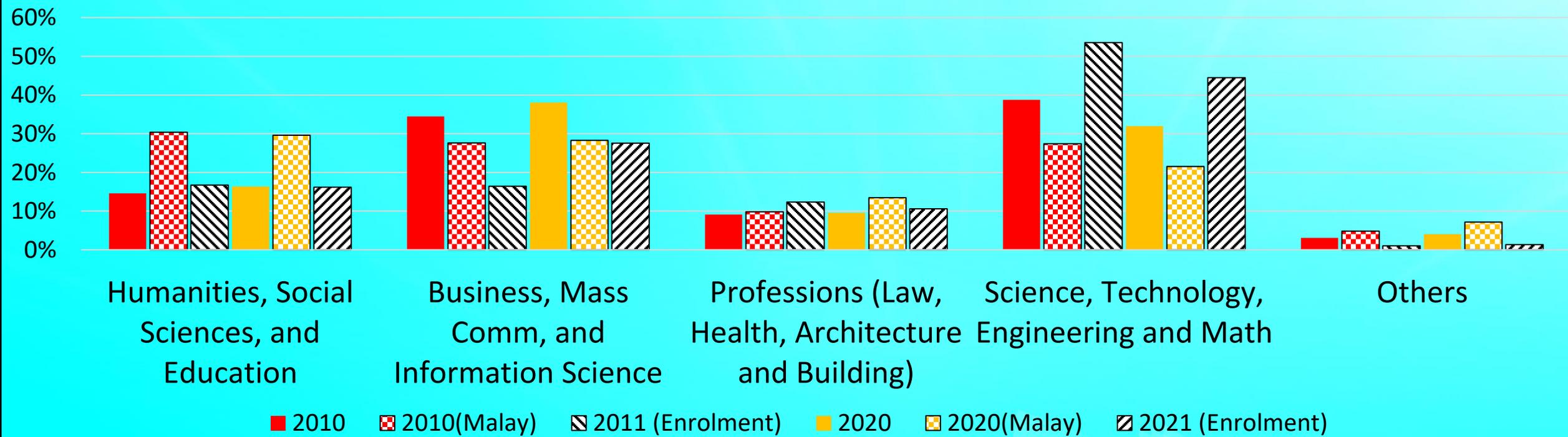


Overview of Recent Developments in Returns to Skills in Singapore

- The starting pay gap between University graduates and other tertiary education graduates has widened in absolute terms.
- Employment prospects have also weakened significantly for non-University graduates.
- Across University graduate disciplines, career prospects are diverging significantly, with disciplines linked to technological change enjoying high employment rates and significantly larger starting salaries.
- The evidence is consistent with returns to skills that complement technological changes rising sharply.



Distribution of Singapore and Malay Ethnic Group Graduates by Discipline, 2010-2020; Distribution of Enrolled Students in Autonomous Universities, 2011 and 2021



High-Skill Education and Preparedness for the Future Economy

- The existing Singapore graduate population lags behind current education trends, and may need help to meet the requirements of a technologically intensive labour market.
- While 44.5% of enrolled graduates were in STEM fields in 2021, today only 32% of all graduates are in STEM, and only 21.5% of Malay graduates are in STEM.
- From 2010-2020, enrolment in AUs has proportionately increased faster in Business disciplines (16.4% to 27.5%), with corresponding reductions in STEM (53.5% to 44.5%). (However, within the subfield of Information Technology, enrolment is up from 7.1% to 9.3%).
- Malay community graduates today tend to be over-represented in Humanities and Social Sciences (particularly in Education) and under-represented in Business and STEM.



Summary

- The Malay ethnic group labour force has changed with Singapore's economic development, mirroring the overall labour force's shift first towards medium-skill industrial jobs, and later towards high-skill PMET services jobs.
- Historic skill-occupation gaps have been slow to close, and Malays remain under-represented in Management and Professionals jobs, and over-represented in medium skill production and logistics jobs. By industry sector (analysis not shown earlier), Malays also continue to be under-represented in the trade, finance and professional services sectors.
- In terms of graduate-level skills, Malays are over-represented in Humanities and Social Sciences, and under-represented in Business and STEM.



Next Steps

- Will skill and occupation gaps will continue to converge (and at what rate) for the Malay community, given that the economy is undergoing rapid skill-biased technological change?
- This is an extremely difficult question to address, but I think some steps could be taken.
- First, research may help understand the historic, and continuing, reasons for differences in skill and occupational convergence in the Malay community. The role of policy, educational pathways, market opportunities and structure, and community preferences, should be examined. This may be useful, because historic structure and constraints are likely to continue having effects today.



Next Steps

- Second, it may be helpful to assess the skills capacity, preferences, and perceptions of the Malay youth and workers, with a view to understanding preparedness and interest in taking up technological-driven training in STEM and skills relevant for the future economy.
- Given that technological shifts are likely to continue changing nature of work and the distribution of returns to skills, without the right adaptations in skills and training, existing gaps may remain or even widen.
- However, with a relatively young community, and a rapidly rising tertiary education rate, there is great potential for the skills distribution in the Malay community to adapt to technological change, and for the Malay community to benefit from gains to productivity and wages in the future economy.



Session 2

Family Friendly, Equal Opportunity Workplaces





Social Service Research Centre
Faculty of Arts & Social Sciences



IN-WORK POVERTY
Challenges of Getting By
Among The Young

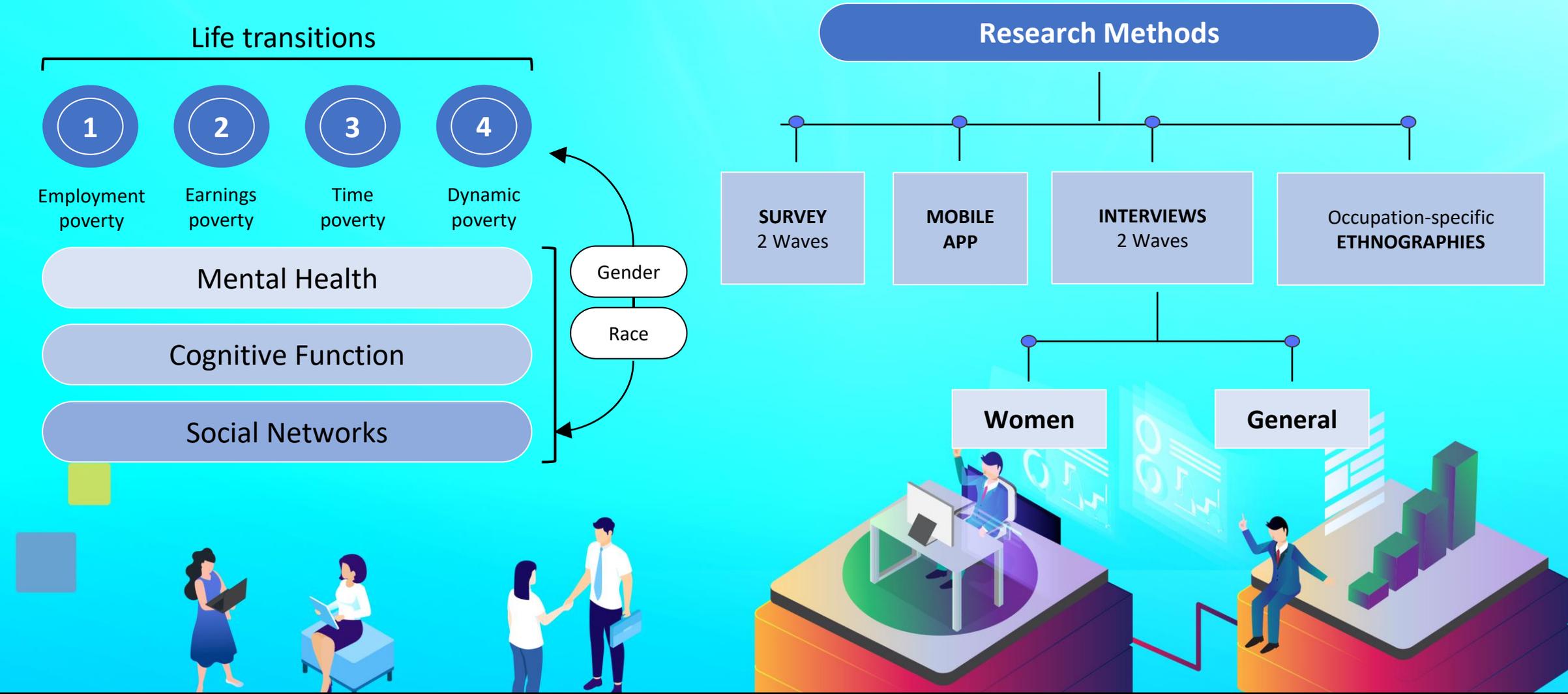
In-Work Poverty: Challenges of Getting By Among The Young

Dr Irene Y.H. Ng
Associate Professor of Social Work
National University of Singapore



Study Overview

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



Presentation Outline

Variation of

1
Monthly
income

2
Occupational
Status

3
Psychological
well-being

4
COVID-19
impacts

5
Training

by education and wage levels



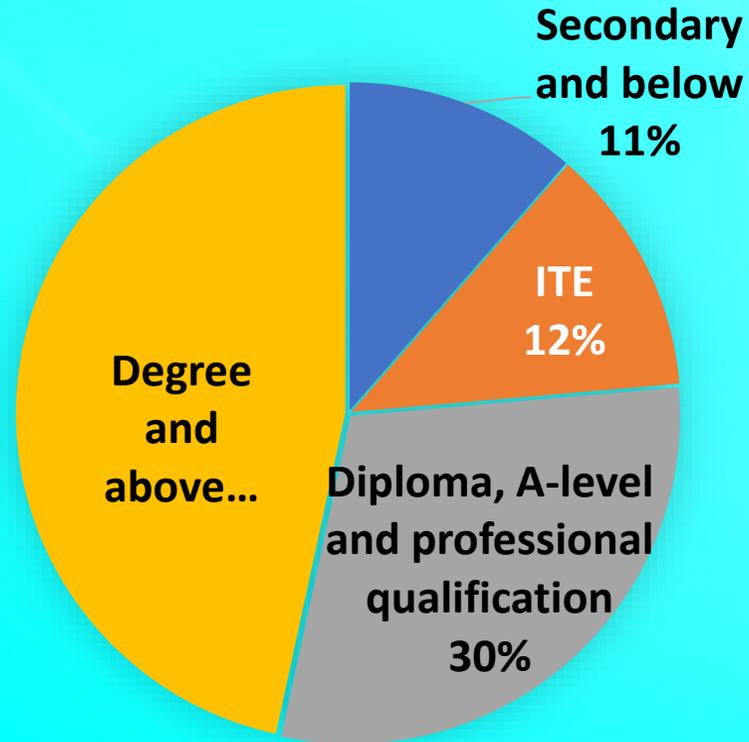


IN-WORK POVERTY
Challenges of Getting By
Among The Young

Education, Wage & Occupations



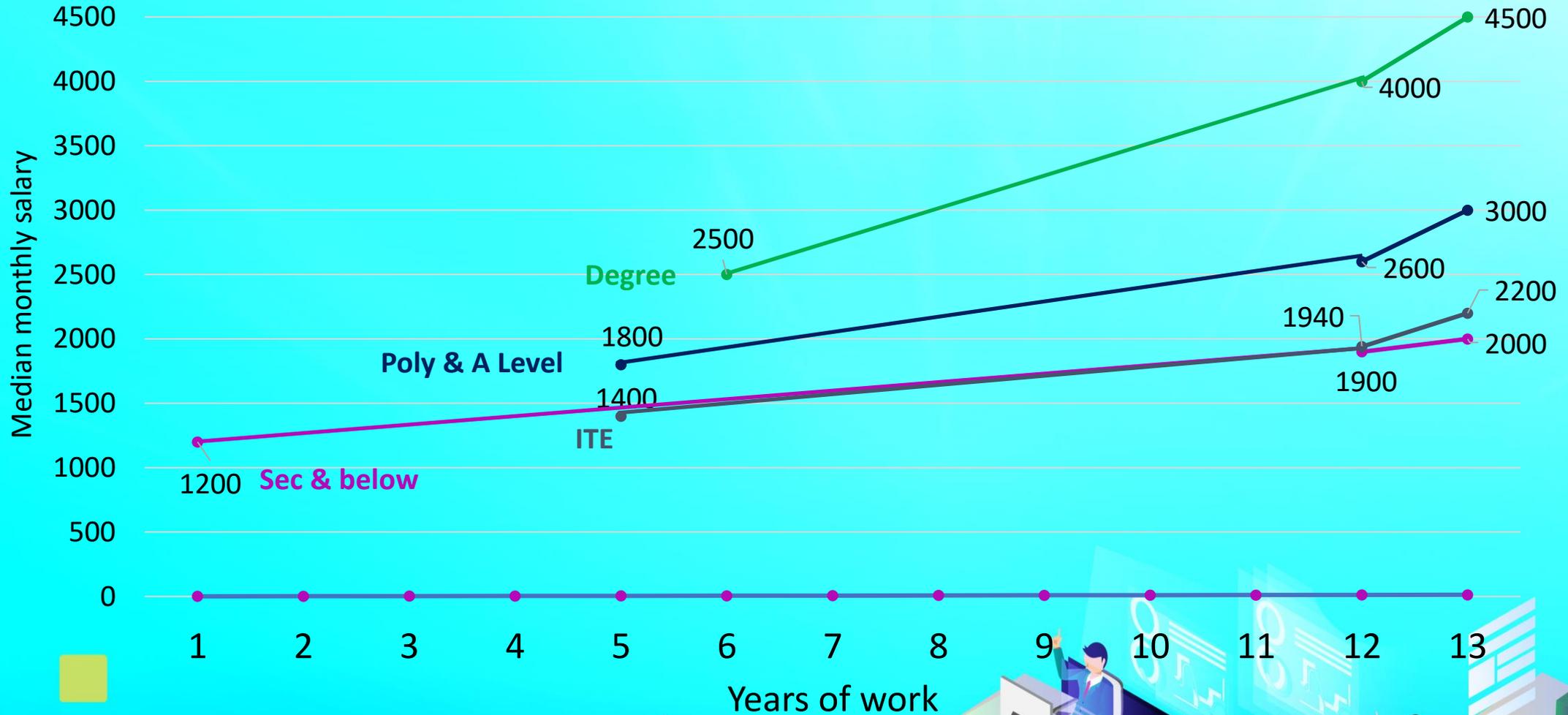
Education and Wage Profile



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

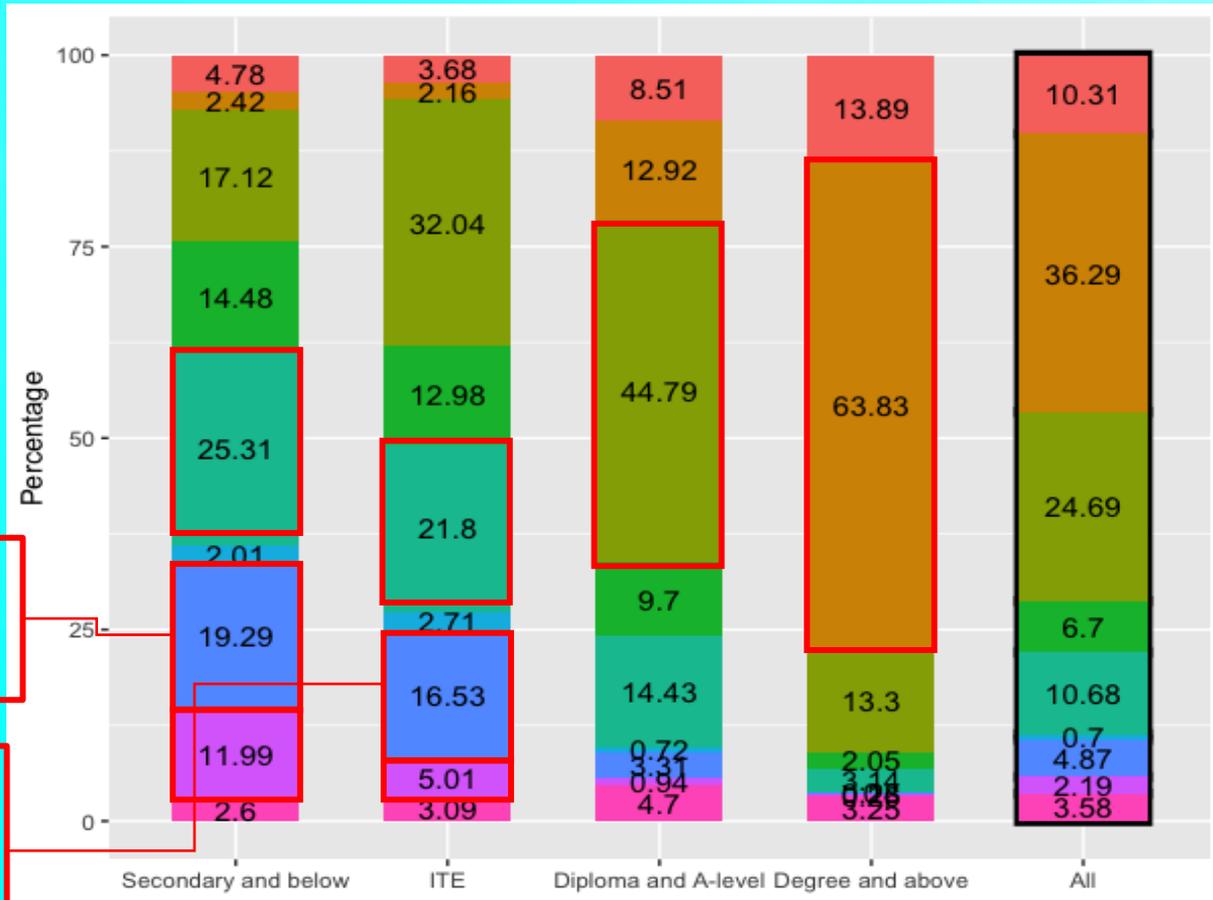


Wage trajectory by highest education



Occupation status

Higher educated have higher occupational status.



57% are self-employed platform workers

68% are self-employed platform workers

Occupation (SSOC-Sample)

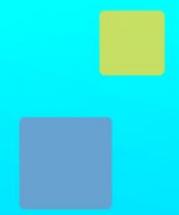
- Managers and working proprietors
- Professionals
- Associate professionals and technicians
- Clerical support workers
- Service and sales workers
- Craftsmen and related trades workers
- Plant and machine operators and assemblers
- Cleaners, labourers, and related workers
- Other occupations





IN-WORK POVERTY
Challenges of Getting By
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Training



Lower training participation persists through waves

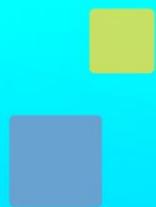
Training participation in the past 12 months

Wave 1 (%)	Wave 2 (%)
49.6	34.2

Training Persistence

	No training in W2	Training in W2
No training in W1	57.3%	36.4%
Training in W1	42.7%	63.6%
	100%	100%

Wave 2 Training Participation Rate Compared to MOM Report



Socioeconomic determinants of training

In multiple regression controlled for:

- Education level,
- PMET status,
- years of work, whether changed jobs, company size,
- age, race, sex, marital status, whether have children.....

The following were more likely to attend training

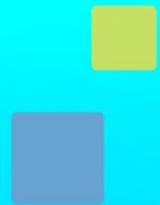
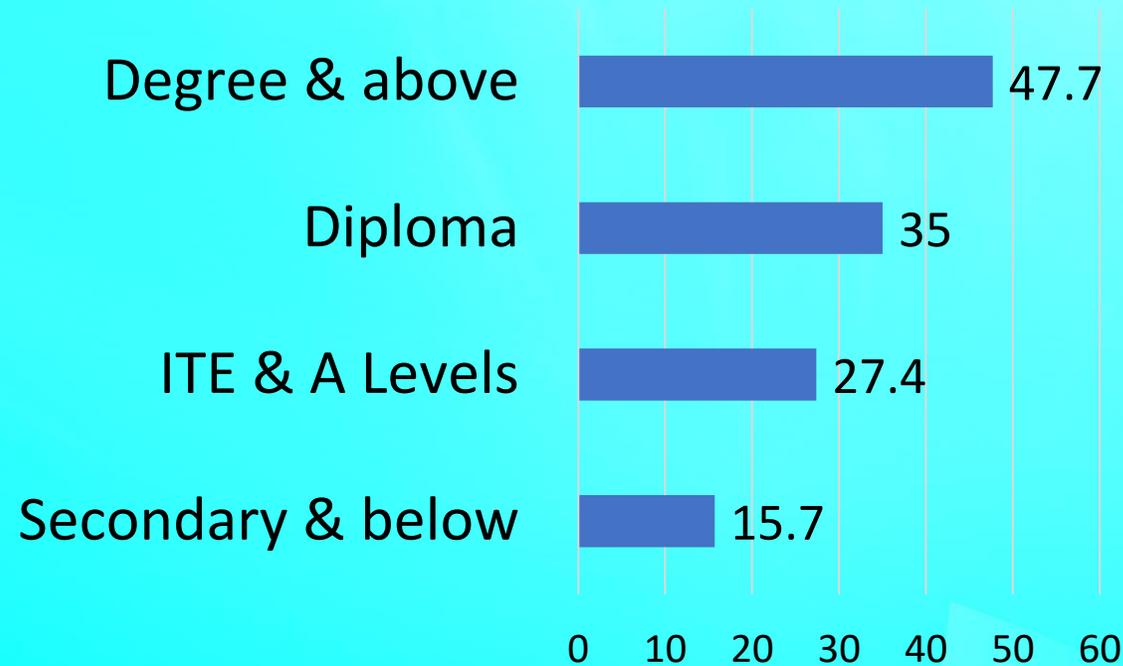
- Higher educated ← **Largest effect**
- PMET
- Respondents working in larger companies
- Malays

For the same education and occupation status, Malays are more likely to attend training

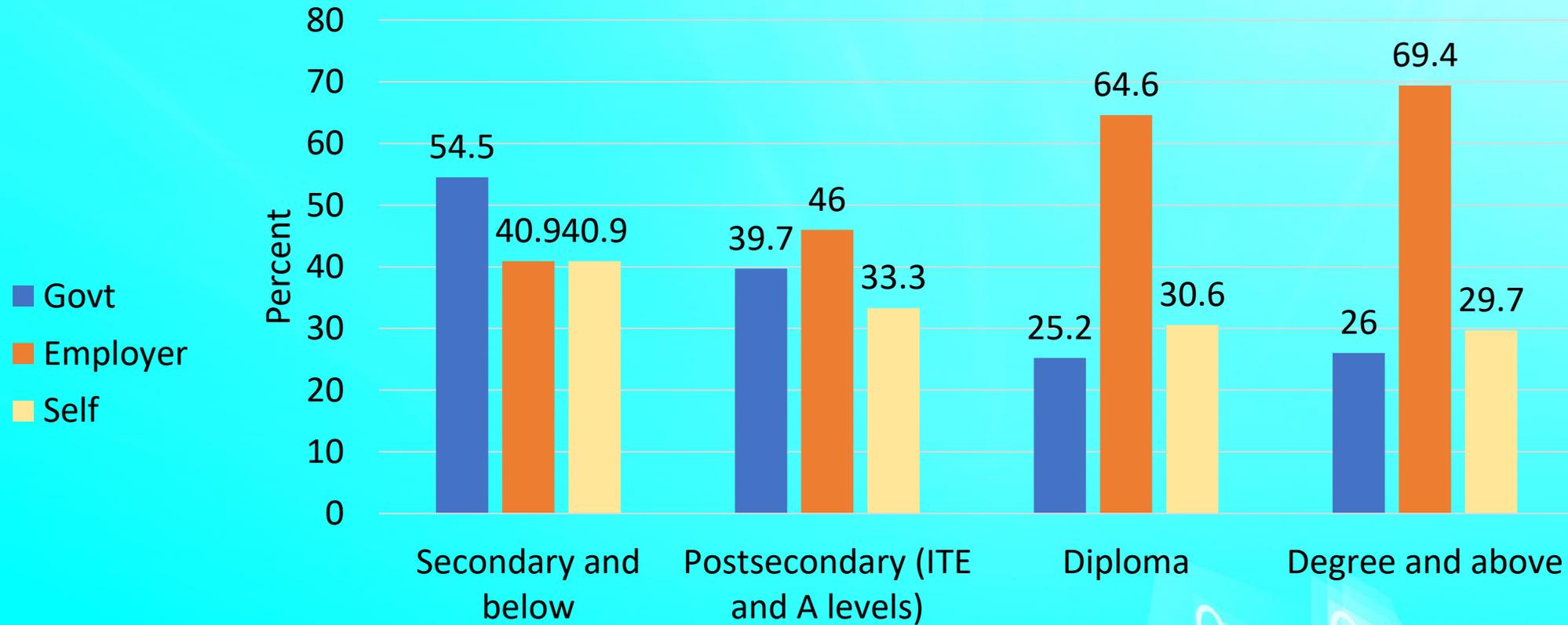


Unequal training participation rates

By education level (%)



Unequal sources of funding for training



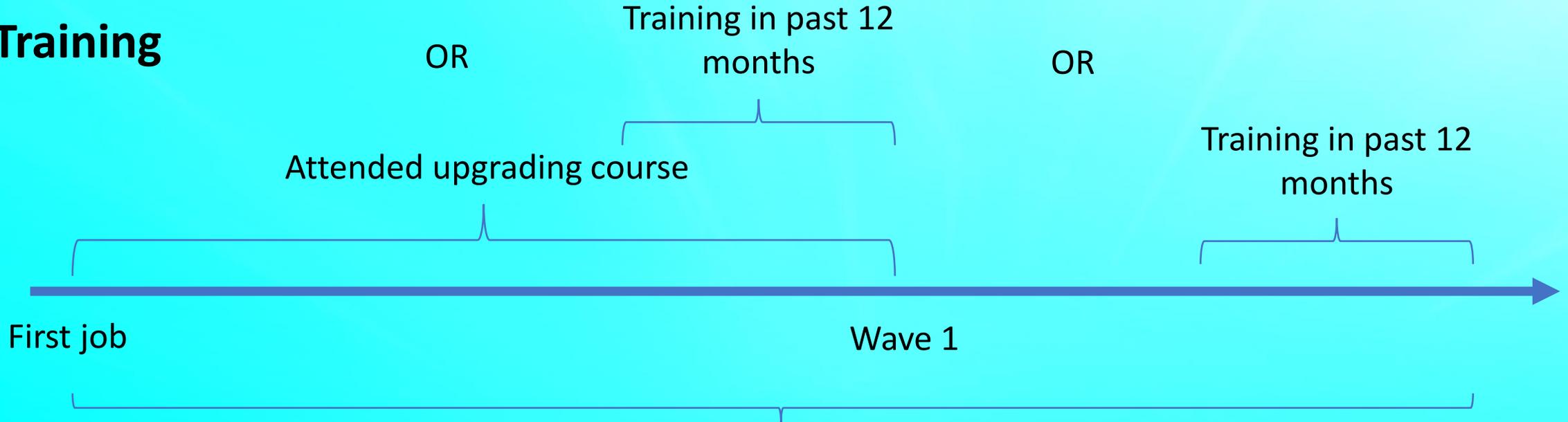
Effect of Wages on Training

- Difference-in-difference (DiD) regression
 - Addresses time-invariant factors that are unobservable in the data
- Sample size = 1,127 respondents who completed waves 1 and 2, with valid wage and work data
- Controlled for:
 - Education level, whether obtained higher qualification while working,
 - PMET status, own account work, years of work, whether changed jobs, company size,
 - age, race, sex, marital status, whether have children



Key Variables

Training



Wage

Wage change from first job to job in wave 2



Result

- Training increases wage by 20%**
Effect driven by respondents
- who have longer work experience
 - have lower education of ITE and below
 - are in non-PMET jobs



Conclusion on Training

- Given lower training participation but greater training benefits to lower educated and non-PMETs, education and occupational status are important factors to target for closing training gaps

BUT

Does training increase wages due to improved performance or the necessity of the certificate?





IN-WORK POVERTY
Challenges of Getting By
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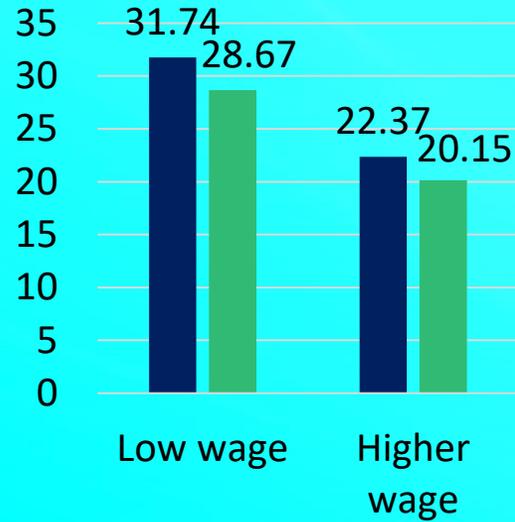
Psychological Well-Being & Impact of Covid-19

Reference: Ng, I. Y. H., Tan, Z. H., Chua, V., & Cheong, A. (2022). Separate lives, uncertain futures: Does Covid-19 align or differentiate the lives of low- and higher-wage young workers? *Applied Research in Quality of Life*.
<https://link.springer.com/article/10.1007/s11482-022-10068-6>



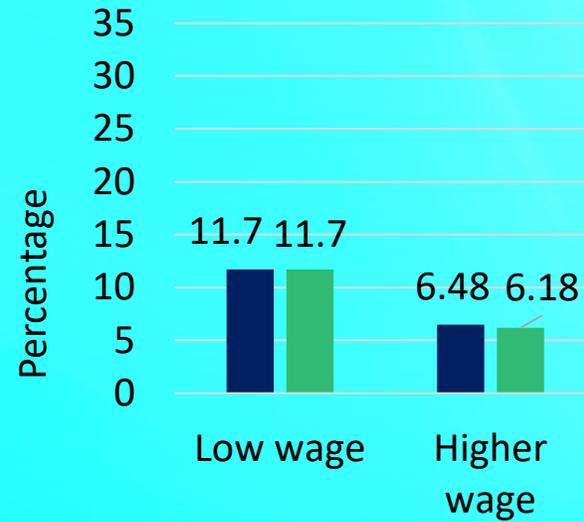
Mental well-being

Anxious



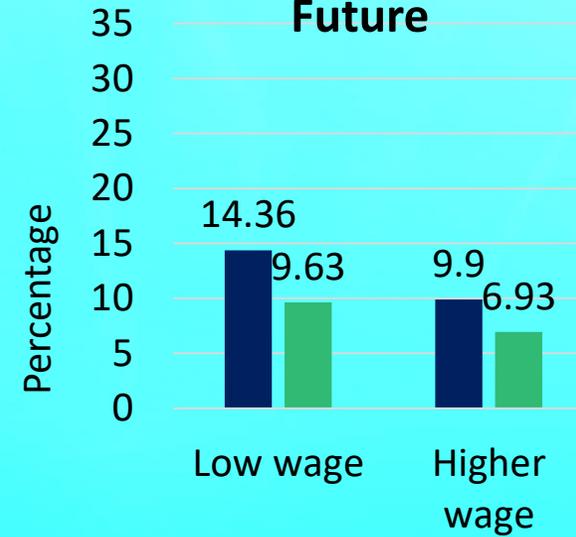
■ Wave 1 ■ Wave 2

Depressed



■ Wave 1 ■ Wave 2

Discouraged about the Future

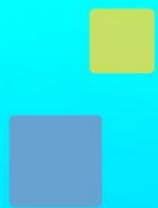
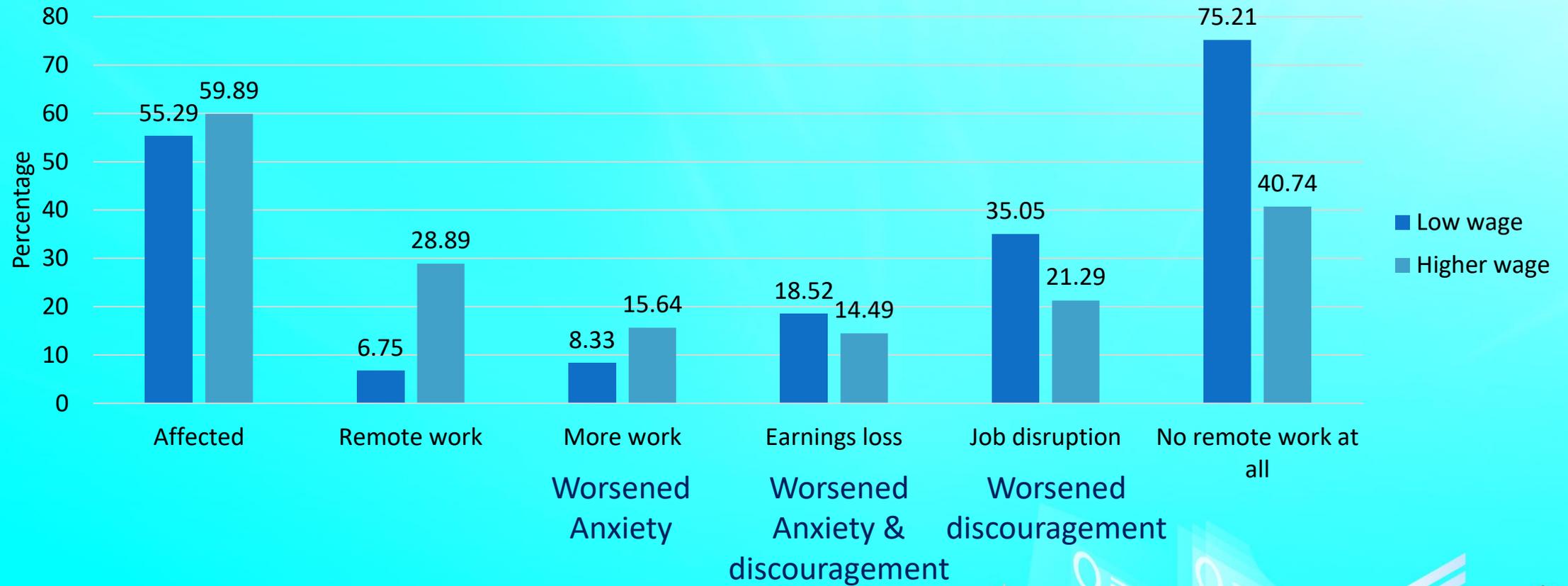


■ Wave 1 ■ Wave 2

- Improved from wave 1 to wave 2
- Is worse for low wage respondents



Impact of Covid-19



Concluding Thoughts

Young people are the future of work

- Good that national policies and institutions are starting to pay attention to them
- But the experiences of low-educated and low-income young people are often different from those of the general population of young people



Wage divergence by education level



Poorer mental well-being among low-wage respondents



Lower training rates but higher training returns by education level



More adversely impacted economically by Covid-19



Implications

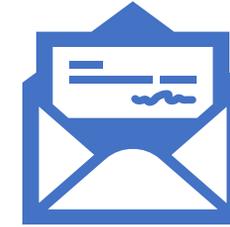


Need a repertoire of interventions to enable young people

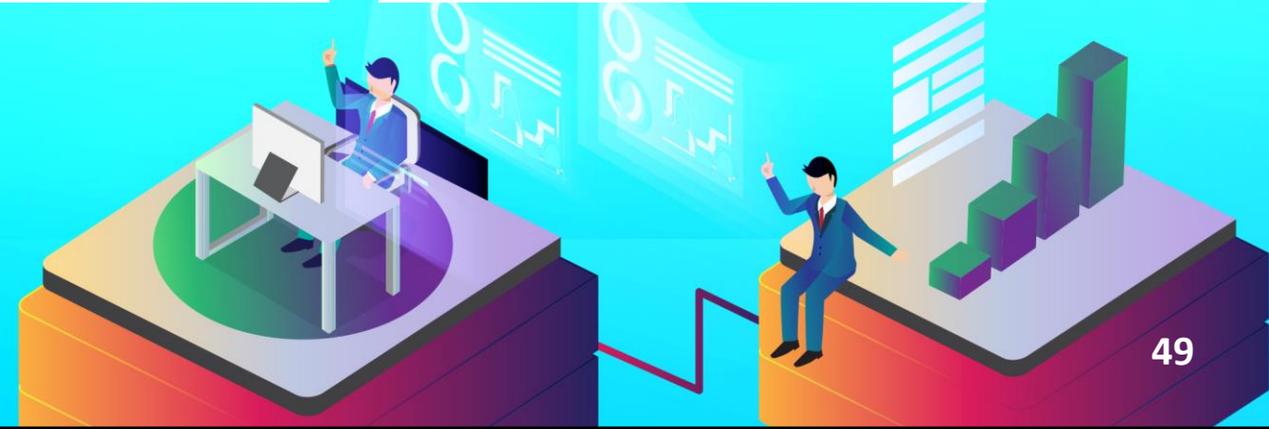
Different for high and low-educated/waged



Training & productivity improvements important



Wage improvements of bottom earners key



Session 3

Integrating Education and Work



Translating Intention into Action

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Study Overview

- Analysed survey and focus group discussions data of working and non-working groups of Malay-Muslims with an equal proportion of males and females
- Ascertained the motivations, deterrents and demographics of respondents pertaining to:
 - Skills acquisition
 - Employment assistance and upskilling programmes (EAUPs)



Quantitative Methodology

Methodology



Face-to-face Interview

Respondent Profile

- ✓ Citizens & PR
- ✓ Aged 15 to 55
- ✓ Malay-Muslim

Data Collection Period

11 Jan 2022
to
10 Feb 2022



Sample Size Achieved

1,002



Qualitative Methodology

Methodology



Online FGD

Respondent Profile



Working Group



Non-working Group

Data Collection Period

March 2022



Sample Size Achieved

18



Working Group

INDUSTRY

1

16.2%

Transportation & Storage

2

10.3%

Health & Social Services

3

9.6%

Wholesale & Retail Trade

OCCUPATION

1

31.3%

Service & Sales Workers

2

14.7%

Assoc. Professionals & Technicians

3

13.1%

Professionals

JOB FUNCTION

1

33.3%

Operations

2

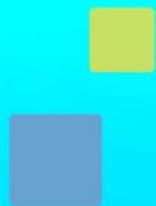
16.1%

Logistics

3

14.1%

Administrative



Non-working Group

Caring for elderly



17.9%

Temporary illness/injury



15.4%

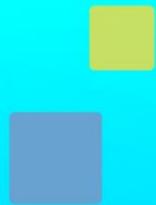
Caring for children



12.8%

34.7%

intend to enter or
re-enter the workforce



Attitudes towards Re-entering Workforce

CHALLENGES

1

52.4%

Lack of work-life balance

2

17.5%

Need to acquire new skills

3

15.9%

Preference to work

Mentally prepared for the challenge

Have a competitive edge

Do not have qualifications

Family is supportive

Positive outlook on industry

Not updated on developments in industry

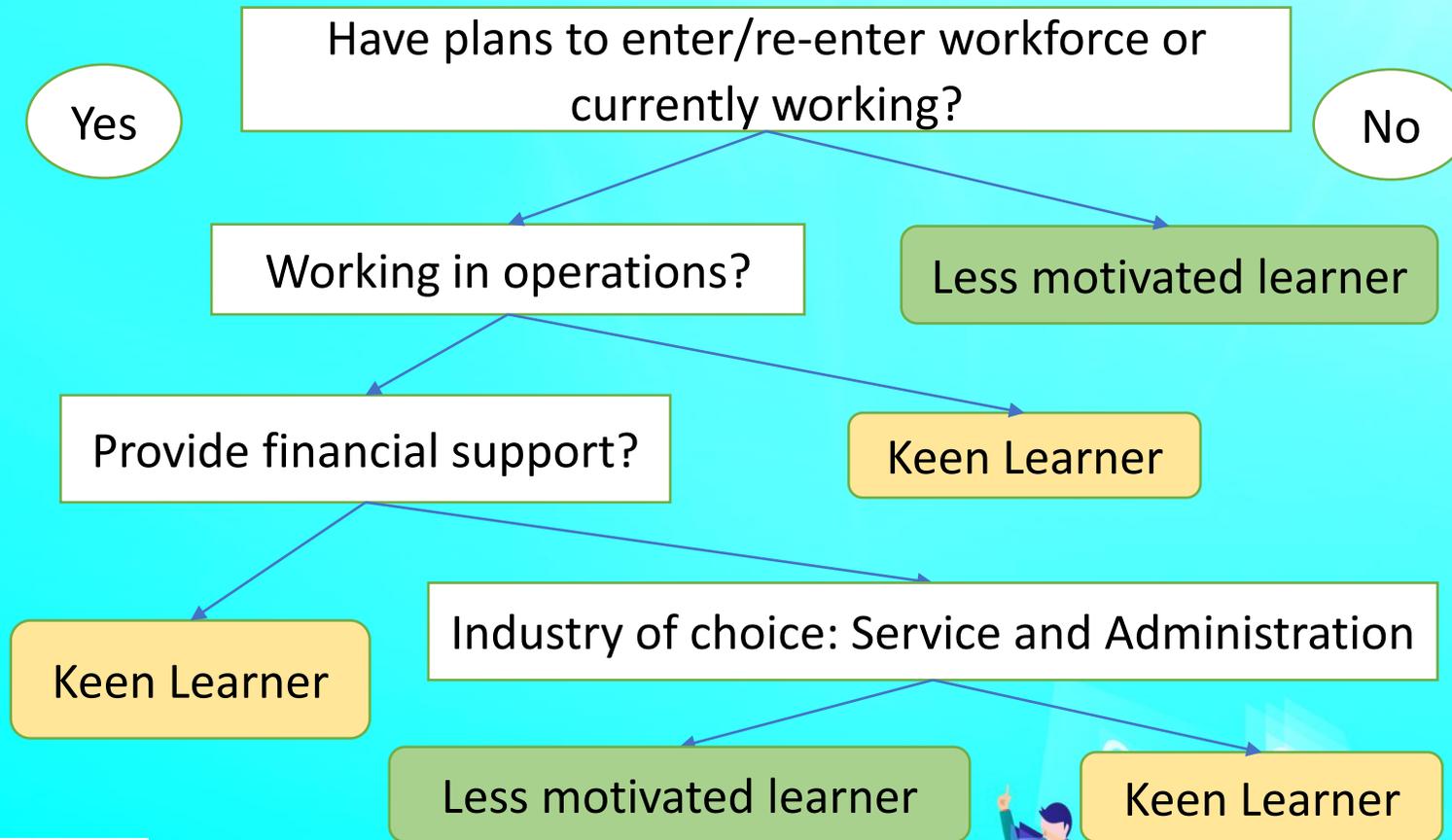


Factors affecting motivation

- A **Keen Learner** is interested in acquiring at least one hard skill and at least one soft skill
- Interventions to convert **Less Motivated Learners** into Keen Learners



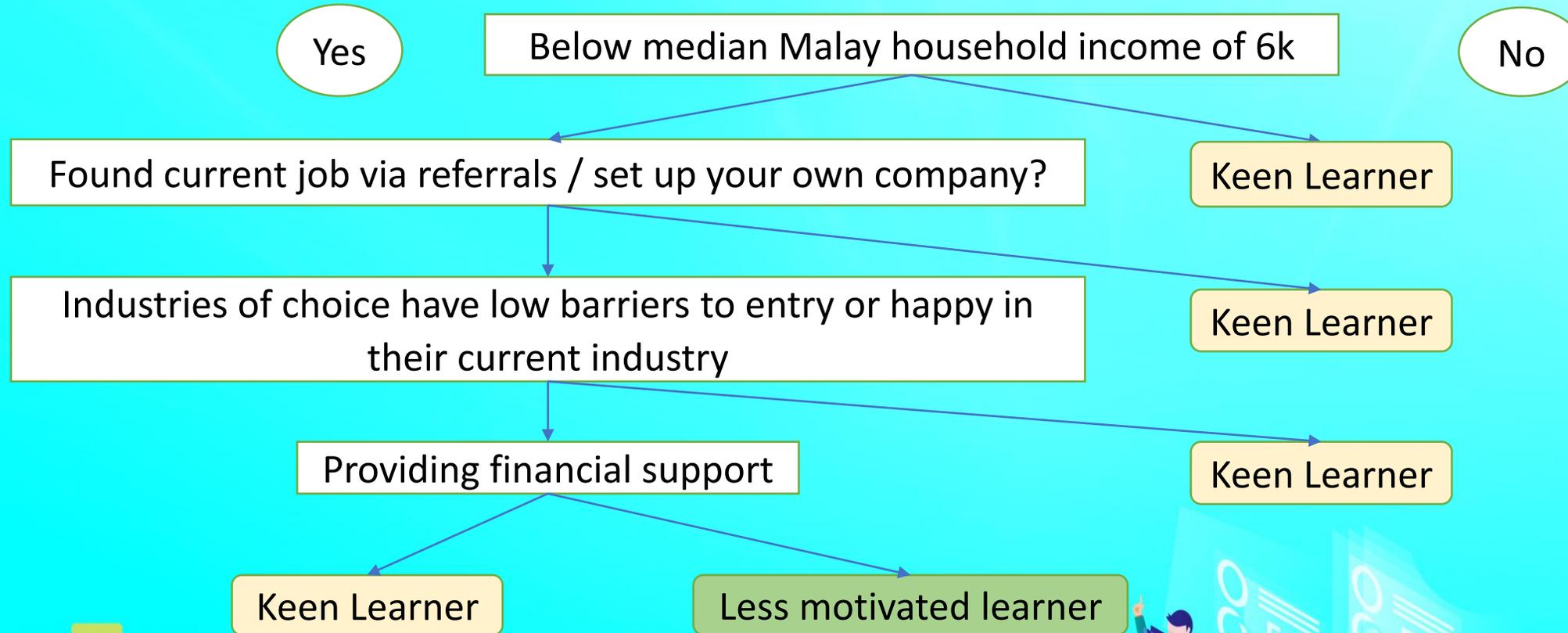
Push/Pull Factors for Learning (All Respondents)



N=1,002, AUC=0.83



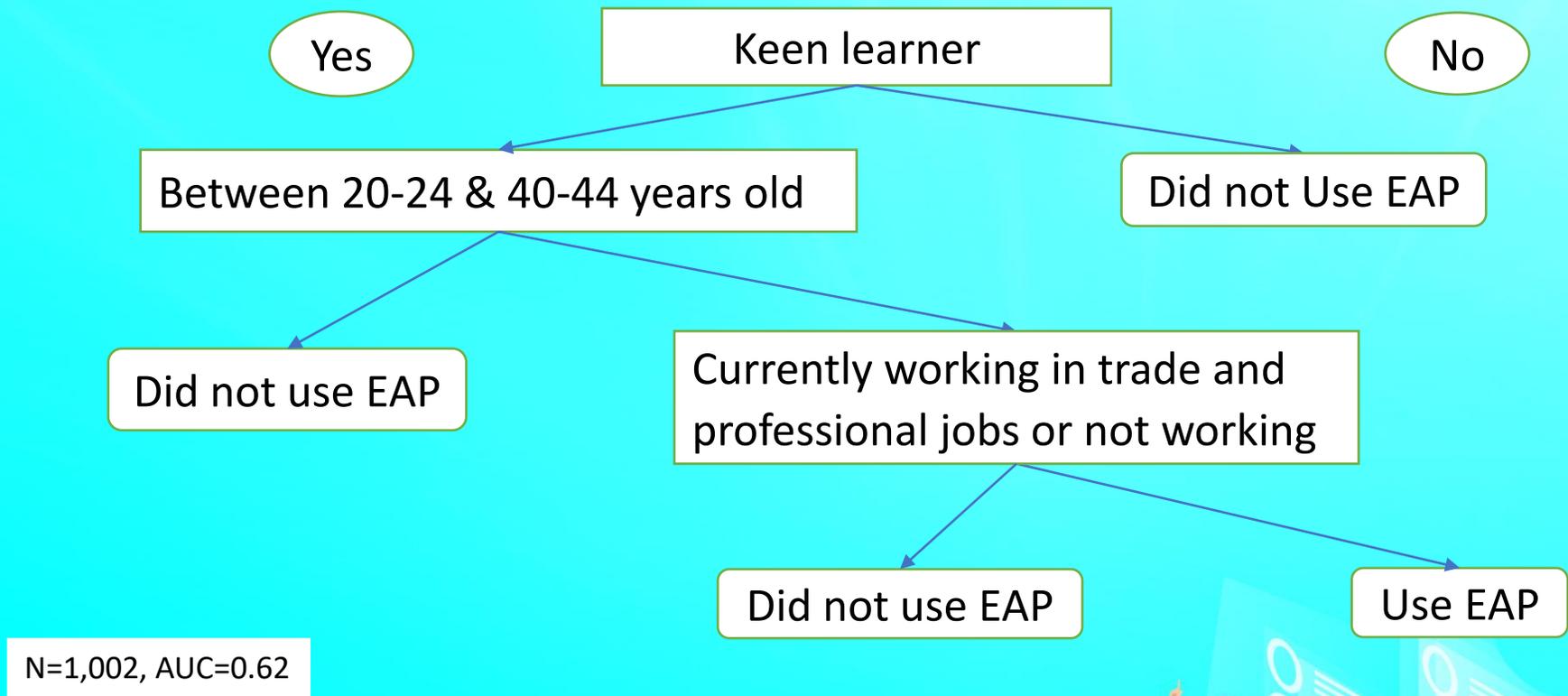
Push/Pull Factors for Learning (All Respondents)



N=639, AUC=0.71



From Intention into Action – Usage of EAUPs (All Respondents)



N=1,002, AUC=0.62



Conclusion

- Adopting a life-course perspective in understanding attitudes and facilitating access to training and learning is important
- Individuals tend to re-evaluate priorities at key junctures:
 - MENDAKI has programmes aimed at different age-groups.
 - Bundling MENDAKI's programmes
- Cultivating a growth mindset is important
 - Age is not a limiting factor in acquiring new skills
 - Make time for learning and training
 - Flexible delivery of MENDAKI's programmes
 - Last mile service delivery



SkillsFuture: A Collective Effort

Ms Chelvin Loh

Director, Skills Intelligence and Planning Division

SkillsFuture Singapore



SkillsFuture is a collective effort within the skills ecosystem



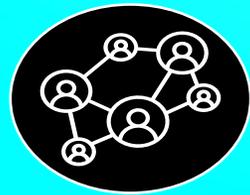
Individuals: Enable individual ownership of lifelong learning



Enterprises: Engage companies to articulate and aggregate skills needs; encourage skills recognition and skills-based HR practices at the workplace



Training Providers: Raise the industry relevance, quality, and market responsiveness of the Training and Adult Education sector



Ecosystem: Strengthen the link between skills supply to demand, and tighten the coordination between training and job placements



Since the launch of SkillsFuture, there has been continuous efforts in enhancing access to reskilling and upskilling

Reducing Financial Barriers

- **SkillsFuture Credit** for 25 yo and above
- **Course fee subsidy** up to 90%
- 40 yo and above receive **additional support**

Reducing Information Barriers

- Regular **jobs-skills insights** and annual **skills report**
- 1-1 **Skills Advisory Service**, Career Coaching (job seeker)
- **Online** portals: MySF & MyCF

Reducing Situational Barriers

- Lesson schedule tailored for **working adults**
- **Multi-modal** learning design
- **Stackable and bite-size** learning

Reducing Learning Barriers

- Learning at **workplace**
- LearnTech & **Learning Analytics**
- **Research & development** in adult learning

Reducing Application Barriers

- **Skills-based** learning design
- Curriculum that facilitates **application at workplace**
- **Modularise** learning for ease of acquisition and application

This also include attempts to engage workforce and employers, especially Small-Medium Enterprises, in skills development for business competitiveness

SkillsFuture Queen Bee (SFQB)

[33 SFQBs across the economy]

Lead Firms appointed to drive sectoral skills development

- Harness SFQBs' market influence and expertise to roll out industry-led learning to small-medium enterprises.
- Participating companies benefit from skills advisory support and curated training solutions in emerging and in-demand skills areas

Skills Development Partner (SDP)

[IES/ IHRP/ SGTech/ SCS]

Trade Associations & Chambers and Professional Bodies appointed to:

- Identify sectoral skills needs responsively
- Strengthen link between skills development and job redesign in their sectors
- Help employers better recognize their employees' skills

Jobs Skills Integrator (JSIT)

[PE/ Retail/ Wholesale Trade]

Strategic Integrators appointed to optimise training, job matching in the skills ecosystem

- Mobilise key industry players, training providers and employment facilitation outfits
- Aggregate industry manpower and skills needs to inform training and placement provision
- Ensure integrated training and placement services, especially for SMEs and mature workers



Case Study: Skills Transformation, Change Management and Talent Retention to Develop Skilled, Motivated and Happy Employees

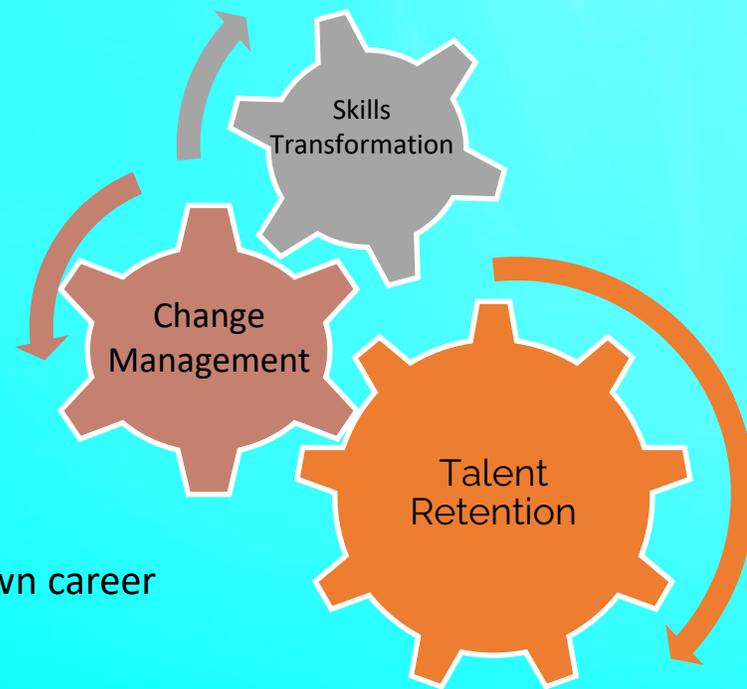
Embracing Workplace Learning to better attract, develop and retain engineers

Skills Transformation

- Leveraging e-learning solutions
- Expanding internal course library on future skills
- Developing own curriculum relating to Critical Core Skills

Change Management

Developing a new L&D framework, where every job role will have its own career pathway and L&D plan



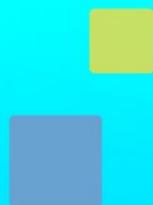
Smart thinking. Safe hands.



Talent Retention

Launching the Rotary Management Program – Customised to equip project engineers with necessary skills to take on project management, thereby reducing the steep learning curve, and having certification endorsed by NACE@SIT

Source: Rotary Engineering



16 Critical Core Skills for a Sustainable Workforce

Insights based on executive interviews and industry validations with organisations across 28 sectors

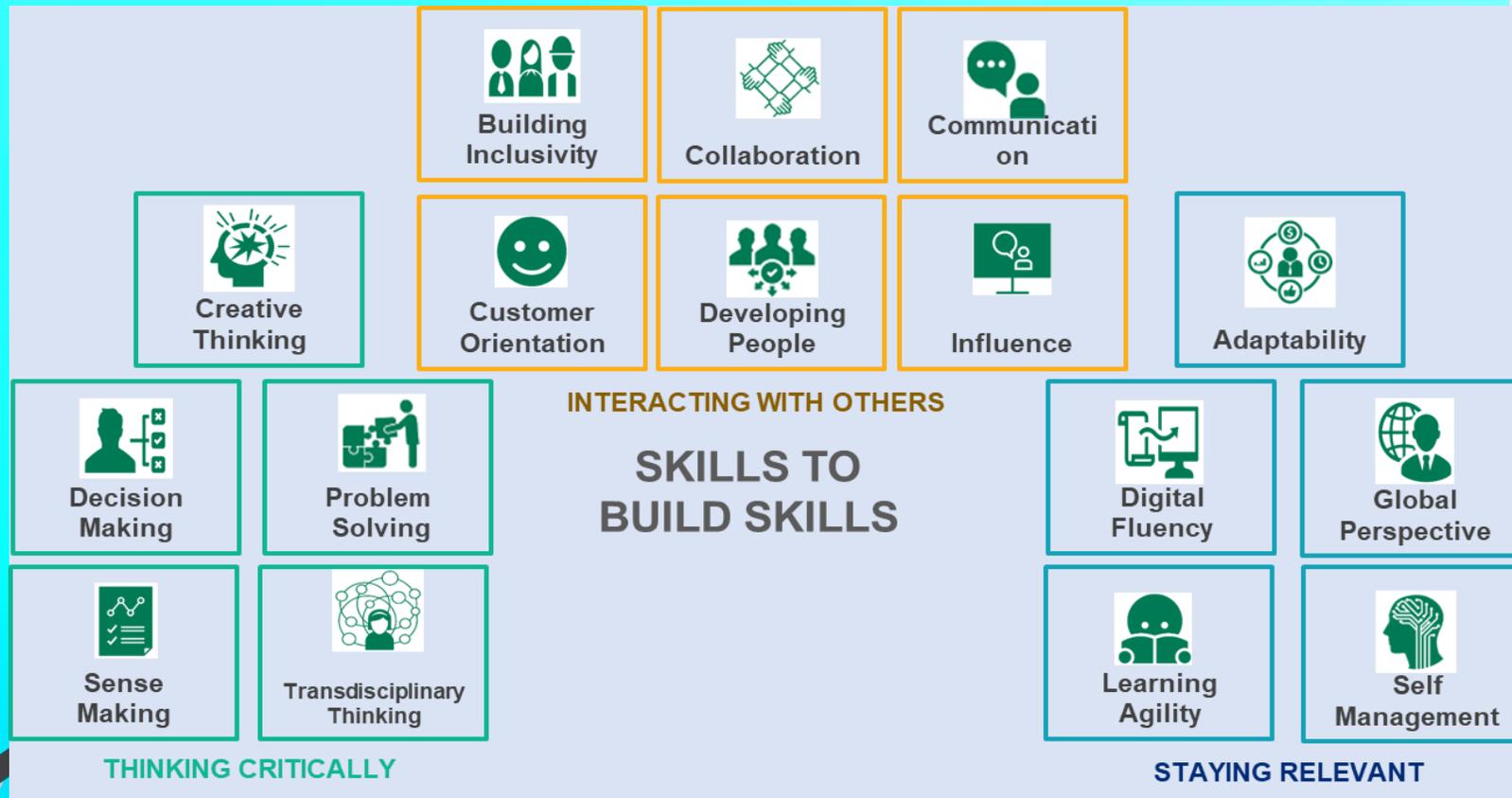


Interacting with Others

- Learning from others is one of the most effective ways to acquire new skills & ideas
- Increasingly, people need to be able to combine their technical skills with others to succeed

Thinking Critically

- Cognitive skills to think broadly and creatively in order to see connections and opportunities in the midst of change
- Cognitive skills are the root of technical skill development and progression



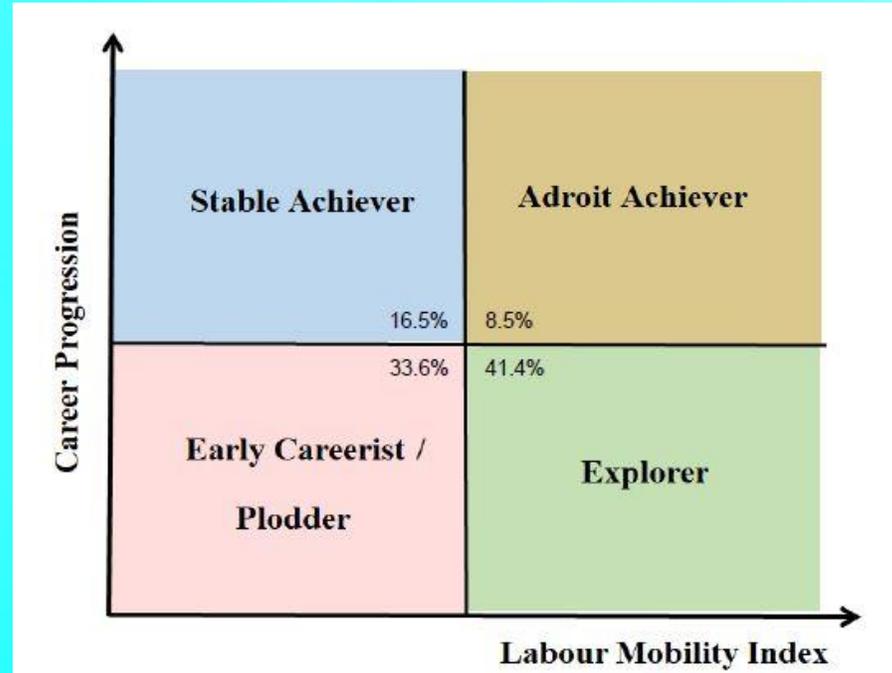
Staying Relevant

- Managing one's self effectively and paying close attention to trends impacting work lives
- Provides strategies, direction and motivation for technical skills development

Strengthening support to individuals to make informed decision for career transition success through signposting, coaching, programmes and funding



Source: July 2023 Jobs Skills Insights by SSG



Source: Dr Ruby Toh, SUSS-IAL. Archetype of Labour Mobility and Career Outcome (2022)

“ Plodder: Tends to remain in the same job throughout their career
Early Careerist: just enter job market, had a few short transitions

Explorer: Made several transition with less success career outcome than achievers

Stable Achiever*: Low labour mobility but high progression

Adroit Achiever*: Achieve career success with a number of adroit moves

*** They have strong career decision-making state and career self-management skills”**



Strengthening support to youths to make informed decisions and prepare for the future workforce



Outreach & engagement through SkillsFuture Advice workshops conducted at SkillsFuture @NS Fair every quarter

- To facilitate NSF's post-ORD upskilling and transition to the workforce, these **SkillsFuture Advice workshops** signpost NSFs/individuals on SkillsFuture resources to help them make well-informed choices on their education/career pathway after they ORD. NSFs/youths learnt about the **Future of Work, job-skills insights on the Digital, Green and Care economies, Critical Core Skills, Work-Study Programmes** and advisory on private education.



Strengthening support to youths to make informed decisions and prepare for the future workforce



Outreach & engagement through 1:1 STA (partnership with PA's MESRA)

- In conjunction with PA's Malay Activity Executive Committees Council (PA MESRA), and Malay Language Committee, `1-1 Skills and Training Advisory services was conducted as part of the youth engagement session. SSG Skills Ambassadors signposted the Junior College, Millennia Institute & Pre-University Madrasah Malay/Muslim students to help them make better training and education decisions.



Build your Assets, Chart your Skills Development Journey



1 Take account of your personal skills stock
It is important to be aware of what skills you already possess, and are skilful in. There are a number of ways to do so: (i) review the priority skills in this report and compare them against your personal skills stock to identify skills to invest in; and (ii) create a LinkedIn account, articulate your skills within your account profile and compare with what is demanded in job vacancies.



2 Initiate conversations with your manager/Speak with a SkillsFuture Skills Ambassador
Have a personal development conversation with your manager to understand your employer's skills need, and secure support for your skills development. Alternatively, you may want to register an appointment with a SkillsFuture Skills Ambassador to discuss your career-learning plan.



3 Sign up for courses for reskilling or upskilling needs
Visit MySkillsFuture to search courses that match your skills needs. Evaluate the course schedule, course fees, and the course rating. Select one that matches your needs. You can find out about course fee subsidies that you are eligible for. You can also check out credible massive online open courses (MOOC) providers for online learning modalities.

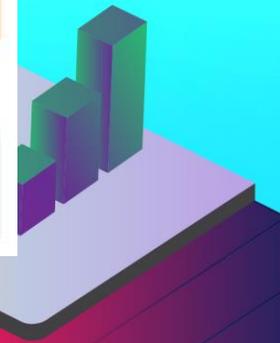


4 Practise the skills learnt at work
Skills learnt must be put to use at work in order to upkeep the proficiency. It is advised to identify and create opportunities to use your newly learnt skills at work. Translating skills learnt to solve workplace problems is an effective way to practice the skills and enhance your performance.



5 Keep track of emerging trends in the sector you are working with
Keep track of emerging trends of the sector you are working with regularly. Subscribe to notifications from education and training institution(s) that specialise in the domain you are interested in. Join regular networking sessions with professionals in your sector.

Source: Skills Demand for the Future Economy, SkillsFuture Singapore



In finance, we make financial investments so as to generate a return from the invested asset.

How about investing in your skills as an asset for greater career resilience and a more sustainable future?





<https://go.gov.sg/ent-portal-js>

Technological innovations, the shift towards a green economy, demographic transition and changing consumer needs are giving rise to new growth sectors, job roles and skills. Let's look at some of the key insights in the Skills Demand for the Future Economy Report 2022, and how you can use them to plan your skills development and career progression.

01 Green, Digital and Care Economies are key growth areas

The Singapore Green Plan 2030, accelerating digitalisation, and an increased focus on preventive care and mental wellness are driving job demand in these three growth areas.

Workers should take advantage of such trends to upgrade and future-proof their skill sets. For instance, healthcare staff could learn about person-centred care to help patients feel more at ease, while auditors and accountants could take courses on environmental and social governance, and sustainability reporting.

TIP Book a free 1-to-1 consultation with a Skills Ambassador to better understand your upskilling options. Register at: go.gov.sg/registration-sta

02 Priority skills are valued and marketable

Digital skills and green skills are highly sought-after across different sectors as companies embark on digitalisation for improved efficiency, as well as adopt greener business models. Skills with high demand growth such as software design, environmental and social governance, and carbon footprint, are also highly transferable across sectors and job roles.

Learning such skills will contribute significantly to your long-term career versatility and success.

TIP Keep track of emerging trends in the sector you work in through SSG's jobs-skills insights at: go.gov.sg/quexq

How Ready are you for the Future of Skills?

03 Rise of smart jobs in manufacturing

Singapore is ranked second globally in terms of robot density in manufacturing, with 605 robots per 10,000 workers. This number is expected to increase as more sectors adapt to Industry 4.0 (I4.0) to respond to Singapore's ageing workforce. I4.0 requires work processes and functions to change, and in turn impacts job tasks. In-demand I4.0 skills include 3D modelling, additive manufacturing and quality assurance.

TIP Have a conversation with your supervisor to understand the company's needs in I4.0 and secure support for your skills development.



Get more insights to guide your career progression and skills development journey at skillsfuture.gov.sg/skillsreport

05 Sharpen soft skills to get an edge

Singapore employers are placing more emphasis on not just technical expertise, but also soft skills. Of the 16 identified Critical Core Skills that are key to business transformation, self management, influence and creative thinking are the top three most important. Other soft skills include learning agility, communication, digital fluency, problem solving and customer orientation. For instance, an educator and human resource professional would both need a high level of communication, self management and creative thinking skills to excel in their job.

TIP Use the Critical Core Skills profiling tool to identify the soft skills you have and plan your soft skills development. Visit: go.gov.sg/ccs-profiling

04 Skills top-up for mid-career workers

Mid-career workers, aged 40 to 59, form half of Singapore's workforce. Many work in five job families that are undergoing transformation: operations and administration; sales, marketing and customer service; human resource; finance and accounting; and engineering and technology. Upskilling can help you stay relevant in your current job role, while reskilling can help you move into other job roles in growing sectors.

TIP Upskill to raise career versatility, and consider signing up for short courses focusing on emerging skills at: skillsfuture.gov.sg/series

Brought to you by

SKILLSfuture



<https://go.gov.sg/alscdf>



Useful Resources

MySkillsFuture Portal: <https://www.myskillsfuture.gov.sg>

MyCareerFuture Portal: <https://www.mycareerfuture.gov.sg>

Skills and Training Advisory Service: [\(Pre\) Registration for Skills and Training Advisory Services | FormSG](#)

Career Conversion Programme: [WSG Career Conversion Programmes \(CCP\) for Individuals Singapore](#)

SkillsFuture Career Transition Programme: [SkillsFuture Career Transition Programme | Campaigns \(myskillsfuture.gov.sg\)](#)

Skills Demand for Future Economy Report: [SSG | Skills Demand for the Future Economy \(skillsfuture.gov.sg\)](#)

SkillsFuture Jobs Skills Insights: [SSG | Jobs-Skills Insights \(skillsfuture.gov.sg\)](#)



Thank You

For more information, please visit:

www.skillsfuture.gov.sg



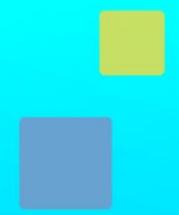
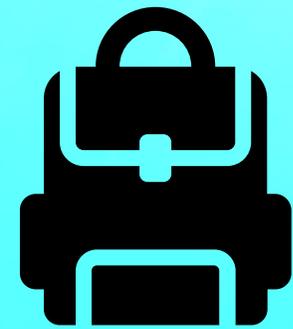
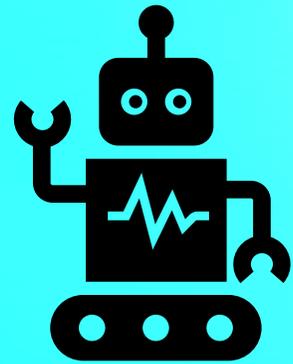
Rethinking Training and Learning

Silin Yang (Dr)

Deputy Director, Strategy Group
National Trades Union Congress



Skills
Required of
Workers
Changing
Rapidly



Employers Are Looking Beyond Academic Qualifications



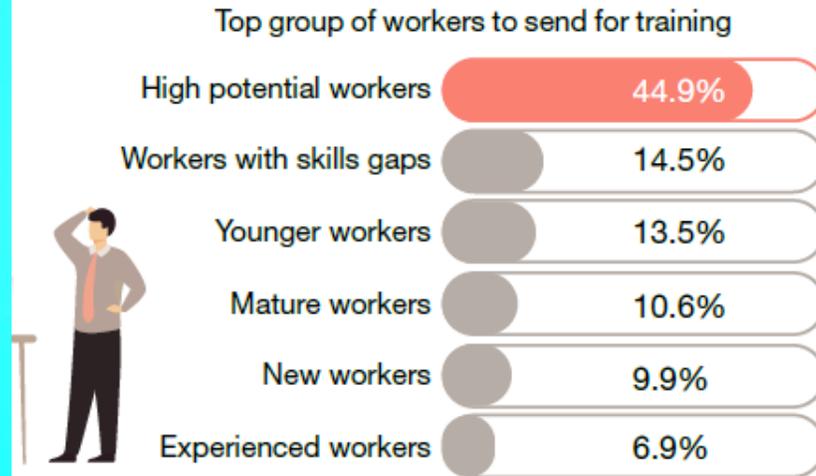
Source: NTUC (2023)



Key Challenges Faced by Workers

Unequal Access

Workers with skills gaps are not the top priority for training according to business leaders. This puts a strain on the workers with skills gaps that would have benefitted from these training.



Percentage may not add up to 100% due to rounding

No Time



Level of Awareness

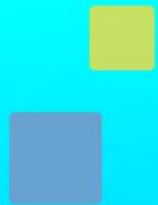
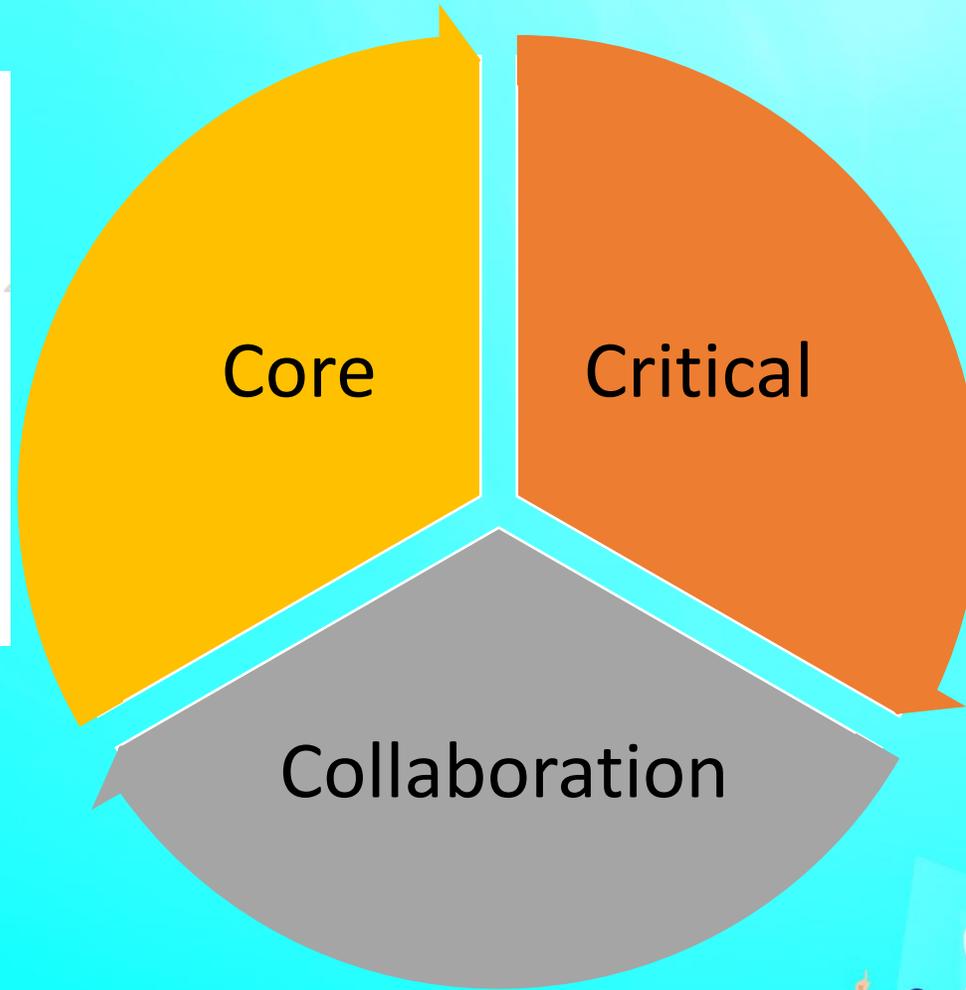
'Not aware of courses to go for/courses available' is a prominent problem among both educated and less educated individuals.

Sources: NTUC (2021,2022)



CAREER PROGRESSION

While youths have high hopes for career progression, **majority (92%) are hoping to earn more** in the next three years. Only **4 out of every 100** youths intend to remain in their current jobs and positions.



Case Study

Wah & Hua Pte Ltd

- Grown from a one-man karung guni to waste management giant
- Company training committee: Bring together union and management to develop transformation plans to ensure the workforce remains future-ready, relevant, and resilient
- Bringing training to the workplace



Full Research Reports



SCAN ME

<https://www.ntuc.org.sg/uportal/resource-hub>

