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### Labour research conference 2018: Upskilling of mature workers

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# LABOUR RESEARCH CONFERENCE 2018

• INCLUSION • TRANSITION • TRANSFORMATION •

# UPSKILLING OF MATURE WORKERS



Centre for Research  
on the Economics of Ageing



First topic in the conference proceedings: Upskilling of Mature Workers.

Research partnership between Ong Teng Cheong Labour Leadership Institute (OTCi) and the Centre for Research on the Economics of Ageing (CREA) at Singapore Management University (SMU).

Report presentation by Assistant Professor Luca Facchinello, School of Economics and Stephen Hoskins, CREA, SMU.



Centre for Research  
on the Economics of Ageing

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# EXECUTIVE SUMMARY

## Introduction

Singapore's population is expected to reach 6.34 million in 2030, based on projections from the World Population Ageing 2015 Report (United Nations - Department of Economic and Social Affairs - Population Division, 2015). By 2030, the number of Singaporeans aged 65 and above is projected to double to 900,000, which means 1 in 4 Singaporeans will be in that age group, up from 1 in 8 today (Population SG, 2016).

The country's fast ageing population coupled with longer life expectancy and low birth rates are recasting the roles that mature workers play in Singapore's economic expansion and progression. It will become increasingly critical for Singapore to attract and retain mature, experienced workers to continue working to maintain a competitive advantage in an evolving economy. There is a clear need for Singapore to upskill mature workers to increase their performance and sustainability.

Together with the Singapore Management University (SMU)'s Centre for Research on the Economics of Ageing (CREA), Ong Teng Cheong Labour Leadership Institute (OTCi) undertook a joint research project on 'Upskilling of Mature Workers', identifying issues surrounding training opportunities for mature workers in the workplace. The objectives of this research study are to enable the Labour Movement to better address the issues faced by mature workers particularly on training opportunities and to take concerted steps to encourage mature workers to continue working and to work as long as they would like to.

## Approach

The research project leverages the Singapore Life Panel, a monthly survey of more than 8,000 Singaporean citizens and permanent residents aged between 50 and 70.

## Key Findings

### Training Opportunities

1. Mature workers appeared highly motivated to accept opportunities to upskill and reskill even beyond the age of 62, in order to remain employable. Nearly half (51%) of all mature workers had been invited to participate in training within the last five years, and nearly 9 in 10 accepted the opportunity to participate in training.

2. Mature workers who were in non-PMET roles and with less formal education were given fewer opportunities to participate in work-related training, and were less likely to accept the training opportunities they were given.

### Motivation and Outcomes

3. There was close alignment between mature workers' motivation for participating in training and the actual outcomes they experienced after training. 42% hoped that training would keep them up-to-date with new technology or practices, and 49% reported that the training achieved this outcome.
4. The most common motivation to participate in training for mature workers who were in PMET roles was to keep themselves up-to-date with new technology or practices. Workers with less formal education were more likely to see benefits of training in terms of improving their employability and pay.

### Feedback on Training

5. Most of the mature workers indicated that their most recent training programme was relevant, easy to understand and, most importantly, was recognised by their employers.

### Barriers to Training

6. High cost, difficulty finding relevant courses and conflict with current work commitments were the top three obstacles cited by mature workers which hindered them from participating in training programmes.

### Employers' Support

7. Employers were generally supportive of training for mature workers with majority of the employers enabling training during working hours and providing financial or funding support to the mature workers. However, employers' support was higher for mature workers who were in PMET roles compared to the non-PMETs.

### Training Gaps

8. Mature workers had a strong desire for more training especially mature workers with less formal education and the non-PMETs. Separately, it was found that homemakers indicated an enthusiasm for training. This may reflect a desire to upskill and improve their employability, enabling them to re-enter the workforce.



## EXECUTIVE SUMMARY

9. Mature workers' preferred training courses differed by the type of occupations or the type of work they were currently in. Mature workers who were in manual occupations were eager to learn computer and IT skills; those in mid-level occupations were interested in the job-specific technical skills; and the PMETs had indicated a desire to take up training on leadership, analytical and technical skills.

With these intriguing insights on issues pertaining to training opportunities for mature workers, moving forward, the Labour Movement can take concerted steps to continue to work with relevant stakeholders in helping mature workers upskill and reskill so that they can continue to be gainfully employed and contribute to the Singapore economy.

A deliberative and collaborative approach may be needed to engage and motivate the mature workers to upskill, reskill and maximise their productivity. The findings highlight the following areas for consideration:

- i. Continue to push for progressive shift in employers' mindset towards embracing training and retaining mature workers as skills development is critical in ensuring mature employees continue working effectively, especially non-PMETs and workers with less formal education. Timely communication regarding individual needs and how their needs align with those of the organisation, could help retain mature employees in ways that value add and most importantly, to ease transitions.
- ii. More training opportunities to be given to mature workers with less formal education, and in non-PMET occupations. At the same time, encourage mature workers with less formal education to seek out and take up training opportunities. They may be passing up opportunities due to reservations about the relevance of training to their needs, failing to meet entry requirements, and concerns about the time it takes for them to complete training. However, when they do participate, the data suggested that workers with less formal education are most likely to experience tangible benefits from training.

- ii. Prepare mature workers to be part of Singapore's transformation by training them to be digitally competent through high quality training courses. Data suggested that these workers are enthusiastic about taking advantage of training opportunities due to a desire to stay up-to-date with the latest technology. They are especially eager to learn computer and IT skills. Hence, there is a need to design training courses which are age-friendly both in terms of content and teaching style with a greater focus on computer and IT skills to equip mature workers with the relevant technological skills to take on higher-value jobs.
- iv. Improve matching between the training provided to workers in different occupations by curating relevant training courses for mature workers as findings suggested that mature workers' preferred training courses differed by the type of occupations or the type of work they are currently in e.g. training on computer and IT skills for mature workers in manual occupations; training on leadership, analytical skills and technical skills for PMETs.
- v. Develop customised training programmes to better suit the schedule and learning needs of the homemakers as they had expressed an enthusiasm for training to improve their employability when they re-enter the workforce. They may also require a flexible work schedule as they have different needs and expectations regarding work and giving back to the community. They may also be confronted by other demands such as caregiving for a sick family member. Hence, there is a need to encourage employers to adopt progressive work practices such as flexible work arrangements, age-friendly workplaces, job redesign and age management practices to encourage mature workers and homemakers to continue working.



# RESEARCH REPORT

**Report submitted by:**

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Centre for Research  
on the Economics of Ageing

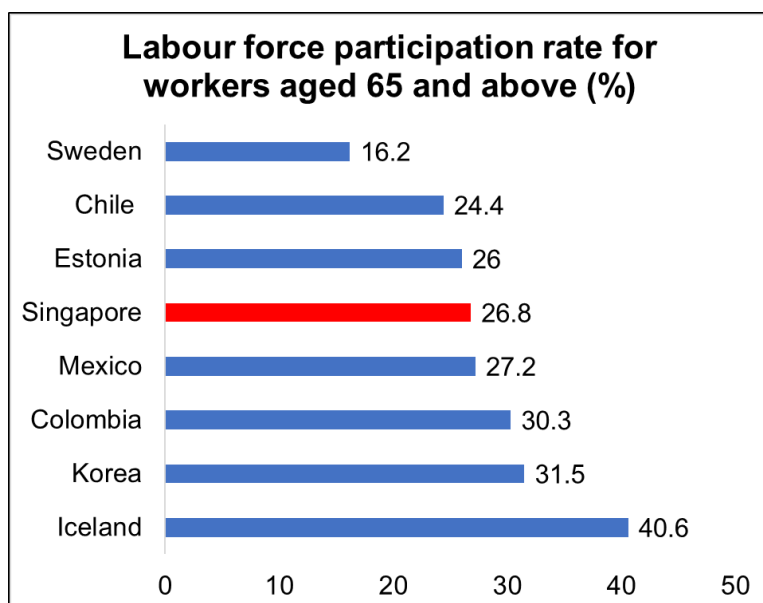
# RESEARCH REPORT

## Introduction

Many developed countries are approaching an era of ageing population due to an increase in longevity and decrease in fertility rates. Singapore is no exception, having one of the fastest ageing populations in Asia, which is driven by low fertility rates and the third longest life expectancy in the world. The number of elderly citizens, defined as those aged 65 and above, is expected to triple to 900,000 by 2030, making up about 28% of the total population in Singapore (Population SG, 2016). This changing population age profile, combined with a competitive labour market, means it makes business sense to train and retain mature workers to maintain a productive workforce contributing to the Singapore economy.

Singapore's local workforce will "plateau from around 2020. In other words, based on current employment and retirement rates, the incoming local workers will only be enough to replace the retiring workers. There will be Zero Net Growth in local workforce" (How, 2019). Singapore's rising education levels, low unemployment rates, long life expectancy, and the high standards of healthcare are allowing seniors to continue contributing in meaningful jobs well past the official retirement age of 62 (Population SG, 2016). Statistics from the Ministry of Manpower showed that the labour force participation rate in Singapore – which measures the percentage of the population who are either working or looking for a job - for workers aged 65 and above was 14.8% in 2007. This rose to 26.8% in 2017. Fig 1 illustrates the labour participation rate for workers aged 65 and above for Singapore and some other developed countries in year 2017 (OECD, 2017).

Figure 1. Labour force participation rate



Mature workers are valuable to Singapore's workforce, and they need upskilling and reskilling to ensure their employment and employability. Hence, this research study is timely, addressing the issues faced by mature workers in relation to training opportunities and to take concerted steps to encourage mature workers to continue working and to work as long as they would like to.

## Research Approach

Ong Teng Cheong Labour Leadership Institute (OTCi) partnered with Singapore Management University (SMU)'s Centre for Research on the Economics of Ageing (CREA) to undertake a joint research study entitled 'Upskilling of Mature Workers'. The objectives of this research study are to enable the Labour Movement (LM) to better address the issues faced by mature workers particularly on training opportunities and to take concerted steps to encourage mature workers to continue working and to work as long as they would like to.

The research study leveraged the Singapore Life Panel (SLP), a large-scale monthly survey that has engaged more than 8,000 Singaporeans aged between 50 and 70 since 2015. The SLP was constructed using a population-representative sampling frame from the Singapore Department of Statistics, and is administered over the internet, supplemented by phone and in-person outreach.

For this research study, a training module was fielded to the SLP in December 2017, with a total of 3,200 participants. This module measured participation in work-related training programmes<sup>1</sup> within the last five years; including skills taught; feedback and attitudes towards training; employers' support for training; and workers' motivation for training, future skills desired, and barriers to further training.

The study focuses on 'mature workers', defined as respondents who indicated that they were working for pay or self-employed in the same month as the training module was fielded, with a sample size of 2,200. Some sections of this report focus only on those mature workers who have participated in training in the past five years, whom we refer to as 'mature learners'.

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<sup>1</sup>Work-related training was described to respondents as "any activities which are intended to make you better at your job or help your career in some way, whether provided by your employer or self-funded".

# RESEARCH REPORT

## Summary Statistics

We begin by describing some summary statistics which characterise the broad picture of training participation among mature workers aged 50 to 70 in Singapore (Fig. 2).

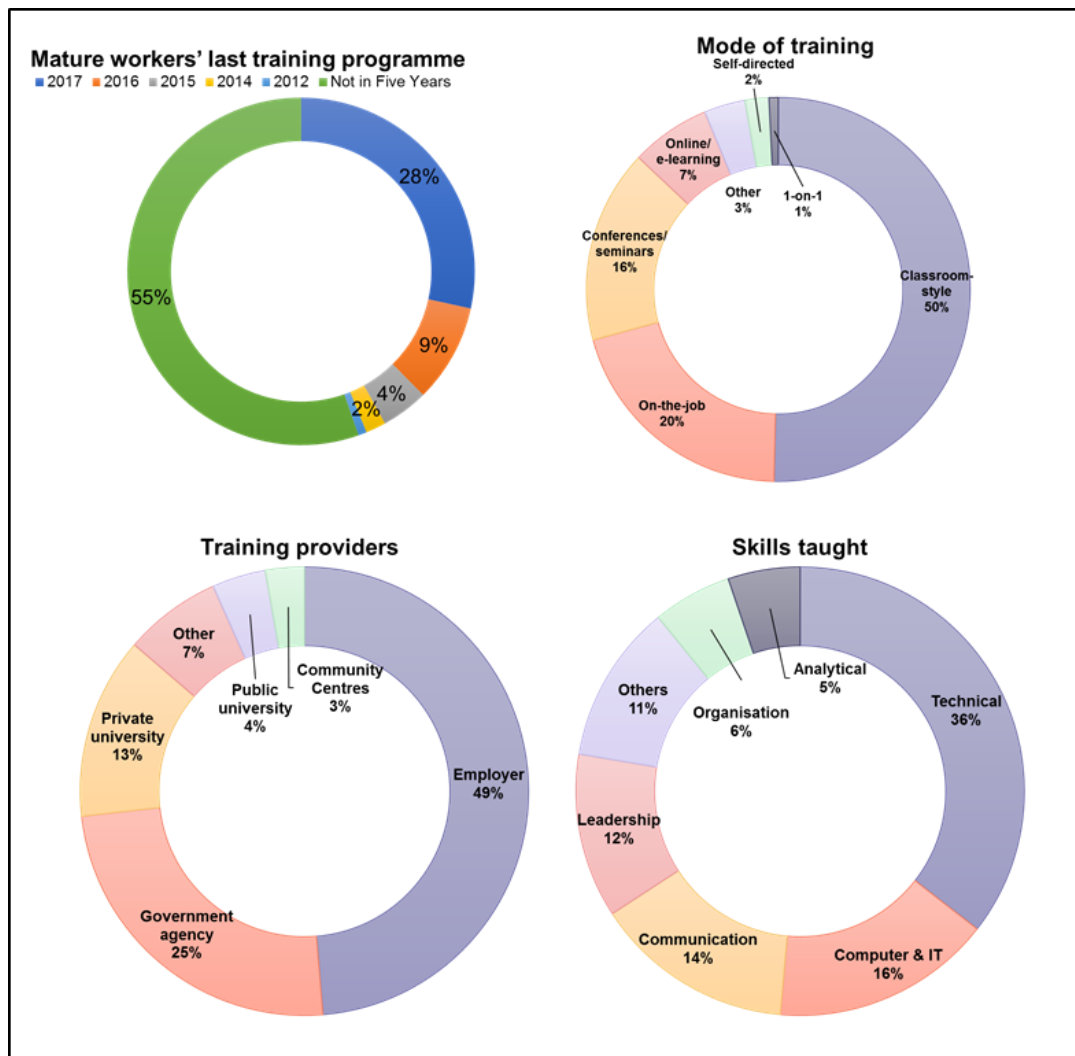
Overall, nearly half (45%) of all mature workers indicated that they had participated in work-related training at least once in the past five years. Slightly more than one quarter (28%) of all mature workers had upskilled within the last year, and an additional 9% had trained in the past two years.

Focusing more closely only on the subset of mature workers who had participated in training programmes in the past five years, we observed that one third (36%) had most recently undergone training on technical skills specifically related to their job. Significant numbers of these mature learners attended training on computer and IT skills (16%), communication skills (14%) and leadership skills (12%).

Half of these most recent courses were taught in the form of classroom style lessons, and one in five (20%) being taught through structured on-the-job training. Only 7% of most recent training programmes were conducted online or via e-learning platforms.

Half (49%) of these most recent training programmes were provided by the mature workers' employer, and one quarter (25%) through government training agencies such as SkillsFuture Singapore (SSG) and Workforce Singapore (WSG). An additional 13% were taught through private universities and private training agencies, compared to 4% through public universities and polytechnics.

Figure 2: Summary statistics on mature workers' training programmes



## Research Findings

The findings are categorised under the following areas:

1. Training Opportunities
2. Motivation and Outcomes
3. Feedback on Training
4. Barriers to Training
5. Employers' Support
6. Training Gaps



# RESEARCH REPORT

## 1. Training Opportunities

Central to this project was a thorough examination of the segments of the mature workforce who participated in work-related training. By identifying those who were missing out on training, decision-makers can intervene to target segments of the population for additional training, helping these mature workers be more employable and enabling longer careers for those who wish to work later in life.

To participate in training, a mature worker must first be invited (or source for the training himself) and second must accept the training opportunities that he is given. As such, we separately analysed each of these two stages in the pathway to training, using the following measures:

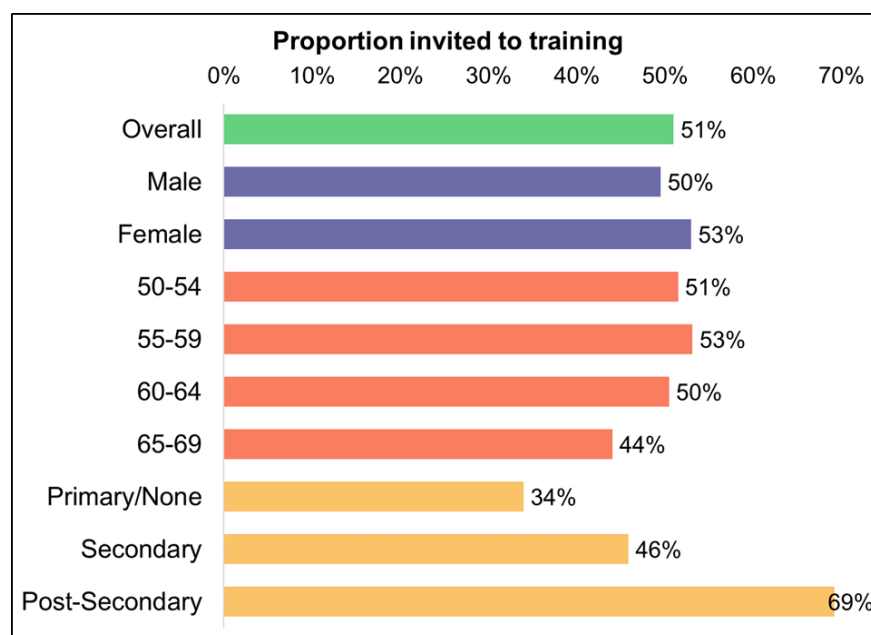
- i. Training Invitation Rate (TIR): measures the proportion of workers who had been invited to participate in work-related training programmes over the past five years.
- ii. Training Acceptance Rate (TAR): among those who had been invited to training, measures the proportion who accepted this opportunity over the past five years.

The TIR enabled us to identify which segments of the workforce received the invitation to participate in training, while the TAR indicated which segments of the mature workers accepted the training opportunities they were given.

### Training Invitation Rate (TIR)

Overall, half (51%) of all mature workers had been invited to participate in training in the past five years (Fig. 3). There was no noticeable gender difference in TIRs.

Figure 3: Proportion of mature workers invited to training by demographics



TIRs remained around 50% for workers in their 50s and early 60s, possibly indicating that some workers were being re-skilled and redeployed around age 62 due to the Retirement and Re-Employment Act. However, TIRs did decline to 44% for workers in their late 60s, which might indicate that firms were less willing to invest resources in workers who they expect would retire soon.

However, many studies have shown that mature workers are very loyal to their firms and are less likely to job-hop (Ministry of Manpower, 2007a, 2007b). Many older Singaporeans desire to stay employed for as long as they would like to so that they can accumulate sufficient resources to fund their desired retirement (The Straits Times, 2018a, 2018b, 2018c, 2018d).

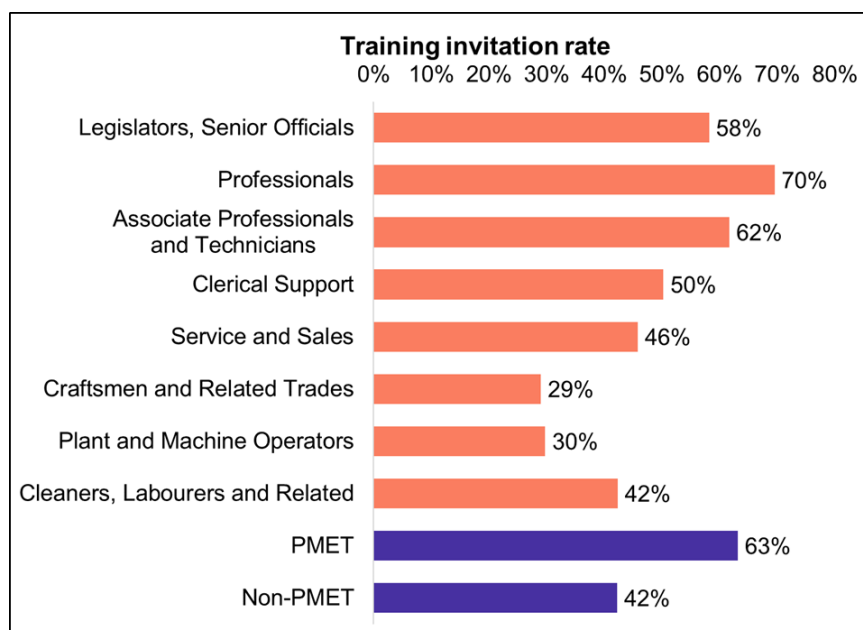
Older Singaporeans also tend to remain in good health into their late 60s; only 5% of 50 to 70 years old in the SLP indicated that they had a health condition that limited the amount of work they could do. In combination, these factors suggested that there may be productivity benefits for firms that continue to invest in training of older workers.

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The research team observed a very strong association between TIR and education. Two-thirds of mature workers (69%) with post-secondary education were more than twice as likely as those with primary or no formal education (34%) to have been invited to participate in training in the past five years. This is somewhat concerning as findings suggested that the workplace advantages of having attained higher education early in life may be compounded by the greater availability of training opportunities as workers progress through their career.

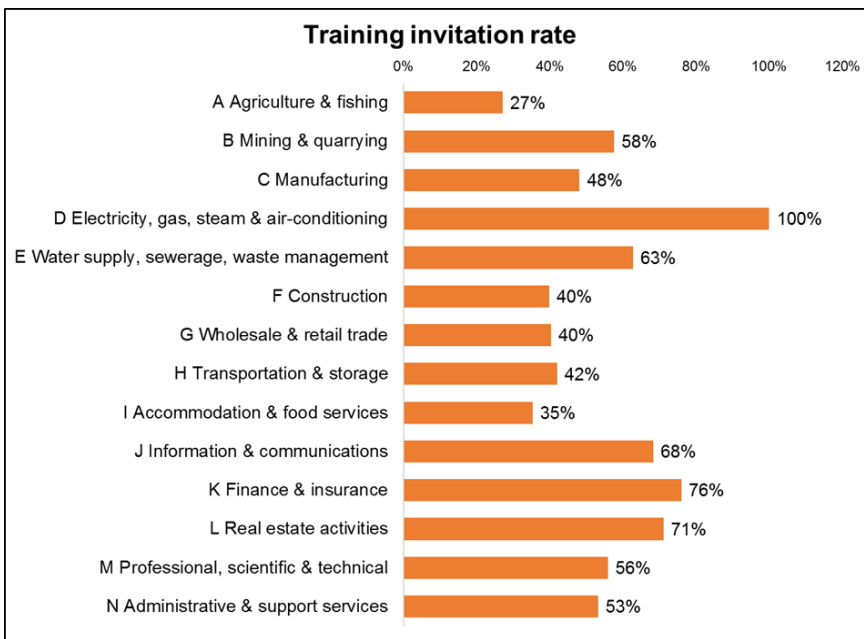
These same trends were found across occupations, wherein Professionals, Managers, Executives and Technicians (PMETs) had an average TIR of 63% compared to 42% for non-PMETs (Fig. 4). Within specific occupations, TIRs were highest for Professionals (70%), and lowest among Craftsmen and Related Trades (29%) and Plant and Machinery Operators (30%). Again, this demonstrated the importance of extending training opportunities to mature workers in non-PMET occupations and workers with less formal education.

Figure 4: Proportion of mature workers invited to training by occupation



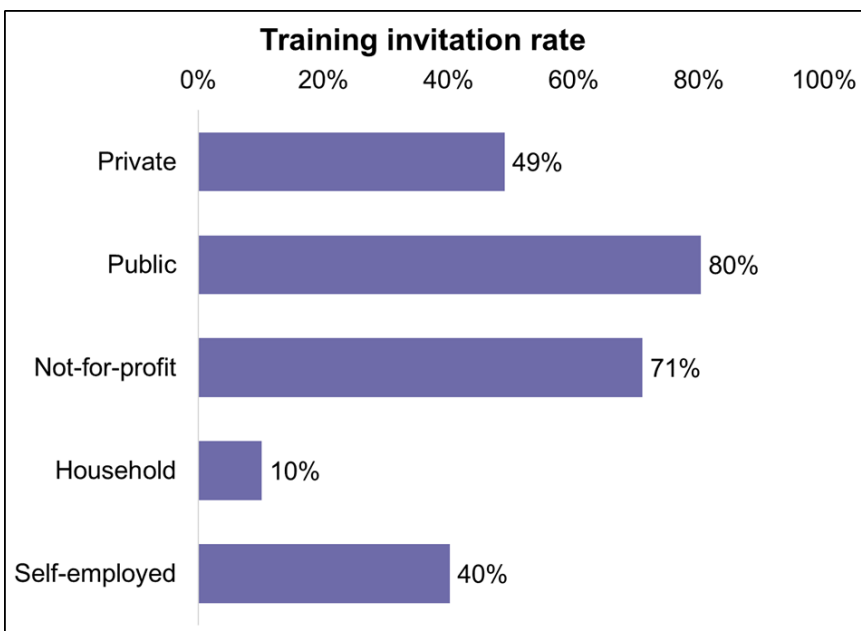
Mature workers in the Finance and Insurance (76%), Real Estates (71%), Information and Communication (68%) industries had high TIRs (Fig. 5). These industries were heavily reliant on human capital hence training was crucial for them to remain competitive. TIRs were lowest in the Agriculture and Fishing (27%) and Accommodation and Food Services (35%) industries, suggesting some scope for productivity enhancements through training in these industries.

Figure 5: Proportion of mature workers invited to training by industry



At a sectoral level, mature workers in the public (80%) and not-for-profit (71%) sectors received more training opportunities compared to mature workers who were in the private sector (49%) (Fig. 6).

Figure 6: Proportion of mature workers invited to training by sector



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## Training Acceptance Rate (TAR)

Next, we looked at the proportion of mature workers who accepted the opportunity to participate in training programmes, defined by the training acceptance rate (TAR). Low acceptance rates could indicate areas where mature workers may need to be encouraged to use their SkillsFuture credit and take advantage of opportunities to participate in training programmes.

Mature workers in Singapore appeared highly motivated to receive training (Fig. 7); nearly 9 in 10 (88%) accepted the opportunity to receive training in the past five years. Mature workers with post-secondary education accepted training invitations (Fig. 8) at a higher rate (94%) than mature workers with less formal education (84%). Interventions to boost training rates among mature workers with less formal education would therefore need to target both employers and employees, encouraging the former to provide training opportunities to all employees, and encouraging the latter to seek out and take up training opportunities that they are given.

Figure 7: Proportion of mature workers accepted training by age

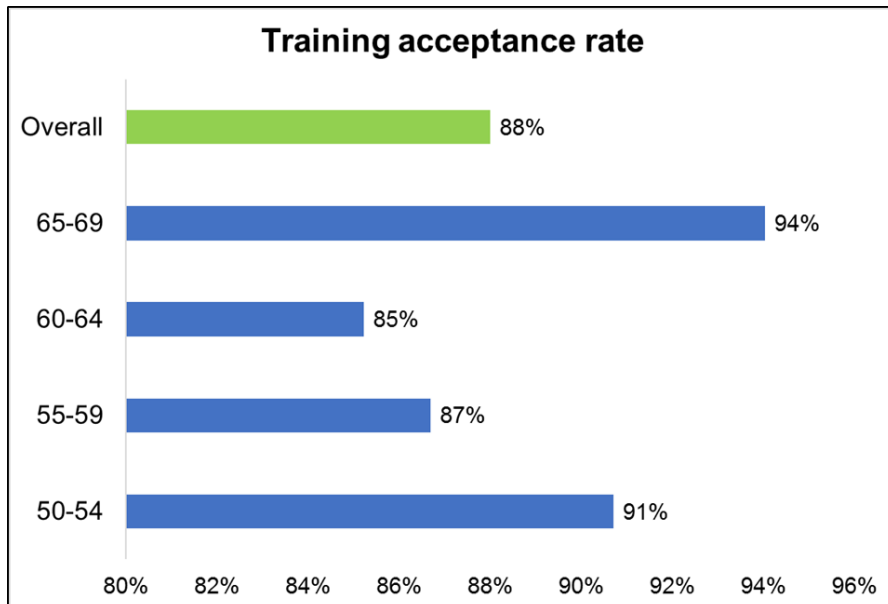
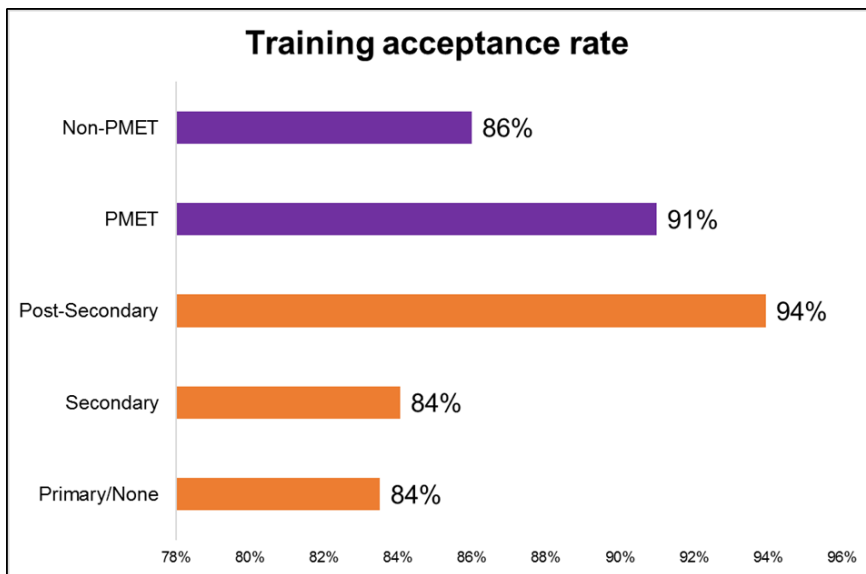
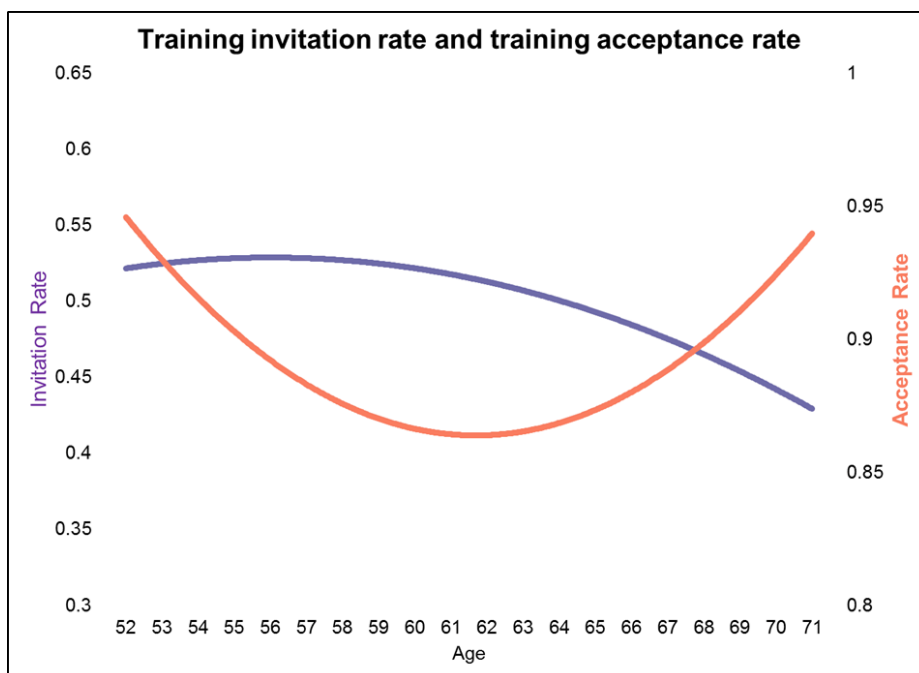


Figure 8: Proportion of mature workers accepted training by occupation and educational qualification



While the research team found that workers in their late 60s were less likely to be invited to participate in training, TARs tended to increase beyond age 62 (Fig. 9). This indicated that many of the individuals who remained in work beyond the re-employment age were highly motivated to keep improving their skills, likely due to a desire to remain employed well into their 70s. Employers who take heed of these findings and seek to support the training needs of mature workers would find workers who are eager to participate in training programmes.

Figure 9: Proportion of mature workers invited to training and accepted training by age



# RESEARCH REPORT

There was minimal variation in TARs across sectors, occupations and industries. PMETs (91%) accepted training at a slightly higher rate than non-PMETs (86%). Notably, Service and Sales workers had a low TIR (46%) but a high TAR (93%), which suggested that interventions to target this occupation with greater training opportunities are likely to be met with enthusiastic engagement from the workers themselves. Low TIRs among the Wholesale and Retail Trade industry (40%) were compounded by low TARs (77%), giving this industry the lowest participation rate across all industries.

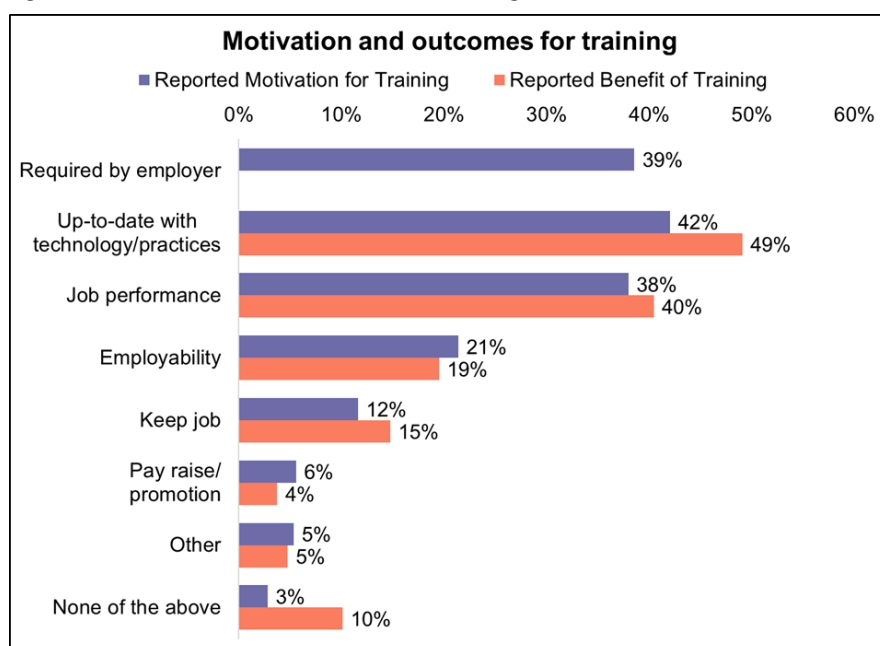
## 2. Motivation and Outcomes

As the LM seeks to promote training among the workforce and increase take-up rate of training, it is crucial to understand workers' motivation for choosing to participate in training and assess whether these needs are being met by current training programmes. For example, making training mandatory will increase attendance, but will not be effective unless workers are motivated to learn. Training motivation strongly influences training outcomes, and is the most important reason for not participating in training among older workers (Thieme, Paula; Bruschi, Michael; Büsch, 2015). Hence, the next few sections examine what motivated mature workers to participate in training, whether these outcomes were achieved after training and their feedback on different types of training programmes.

Workers who had undergone training in the past five years were asked about their motivation for participating in their most recent training programme (Fig. 10). Encouragingly, only 39% indicated that it was mandatory, indicating that six in ten mature workers participated in the training voluntarily. Mature learners chose to participate in training for reasons relating to their current job, with 42% motivated by a desire to stay up-to-date with new technology and practices, and 38% motivated to improve their job performance.

The respondents were then asked to indicate the outcomes they achieved after training, with the same list of options presented.

Figure 10: Motivation and outcomes for training



There was a very close alignment between motivation for training and actual outcomes achieved after training. For example, while 42% were motivated by staying up-to-date, 49% reported that the training programme achieved this. Overall, only 10% of mature learners reported that they experienced none of the above outcomes following training. Broadly, this suggested that current training programmes did a good job of meeting the expectations of mature workers, in terms of benefits yielded from training. However, pay raises and promotions were only reported by 4% of mature learners. This may suggest that there is some scope for changes to current training programmes to ensure that they are translating to tangible benefits for mature workers themselves as well as their employers.

To identify the segments of the workforce who gained the most and least out of training, the research team proceeded to compare each of the above outcomes across a range of demographic groups using regression analysis. By identifying what works best for different demographics of mature workers, the LM can sharpen the development of training programmes, through NTUC LearningHub (LHUB) and NTUC's Employment and Employability Institute (e2i), and advocating for suitable training methods for mature workers through SSG and WSG.



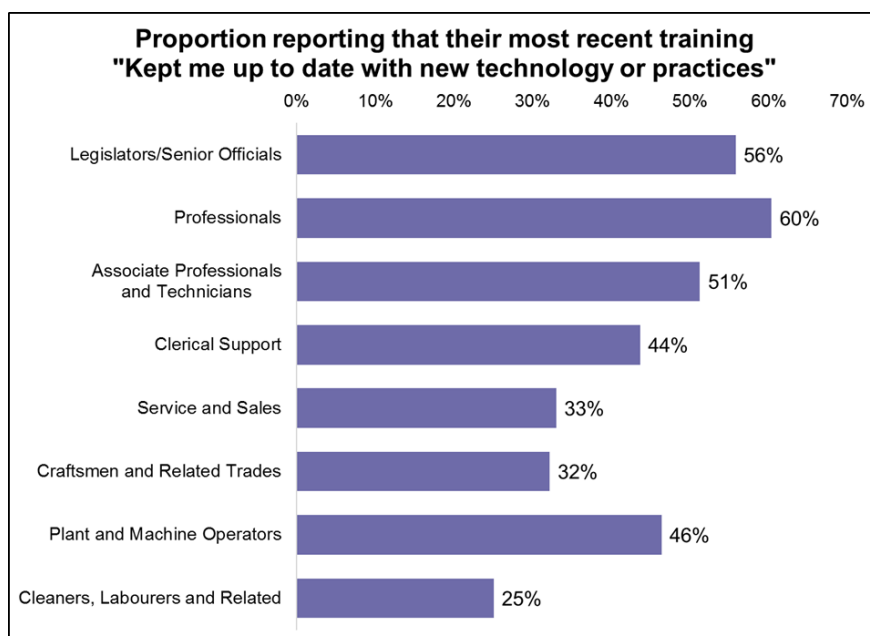
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Older mature workers, i.e. those in their 60s rather than 50s, were more likely to report that training had kept them up-to-date with the latest technology. It is encouraging that staying up-to-date was the most common motivation for training even for the oldest of mature learners.

Tangible benefits such as pay raises, promotions and improved employability were more commonly reported by mature workers with less formal education. This is a valuable insight that could be used to highlight the advantages of upskilling to lower-educated workers and encourage them to seek out and accept training opportunities. Comparatively, training appeared to serve more of a maintenance function for higher-educated mature workers, who were more likely to report that training had kept them up-to-date and improved their performance at their current job.

Among the mature workers, female workers and non-PMETs were most likely to report having received no benefits from training programmes (Fig. 11), suggesting that further study may be needed to identify how training programmes can be better designed to suit the schedule or learning needs of these demographics.

Figure 11: Training kept me up-to-date by occupation



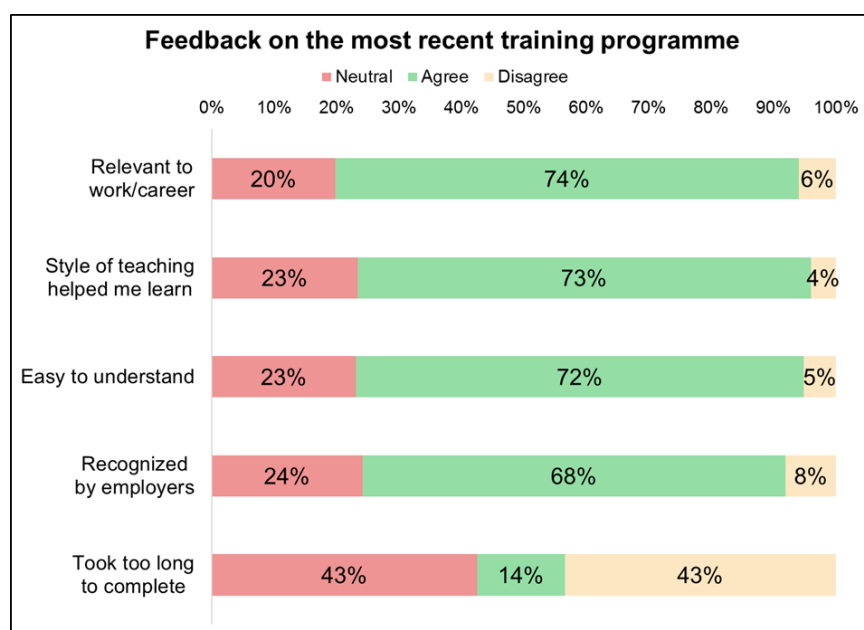
### 3. Feedback on Training

A range of data was collected to gauge mature learners'<sup>2</sup> feedback on their most recent training programme, to help understand the suitability of training methods to the specific needs of mature workers.

Feedback from mature learners on their most recent training programme was very positive (Fig. 12). Nearly two-thirds to three-quarters of mature learners agreed that their most recent training was relevant to their career (74%); the style of teaching helped them to learn (73%); the course was easy to understand (72%); and that the course was recognised by employers (68%). Only 14% reported that their most recent training took too long to complete.

Mature workers with more formal education responded more positively about all of the above measures (Fig. 13) as compared to workers with less formal education, suggesting some scope for a better understanding of the specific needs of mature workers with less formal education.

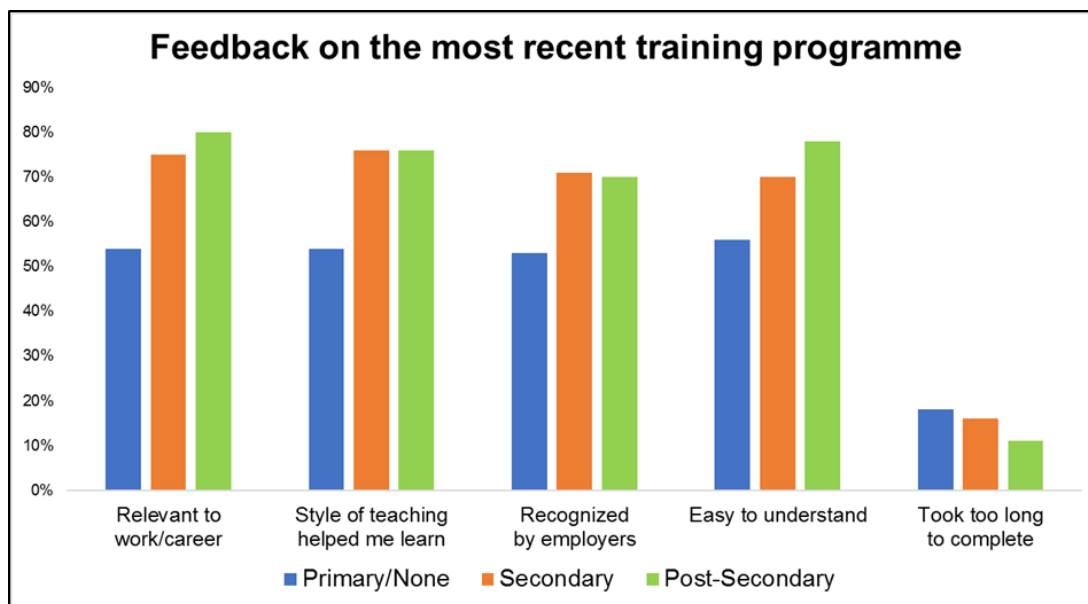
Figure 12: Feedback on the most recent training programme



<sup>2</sup>Mature learners refer to mature workers who have participated in training in the past five years.

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Figure 13: Feedback on the most recent training programme by educational qualification



The research team compared feedback from mature workers across a range of skillsets being taught at training programmes. It was found that mature workers were eager to stay up-to-date with technological progress. While mature workers indicated that computer and IT courses were an effective way to stay up-to-date with new technology, they were unfortunately reported as being difficult to understand and poorly-taught. Therefore, there is a significant need to review computer and IT training courses to ensure that it is suited to the needs of mature workers. There may also be scope for technology literacy courses to be targeted specifically at the needs of mature workers.

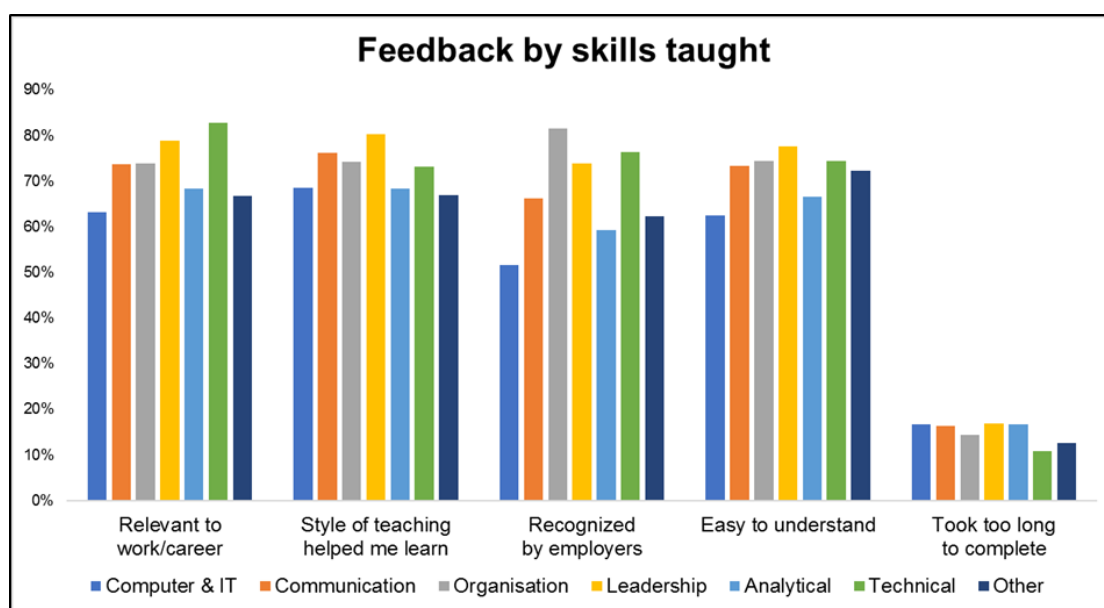
Leadership courses were rated very highly across all dimensions (Fig. 14), especially for their teaching style, ease of understanding and workplace relevance.

Organisational skills courses (e.g. project management, planning, time management) were recognised by employers and useful for keeping one's job but were less relevant to mature workers' careers.

Unsurprisingly, technical skills courses (e.g. a food safety certificate for chefs) were highly relevant to mature workers' careers and were well-recognised by employers. They were easy to understand and fast to complete.

Training in communication skills (e.g. writing, language, public speaking, customer service) was easy to understand and relevant to mature workers' work.

Figure 14: Feedback on the most recent training by skills



#### 4. Barriers to training

As the LM seeks to mobilise the mature workforce to deep-skill, reskill and upskill, it is crucial to understand the potential obstacles and concerns that may hinder these workers from participating in training. All mature workers were therefore asked about the barriers that prevented them from participating in training.

The findings indicated that the three most common barriers that hindered mature workers from participating in training were (Fig. 15):

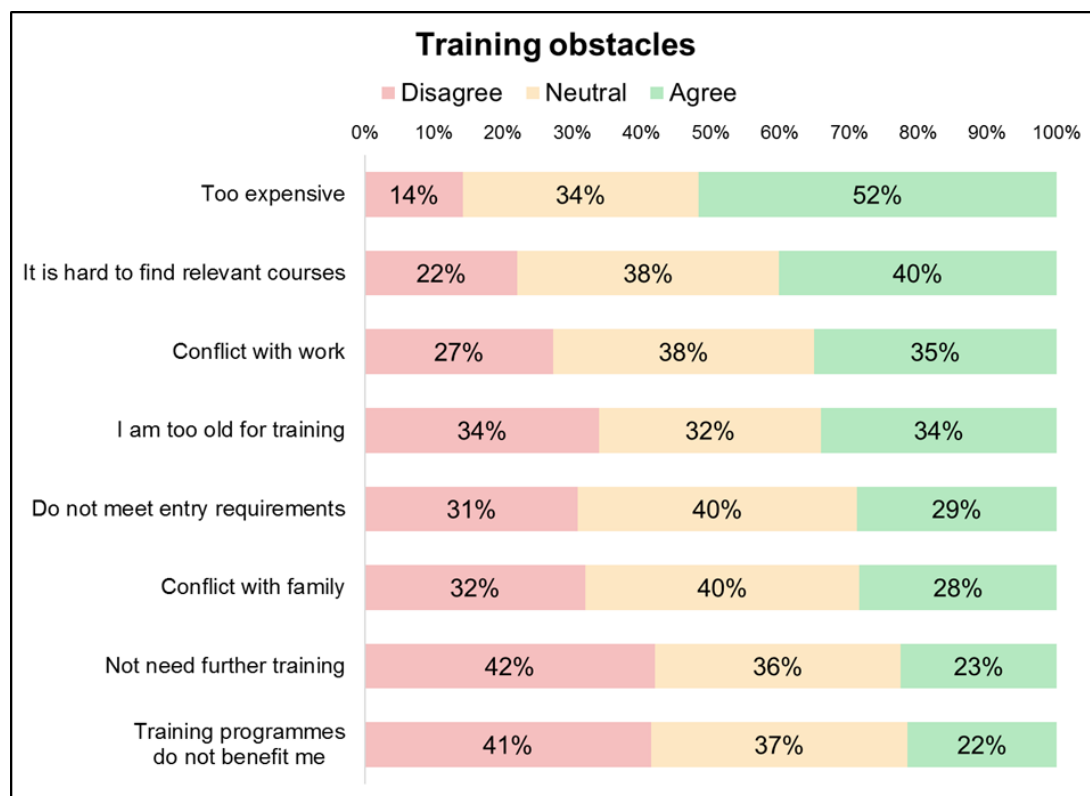
1. Cost - 52% agreed that training was too expensive
2. Difficulty finding relevant courses - 40% agreed that it was hard to find relevant courses
3. Conflict with work commitments – 35% agreed that this was a barrier to further training.

There were indications that some mature workers may be self-discriminating based on their own age. One third (34%) of mature workers agreed that they were too old for training, suggesting that they may be choosing not to take up training opportunities. Internalisation of such age-discriminatory attitudes can be harmful where they hinder mature workers' employment outcomes (Jones et al., 2004).

# RESEARCH REPORT

Overall, mature workers in Singapore did appear to value the importance of training, with only 23% responded that they did not need any further training, and 22% reported that training programmes did not benefit them.

Figure 15: Training obstacles

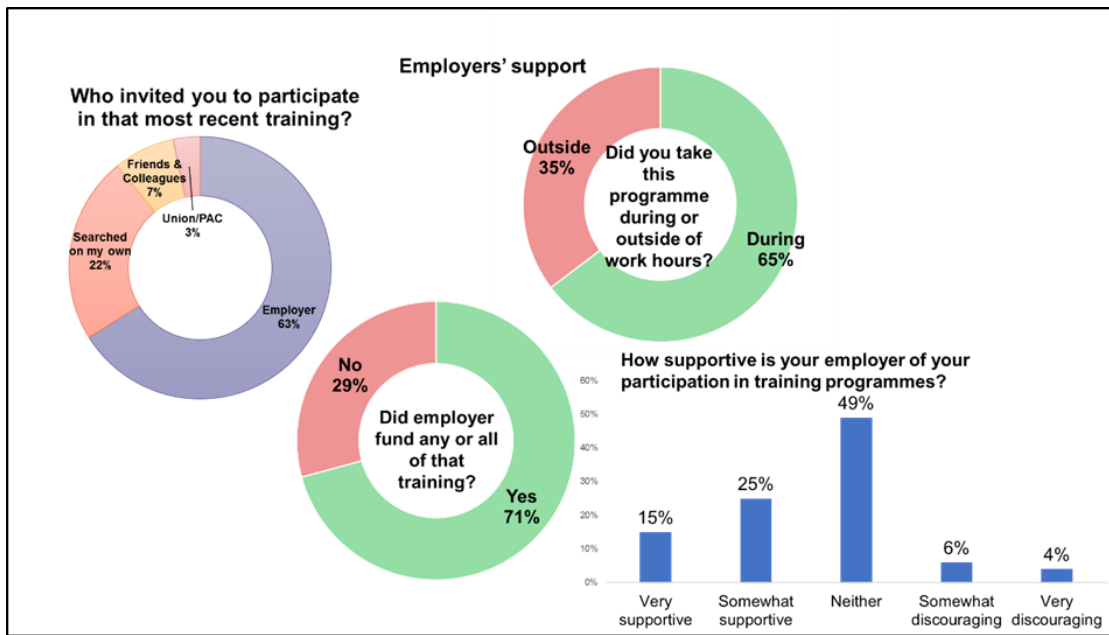


## 5. Employers' Support

This research also sought to assess the extent of employers' support for employees' participation in training programmes. Mature workers indicated that employers provided high levels of support towards training.

Considering the most recent training programme they had participated in, 71% of respondents indicated that the programme was fully or partially funded by their employer, and 65% of respondents reported that the training programme was completed during working hours. 40% of the mature workers indicated that employers were overall supportive of their participation in training programmes (Fig. 16).

Figure 16: Employers' support

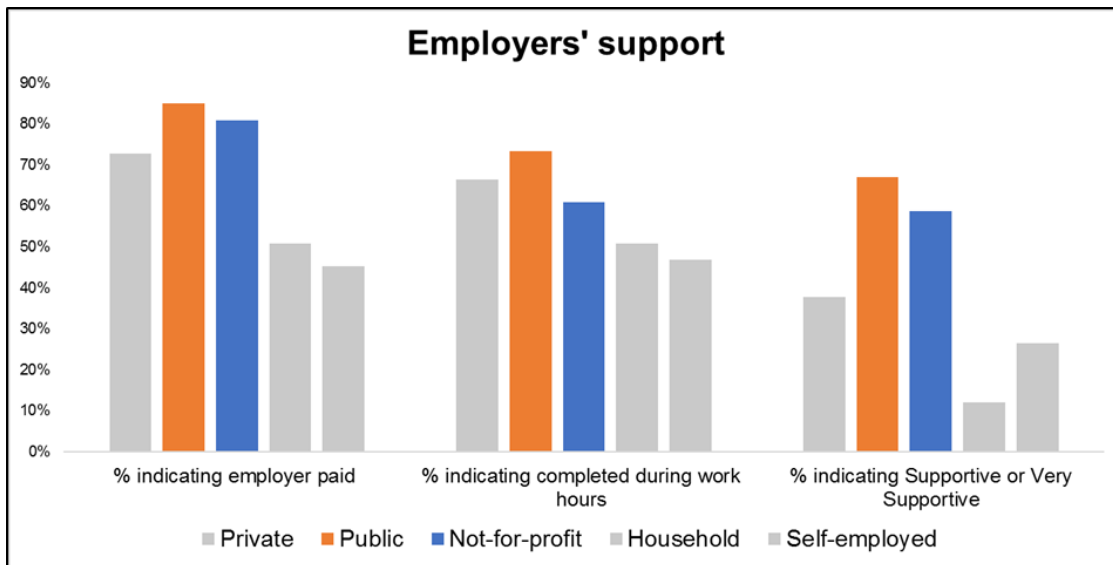


The study also found that employers' support for mature workers' training was higher in the public sector and not-for-profit organisations as compared to the private sector (Fig. 17).

Employers' support was also higher for mature workers who were in the PMET roles as compared to the non-PMETs, consistent with the earlier findings that PMETs received more training opportunities. This highlighted the importance for employers to understand the value of training for every mature worker in the organisation, and the important role that employers can play in providing support to all workers, especially non-PMETs.

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Figure 17: Employers' support by sector



## 6. Training Gaps

The final component of this project was to identify the skills gaps of mature workers. Through a better understanding of these gaps, the LM can better meet the unmet needs of mature workers by strengthening and customising training programmes by its partners, especially NTUC LHUB. The use of training programmes to plug these skill gaps is a crucial tool by which the productivity and employability of mature workers can be maintained (Picchio, 2015).

Overall, mature workers demonstrated a strong desire for more training, with half of mature workers (51%) indicating that they had not received enough training (Fig. 18). The desire for more training was higher among mature workers with primary or no formal education (55%) compared to those with tertiary education (42%). This reaffirms that efforts to expand training opportunities to mature workers with primary or no formal education are likely to be met by enthusiasm by workers who were not offered the opportunity to participate in training (Fig. 19).

Figure 18: Mature workers' desire for training

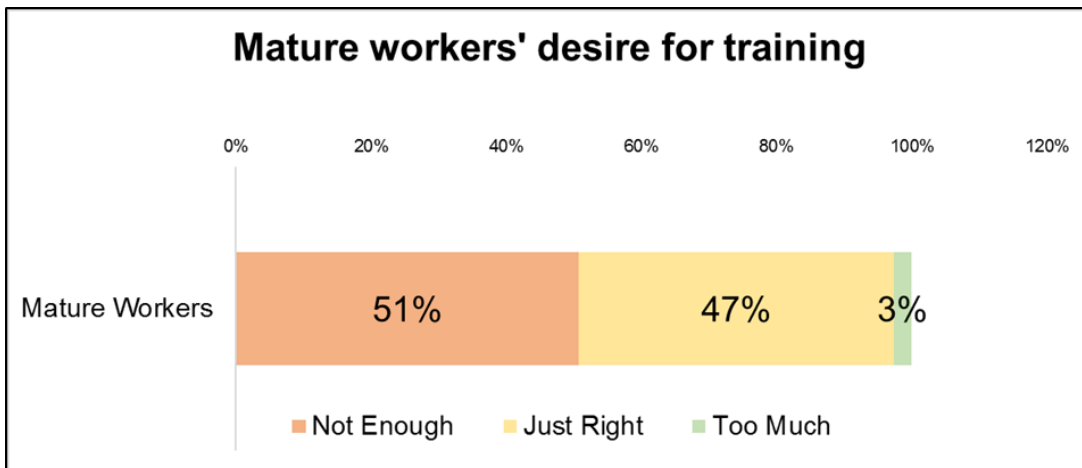
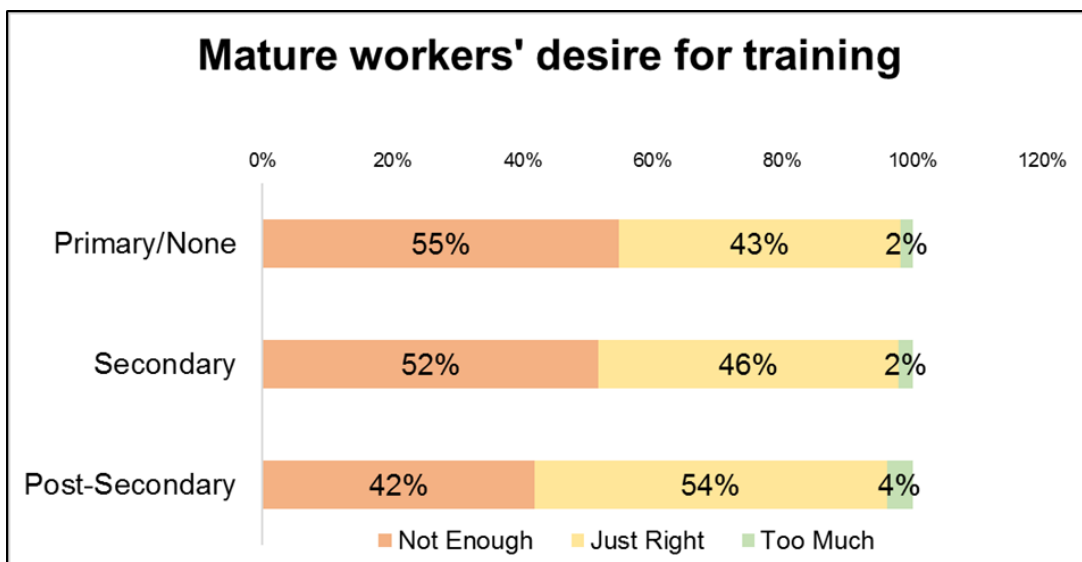


Figure 19: Mature workers' desire for training by educational qualification



Desire for further training was much higher among mature workers who were providing Clerical Support or were Plant and Machine Operators.

Homemakers also indicated an enthusiasm for training; two-thirds said that they had not received enough training. As these were mostly women, this might reflect their desire to upskill and improve their employability, enabling them to re-enter the workforce.

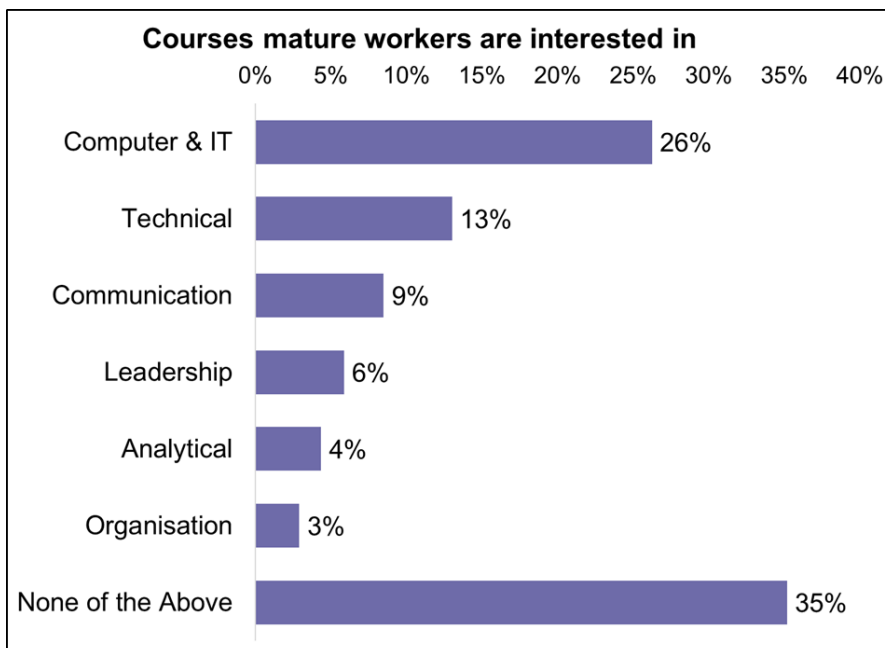


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Next, the research team examined the training programmes that mature workers indicated would be most valuable to their current situation:

1. Mature workers were most interested to take up training programmes in computer and IT skills (26%), technical skills (13%) and communication skills (9%) (Fig. 20).
2. Mature workers in their 50s showed a greater interest in learning organisational and leadership skills.
3. Male workers showed greater interest in technical skills that were relevant to their profession.
4. Female workers and workers in their 60s were more interested in computer and IT skills – possibly indicating an awareness that technology literacy is crucial for maintaining employability later in life.

Figure 20: Courses mature workers are interested in



From the analysis of the preferred training for different occupations and levels of education (Fig. 21), the research team found that mature workers in manual occupations were eager to learn computer and IT skills, possibly indicating a desire to move up to higher-value jobs (i.e. mid-level jobs). Mature workers in mid-level occupations were more interested in job-specific technical skills and communication skills, which suggested ambition to specialise in their industries and move up into PMET positions in future, for which communication skills will be crucial. Those in PMET roles had indicated a strong desire to hone their leadership skills, analytical skills and technical skills. Mature workers with less formal education desired technical training that was relevant to their profession, while those with more formal education were more interested in leadership skills.

Hence these findings suggest that there is a need to curate and target relevant training courses to mature workers at different career levels.

Figure 21: Courses mature workers interested in by occupation

<b>Occupation</b>	<b>Occupation has a Higher Level of Interest</b>	<b>Occupation has a Lower Level of Interest</b>
Legislators/Senior Officials	Leadership, Analytical, Organisational	Technical
Professionals	Technical, Organisational	Computer & IT
Associate Professionals and Technicians	Technical, Analytical, Leadership	Organisational
Clerical Support	Computer & IT skills, Communication	Leadership, Technical
Service and Sales	Technical, Communication	Analytical
Craftsmen and Related Trades	Technical	Communication, Computer & IT
Plant and Machine Operators	Computer & IT skills	Analytical, Organisational
Cleaners, Labourers and Related	Computer & IT skills	Leadership, Analytical

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## Conclusion

Many studies have shown that mature workers are loyal to their firms (are less likely to job-hop), have the ability to mentor and impart their career knowledge to younger staff, and a willingness to accept salary adjustments when necessary (Ministry of Manpower, 2007b, 2007a). These are some of the qualities that employers appreciate in their mature workers.

However, to remain employable in the changing economic landscape, it is important for mature workers to continually upskill, reskill and deep-skill to stay relevant and resilient. Continuing education and training is the best safeguard for mature workers to be equipped with the necessary skills during this period of transformation.

The findings of this research make for very positive insights – they are encouraging for both the ageing workforce and the employers. Employers were supportive of training with the majority enabling training during working hours and providing financial or funding support. Mature workers in Singapore appeared highly motivated to participate in training, even beyond the age of 62, to maintain their employability. They were found to be very positive about taking up training opportunities, and reported that training was relevant, easy to understand and well-recognised by employers. Training programmes frequently delivered their desired outcomes, such as keeping mature workers up-to-date with new technology and practices, and improve job performance.

Some groups of mature workers were however missing out on training opportunities, especially the less-educated and non-PMETs. The disadvantages of not having attained higher education were compounded by low rates of training invitation to participate in work-related training, combined with low acceptance rates of the few training opportunities that were offered to them.

The rapid pace of technological change and the transition to a knowledge-based economy is going to increase the demand for highly skilled and well-educated workers. This implies that workers, especially mature workers who may not have been exposed to changes in technology, will continually need to engage in training and retraining activities to remain competitive in the workforce. Hence, all stakeholders have a critical role to play in helping mature workers in Singapore stay employed, to ensure that workers of all occupations and educational levels have access to training opportunities, with no one being left behind.

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