SOUTH CENTRAL
COMMUNITY
FAMILY SERVICE CENTRE

Stuck in a Well:
A Qualitative Study Examining the Perceptions and Experiences of Upskilling by Low-Income Adults in Singapore

Luke Ho
Singapore University of Social Sciences
(Former Student, until Oct 2022)

Jie Hui Pek
South Central Community Family Service Centre Ltd
(Social Worker)

Nityahpriya
South Central Community Family Service Centre Ltd
(Social Worker)

Denise Liu
South Central Community Family Service Centre Ltd
(Former Senior Research Executive, until Mar 2022)

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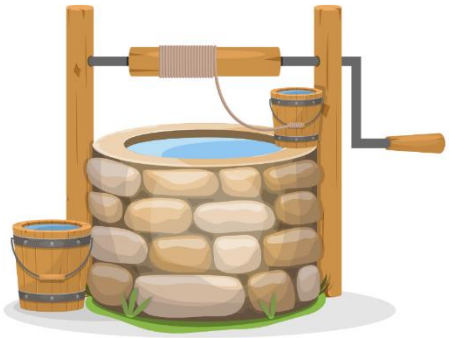
Summary

Through our experiences of working with low-income adults in the communities served by South Central Community Family Service Centre (SCC), we observed that many of them encounter numerous difficulties securing higher-paying employment, perpetuating their position in the lowest income strata in Singapore. At the same time, upskilling is often promoted by the government as a pathway to enable citizens to stay relevant and competitive in the economy, thereby gaining access to higher-paying employment. A review of the literature reveals that some barriers to upskilling include the lack of time and mental bandwidth, financial constraint, and a sociocultural preference that employers have for academic qualification, but existing literature on upskilling by low-income adults is extremely scarce. The research team thus set out to study the perceptions, challenges and enablers of low-income adults in their upskilling endeavours.

We conducted semi-structured interviews with 14 community members. The interviews were transcribed verbatim and analysed thematically to furnish the perceptions, challenges and enablers as documented in this paper. Although many participants perceived upskilling as a long-term investment to gain access to higher-paying employment, significant concern was raised about the uncertainty of this investment and the risk of low or negative returns, which posed barriers to upskilling. On the other hand, findings also revealed motivating factors for upskilling – financial aspirations, passion for self-development, as well as support from families, social services, or government agencies.

We believe that the findings can inform practitioners on the complexities and challenges encountered by low-income adults at the social service agency (SSA) and community level. Brief recommendations for policy and future research were also provided.

Introduction



You know what you should do, but then… you have very limited resource, then it's like a tedious cycle… It's like being stuck in a well. Like you're crawling up…

– Participant 8, mother of three children

Upskilling and the Low-Income in Singapore

Upskilling, or skills upgrading, is hardly a new concept in Singapore. Since 1979, there have been attempts to increase the social mobility of school dropouts via the Skills Development Fund, which provided technical or vocational education (Lee & Morris, 2016). In 2003, the Workforce Development Agency (WDA) was created to help low-income workers "progress into better paying jobs" (WDA, 2014). Today, upskilling remains the promoted narrative for social mobility and an intervention to tackle income inequality (Peng, 2019). It is seen as a central means for workers to constantly acquire more knowledge and skills to remain productive and competitive on the global talent market (Ang, 2018; Chan, 2021). In addressing the growing income gap, then Deputy Prime Minister Tharman Shanmugaratnam described SkillsFuture as "a major force for social mobility" that "pays for Singaporeans to learn new skills" (Tham, 2015).

A key tenet in skills development policies is about offering multiple upskilling pathways and recognising all skills. As the main coordinator to promote upskilling, SkillsFuture Singapore (SSG) partners closely with multiple agencies including the Institute of Adult Learning (IAL), Workforce Singapore (WSG) and Employment and Employability Institute (e2i) in identifying skills gaps, developing, and delivering training for individuals' skills acquisition (Figure 1).

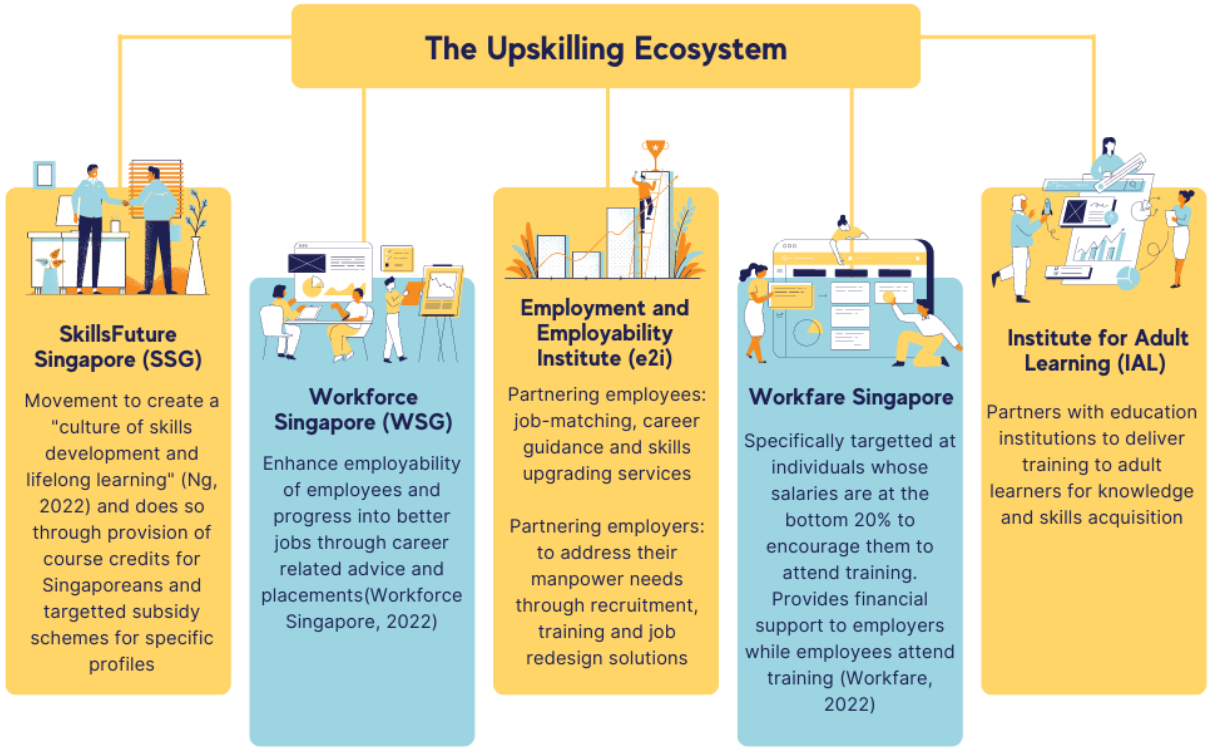
Essentially, upskilling is portrayed as the primary force for social mobility, helping low-income workers obtain new skills and knowledge and remaining relevant in an international market. However, this narrative can inadvertently focus the blame on individuals while downplaying other factors that perpetuate the low-income phenomenon. Some of these factors include structural

barriers to employment, caregiving, or poor awareness of alternatives (Kim et al., 2021). Additionally, poverty is a multi-dimensional problem that often occurs vis-a-vis exacerbating stressors like marital problems, gambling, arrears, addictions, and a myriad other factors (Ho, 2016). As they are unseen, such stressors are easy to understate even if they have profound psychological and behavioural impacts (Ong et al., 2019). For any field or sector that assists the low-income population, understanding the barriers faced can inform individual practice, improve programs, and direct advocacy efforts.

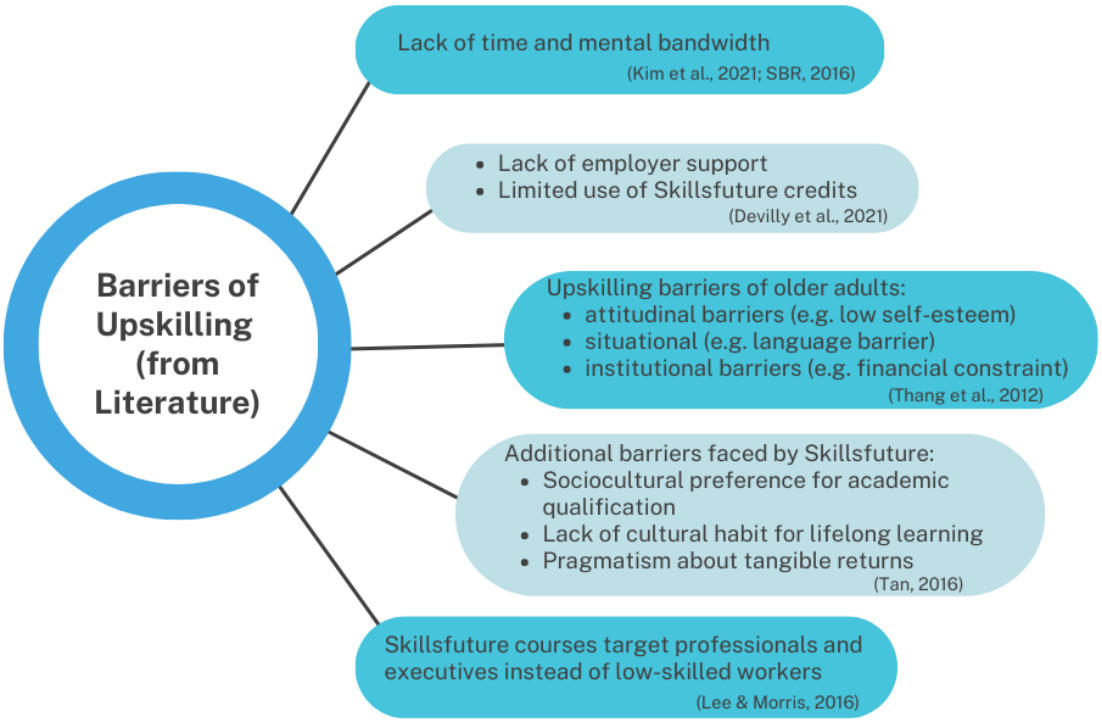
Before progressing further, two terms must be defined, but it is important to note that these terms are meant for brevity and may diverge from global definitions. The first is the definition of "upskilling". The dictionary defines upskilling as merely gaining new skills. However, for the purposes of this study, upskilling refers to the acquisition of new skills, knowledge or certifications that will "enhance an individual's value added to the economy" (Lim & Chan, 2003, p. 219). This is not limited to formal courses like SkillsFuture and can include programs by Social Service Agencies (SSAs) or obtaining a driving licence, to avoid limiting the findings to only formal courses. Secondly, the term "upgrading" broadly refers to obtaining employment that pays more, whether it is changing industry or ascending the career ladder.

Figure 1

A summary of efforts by SSG and partnering agencies in promoting upskilling and employability.



Literature Review



The available literature on upskilling by low-income persons in Singapore is extremely scarce. Research on upskilling barriers and motivational factors have been conducted albeit not targeted at the low-income population. Kim et al. (2021) and Singapore Business Review (SBR, 2016, which had a specific respondent pool comprising accounting and business students) cited lack of time as the primary barrier to taking up courses (59% and 47% respectively). Already laden with responsibilities such as work or family, taking courses was seen as an additional commitment that often clashed with other priorities. This created stress which demanded resources like finances or peer support to resolve (Devilly et al., 2021). In addition, "lack of time" was not always literal – some participants attributed it to the lack of mental energy to undertake courses (Kim et al., 2021).

Other studies examined structural barriers specific to upskilling via SkillsFuture. Findings from Devilly et al. (2021) indicated that 30% of respondents saw the lack of employer support as the primary hurdle, being concerned about needing to resign from their jobs or granted leave for upskilling. Besides this, some respondents also felt that SkillsFuture credit usage conditions were too inflexible, being non-applicable for less structured training or purchasing of materials (SBR, 2016). Additionally, Tan (2017) reports three main barriers faced by the SkillsFuture movement:

1. Sociocultural preference for academic rather than vocational education in Singapore.
2. Lack of a "strong culture" that underscores "habits of mind for lifelong learning" which includes the "drive to succeed" and "appreciating the need to learn and unlearn" (p. 7)
3. The "dominant idea of pragmatism" (p. 8) which contradicts with the living out of one's aspirations in self-upgrading even when it does not cumulate in tangible economic returns.

Specific to older adults (age 50 to 65), Thang et al. (2012) found upskilling barriers such as:

1. Self-perceived notions of not being able to learn (attitudinal barriers)
2. Health, language and learning support (situational barriers)
3. Lack of awareness of opportunities, financial constraint or the fact that courses are not user-friendly or accessible to the elderly (institutional barriers)

Despite these barriers, SkillsFuture still reported high participation rates of 660,000 participants, an increase from 2021's 540,000 (Ng, 2022). However, there is contention about whether SkillsFuture increases social mobility for low-income workers. Lee & Morris (2016) theorised that if SkillsFuture was a force for social mobility, then most courses should target low-skilled workers or provide entry level training. Instead, they found that most courses targeted professionals, managers, and executives. The few courses that did target low-skilled workers were often company based, meaning it was even less accessible for low-skilled workers who are more vulnerable to barriers such as lack of employer support or time (Devilly et al., 2021; Kim et al, 2021; SBR, 2016). Lee & Morris (2016) ultimately criticised SkillsFuture as oriented towards helping the skilled obtain even more skills, bearing little relevance for the low-income population. SkillsFuture thus might ultimately not contribute to increasing social mobility as there is unequal access to upskilling opportunities.

Overall, the local literature indicates a wide variety of barriers, primarily conflicting responsibility between work or family, lack of time and mental bandwidth and courses being irrelevant to the low-skilled. Yet only one paper specifically explored the perspectives of the low-income population. Although the barriers they faced are likely similar to the above, there may be other unknown barriers, because poverty often limits the utilisation of available opportunities (Teo, 2018). No research has yet sought to understand the perspectives from the low-income population. Our study thus aims to further explore this existing gap in the research literature.

Theoretical Framework

The following theories form the theoretical framework for our study.

Scarcity Theory

Scarcity theory aims to explain seemingly counterproductive economic decisions made by low-income persons. It proposes that "poverty produces a scarcity mindset", which forces the low income "into poor or suboptimal decisions and behaviours" (Bruijn & Antonides, 2021, p. 1). For

this study, two effects of scarcity are particularly relevant: reduced bandwidth and heightened risk aversion.

Mental bandwidth refers to the "cognitive ability to perform higher level functions and behaviours" (Bruijn & Antonides, 2021). Living in poverty places a heavy cognitive burden on the mind with a myriad of stressors, including uncertain income, payment deadlines, consumption calculations. These urgent tasks consume cognitive resources and leave less for other tasks, such as contemplating upskilling (Bruijn & Antonides, 2021). This is cognitive stress exists on top of the "lack of time" as reported by Kim et al. (2021) due to other concurrent commitments that a low-income person might have.

Risk aversion refers to how poverty predisposes people to be less willing to take risks. Studies have found that financial scarcity affects decision-making by increasing time discounting, leading to a preference for small but instant rewards over larger rewards in the future. Scarcity also encouraged a bias towards the present orientation and attending to immediate needs. Hence, a scarcity-affected mind has less inclination towards choices that have long-term benefits (Bruijn & Antonides, 2021). Overall, this indicates that the low-income group being more present-oriented may find it difficult to justify the financial costs or losses incurred by taking up courses.

Social Cognitive Career Theory (SCCT)

SCCT aims to explain career development – comprising academic and career interests, choices, and successes. It employs three elements: (a) self-efficacy beliefs, (b) outcome expectations, and (c) goals. Within this theory, self-efficacy beliefs are domain specific, such as sports, music, or writing. Closely linked to this is outcome expectations, which refer to performance expectations in a specific domain, based on the individual's level of self-efficacy belief. To illustrate this, a worker with experience in the food and beverage (F&B) industry will hold strong self-efficacy beliefs and expect a positive outcome when attending a cooking course but might have less confidence in another domain like a driving course. Goals are defined as a personal intention to engage in specific activities (Lent et al., 2002).

SCCT posits that humans develop career interests by attempting and succeeding at activities related to it. The more successful they are, the more positive and sophisticated their outcome expectations become, which ultimately forms interest in the subject (Lent et al., 2002). For this study, SCCT could provide insight into why low-income workers may cite lack of interest for upgrading to a higher-paying paying industry, having lacked opportunities to partake in activities related to their career of interest. It also explains the trepidation of returning to a classroom environment, since low-income workers may harbour negative self-efficacy beliefs and outcome expectations based on past studying experiences.

Family Systems Theory

Family systems theory (FST) is a theory that considers the dynamics of the entire family system and its interpersonal relationships instead of studying the behaviour of individuals in isolation from their environment. It views issues as residing within the interpersonal instead of the individual (Dallos & Draper, 2015). For this study, FST was chosen to contribute a more comprehensive understanding of participants' upskilling behaviour, most of whom were heavily involved in their own family systems.

There are several key tenets of FST, but we selected the concept of circularity due to its relevance to our topic of study (Dallos & Draper, 2015). Circularity perceives each member as exerting influence over the others, and the response by others in turn influences the first member's responses (Dallos & Draper, 2015). Therefore, any action can be considered a response, and a response to an action. For instance, in a low-income household where a wife has active suicidal ideation, the husband works fewer hours and dedicates more time at home to monitor her safety, forgoing the option of upskilling. This perpetuates the couple's low-income which stresses the wife and continues to trigger her suicidal ideation and the husband to stay at home.

This expands the study's understanding of participants from individuals to members of a system, and how challenges or difficulties with one member can affect the whole system. Essentially, stressors on one member can affect the entire system's functioning. As such parent-child conflict for instance can negatively affect the employment functioning of another individual in the system (Banovcinova et al., 2014). We also note that the literature mainly reflects the individual or societal barriers of upskilling, but rarely have the family dynamics been examined as barriers to upskilling. The exceptions are Kim et al. (2021) and SBR (2016) which briefly touch upon the fact that current commitments to family or work affects motivations to upskill.

Aims of the Study

This study has two main objectives, which are to (a) explore the perspectives of low-income adults on upskilling or upgrading, and (b) identify what helps or hinders them in doing so. Thus, two research questions have been designed:

1. What are the perceptions of low-income adults towards upskilling?
2. What are the challenges and enablers of low-income adults in upskilling or upgrading?

Methods

Participants

All participants of the study reside within SCC's service boundary[1] and were recruited through electronic recruitment posters sent out by SCC's social workers to their casework members[2]. The other eligibility criteria were that participants had to:

1. Live in a public rental flat.[3]
2. Be able to work. (This excludes those for whom upskilling will not improve employability, such as retirees or being medically unfit.)
3. Be 21 years old or above.
4. Speak English.

A total of 14 participants were recruited for the study. All participants come from unique households. Table 1 shows a brief profile of participants based on gender, ethnicity, nationality, family size, employment type, household income and whether the family is a single or dual income family.

[1] The service boundary is the geographical region which a FSC provides services for. SCC's service boundary includes Beo Crescent, Redhill, Lengkok Bahru and Henderson neighbourhoods.

[2] In SCC, service users or clients receiving casework and counselling services are referred to as "members."

[3] The Housing Development Board (HDB) of Singapore rents out one- or two-room flats to low-income families that meet the eligibility criteria under the Public Rental Scheme.

Table 1
Profile of participants.

Parti-cipant	Sex	Ethnicity	Nationality	Family size (a: adult c: child[4])	Employment type[5]	Household income/ month	Per Capita Income	Fixed income?	Single income?
1	F	Malay	Singaporean	2a 5c	Project-based	$2,000	$286	No	No
2	F	Malay	Singaporean	2a 5c	None	$2000	$286	No	Yes
3	F	Others	Permanent Resident	1a 2c	Part-time	$2,000	$667	No	Yes
4	F	Others	Permanent Resident	1a 2c	Part-time	$1900	$633	No	Yes
5	M	Indian	Singaporean	2a 1c	Full-time	$2,400	$800	Yes	Yes
6	M	Malay	Singaporean	1a	Part-time (x3)	$1500	$1,500	No	Yes
7	F	Indian	Singaporean	1a	Part-time	$800	$800	No	Yes
8	F	Malay	Singaporean	2a 3c	Part-time	$2320	$464	No	No
9	M	Malay	Singaporean	2a 5c	Full-time	$2,000	$286	Yes	Yes
10	F	Indian	Singaporean	1a 1c	Full-time	$2,069	$1,035	Yes	Yes
11	M	Malay	Singaporean	1a 2c	Part-time	$650	$217	No	Yes
12	F	Malay	Singaporean	2a 2c	Part-time	$2850	$713	Yes	No
13	F	Malay	Singaporean	1a 1c	Part-time	$960	$480	No	Yes
14	M	Malay	Singaporean	2a 4c	Full-time (x2)	$5000	$833	No	No

The general upskilling experiences of participants and whether upskilling aided participants to secure a higher paying job is documented in Table 2. "Upskilling outcomes" were deemed as "positive" if it ultimately increased income or were instrumental for obtaining higher employment. "Upskilling relevance" was more subjectively defined by participants as how useful they perceived the newly gained knowledge or skills post-upskilling. Of 14 participants, six did not attempt upskilling for various reasons. Of the eight who attempted upskilling, five had "positive" outcomes after upskilling, while four reflected that the courses taken were relevant to their current or future employment.

[4] Children is defined as individuals below the age of 21.

[5] An employee that works less than 35 hours per week is considered as part-time, and full-time if exceeding 35 hours per week (Ministry of Manpower, 2020). Project-based work is ad hoc work accepted only during the course of the given project. A "x2" or "x3" in the table shows that the participant is holding two or three simultaneous jobs respectively.

Table 2

Outcome of upskilling by participants.

Participant	Attempted upskilling?	Upskilling relevant?	Upskilling outcome?	Remarks
1	Yes	No	Negative	Food certification was not recognised
2	No	-	-	Never thought about it
3	No	-	-	Language, learning barrier
4	No	-	-	Language, digital barrier
5	No	-	-	No time, no money
6	Yes	Yes	Positive	Basic workplace safety certification
7	Yes	No	Positive	Taking diploma, still ongoing
8	Yes	No	Negative	Did not complete diploma
9	Yes	Yes	Positive	Upgraded to technician
10	Yes	Yes	Positive	Prerequisite for healthcare job
11	No	-	-	No time, no money
12	Yes	Yes	Positive	Prerequisite for healthcare job
13	Yes	No	Negative	Could not find higher-paying employment
14	No	-	-	No time

It is important to note that while some participants disputed the practical results of upskilling – such as actually being able to find a better job – none displayed resistance towards learning itself. These participants, particularly those who faced many barriers, perceived upskilling as a risky investment – which will be detailed in the "Results" section. Nevertheless, participants generally did not object to acquiring more knowledge or skills.

Research Design and Procedure

For this qualitative study, data collection comprised semi-structured interviews with 14 participants residing in rental flats within SCC's service boundaries. Interviews were conducted online, then transcribed verbatim, and subsequently analysed. Each participant was interviewed for an hour, then given a NTUC voucher as a token of appreciation. The interviews also included a participatory element where participants were consulted on how they would like the researchers to utilise the findings of this study. Outcomes of this consultation is presented in the results section.

In order to ensure an ethical research process, participants were explicitly informed of their rights and privacy (such as voluntary consent to participate in the study, and their right to exit the study at any point in time) via a Zoom screen-sharing presentation, after which they signed an online consent form. Participants were informed that they could decline answering any question or withdraw from the study at any time without giving reason. Additionally, because two out of three researchers were SCC staff and familiar with some participants, interviews were carefully arranged

to minimise familiarity between researcher and participant. Specifically, one of the interviewers is a social worker and ensured not to interview his members whom he is providing ongoing case management.

Coding of Qualitative Data

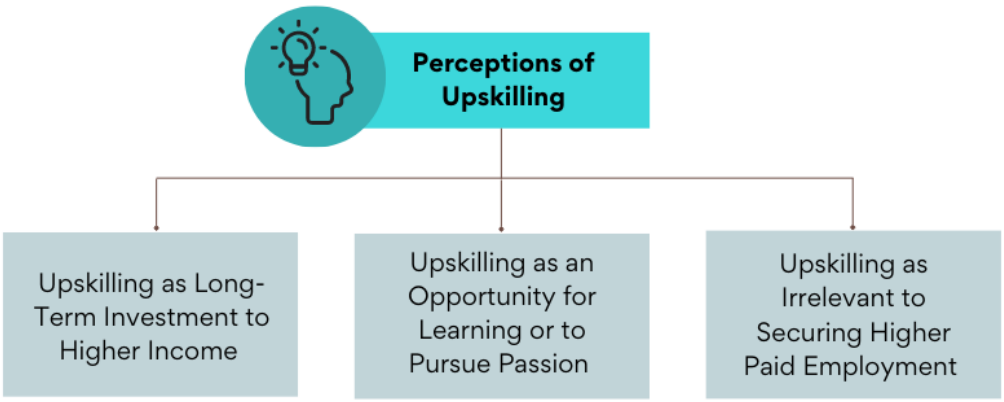
All four research team members (one student, two social workers and one researcher) analysed the data by employing thematic analysis (Braun & Clark, 2006; Boyatzis, 1998; see Annex I for a detailed explanation of how data was coded). Dedoose qualitative analysis software was used to code the data according to themes based on the interview guide.

An initial round of cross-coding was first conducted on three selected transcripts, forming a codebook defining each code. Following this, any divergence in coding applications were discussed to agreement, refining the codebook, and increasing inter-coder reliability. Then, a second round of cross coding using the refined codebook was conducted on two transcripts. After another round of discussions to agreement, the codebook was finalised. Thus, three (20%) of 14 transcripts were double coded to ensure inter-coder reliability. Subsequently, the codes were applied to all 14 transcripts and the information organised into the agreed themes. Representative excerpts were selected and presented throughout this report to showcase prominent themes that emerged.

Results

Perceptions of Upskilling

This section documents how participants perceive upskilling. Some of these perceptions will be revisited in the later sections "Challenges and Barriers of Upskilling" and "Factors that Enable Upskilling" as they also constitute the dominant narratives that serve to motivate or de-motivate upskilling.



Upskilling as Long-Term Investment to Higher Income

Several participants expressed the economic reality of needing qualifications or certifications to survive in Singapore, without which there would be no way out of lower paid jobs. For example, Participant 12 shared:

> *It's not [like] the time before, our… grandfather time. As long as you know how to on the vacuum … you can work already, it's not like that!*

Apart from the economic necessity of upskilling, Participant 8 pointed out specifically the importance of upskilling as a pathway out from poverty in Singapore society. Hence it is an investment to be made for the long-term. This perception corroborates with the role of skills upgrading in alleviating income inequality (Peng, 2019). However, parallel to upskilling, Participant 8 also expressed difficulty in securing employment which met desired pay, stating that it is based on "luck":

> *Yeah, I mean we- we all know it's a long-term investment… it's the only thing that I can get out of the… circle (poverty cycle) you know?… you have very limited resource, then it's like a tedious cycle… I think for people like me is luck la. If you chance upon a job that pay you well, then ok. But until then, you- it's like… depends on your luck if you get, you know? If you don't then you have to, scrape through.*

Upskilling as an Opportunity for Learning or to Pursue Passion

Beyond mere pragmatism, learning itself was also generally perceived as positive. By extension, upskilling can also be perceived as positive since it offers a means for participants to learn more. Participant 10 enthused:

> *I mean learning is something which there's no end, and you should go learn whatever courses you want to take up.*

Similarly, Participant 12 espoused that upskilling is also an opportunity to pursue one's passion or interests. To provide further context, Participant 12 was an office worker who discovered her passion for helping elderly after taking an eldercare course, eventually becoming a medical escort for elderly outpatients:

> *I only know my passion when I… upskill myself when I do the courses, so you see, you can find your passion while you are upgrading yourself. So I hope more people will realize the same thing.*

Thus, the impact of the course was more than just acquiring knowledge or skills, it also provided a critical opportunity for self-discovery. In SCCT terms, the course provided the space for Participant 12 to attempt eldercare and receive positive feedback, subsequently resulting in positive self-efficacy beliefs and outcome expectations, and ultimately facilitating her discovery of her future career goal in the healthcare sector.

Upskilling as Irrelevant to Securing Higher Paid Employment

In a more negative light, participants have also shared their critique on upskilling as a means to obtain a higher paying job. In particular, Participant 13 shared his or her perception that the course qualification obtained from upskilling does not provide an edge in securing higher paid employment because employers might place more emphasis on formal qualifications instead:

> *Ya the employers are the problem… They still like want you… to have degree… So I think it's a waste of time, even the government give you that kind of SkillsFuture credit right, you go and learn some skills, and then… [when I] go for interview, [employer] say oh… you are just an O level… you don't have a degree… the paper (formal qualification) is more important to them.*

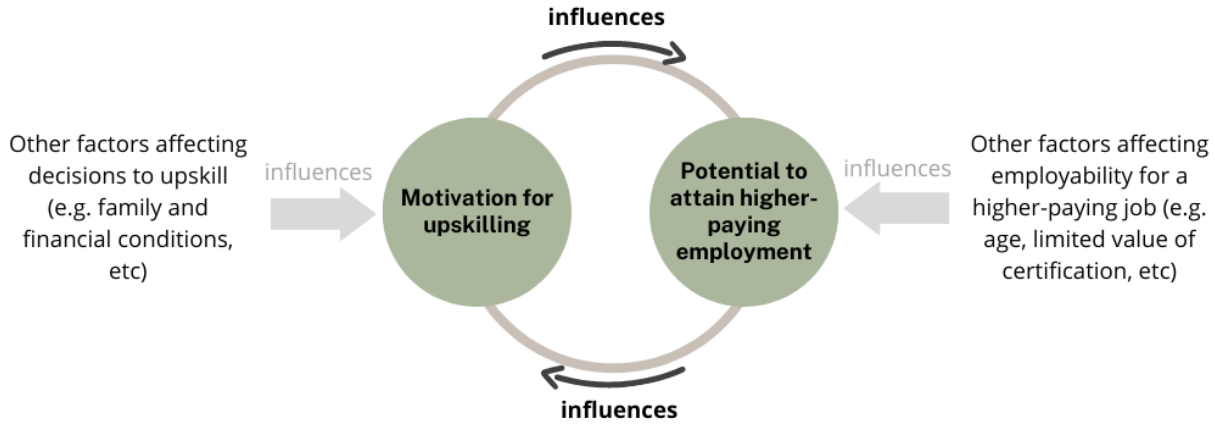
This view corroborates with Lim (2020)'s claim that generalist diplomas are more valuable for low-income families and Tan (2017)'s discussion on the limited effectiveness of vocational qualification in securing employment.

Mutual Influence between Upskilling Motivation and Potential for Higher-Paid Employment

The general motivations of upskilling observed from our participants are (1) to pursue a higher-paying job post-upskilling and (2) for self-development and pursuit of passion. For the former, what stood out for the research team is that the motivation to upskill and the perceived potential to obtain higher-paid employment post-upskilling are mutually influencing factors (Figure 2). This means that if one does not upskill and obtain the relevant qualifications, this impacts the chances of attaining a higher-paid job. The converse is also true where if one perceives that higher-paid employment cannot be attained, it also demoralises one to upskill (unless one upskills to pursue interest and passion).

Figure 2

Diagram depicting the mutual influencing between upskilling potential and potential for higher-paid employment.



Some factors (elicited from interviews) that pose a challenge to individuals securing higher-paid employment include age, learning ability and health issues. The examples in the following paragraphs highlight how the participants' motivations to upskill are hampered when they do not perceive the ability to obtain a higher-paid job even after upskilling.

Perceived Hopelessness in Changing Employment Post-Upskilling

When participants perceived hopelessness in changing jobs, it also hinders their motivation to upskill. In particular, Participant 10 shared about her decision (and her colleagues' decisions) to not upskill because of the difficulty of changing to a higher-paid job due to age:

At the moment it's gonna be very difficult for me to.. scout for another job because of my age… I'm 52… maybe I need to… upgrade myself… [But] because for my age especially… my colleagues are all around my age… we are all staying put because of our age. So just shut up and then just work as much as we can, until we retire.

For older participants, the limited number of working years they had left also decreased the potential returns of upskilling. Participant 12 echoed concerns by sharing about worries in securing better employment upon completion of the course primarily due to age.

Maybe after I finish everything [in the course], then the, the work find me too old then reject me, how? Wasting my time wasting my effort.

Perceived Risks of Changing Employment

Participants also described the harsh realities of switching to another job and the risks and strain involved in navigating a new field of work and workplace environment. As Participant 12 shared, there is uncertainty about whether she will be a good fit for the new work environment upon changing employment:

I rather have something (a job) that I know. Okay, this thing, I already know the pattern, I already know the people.... If you start new one, aiya[6] you don't know anything, you still need to... you need to learn. This person is how, how you must handle this place. All this politic drama issue or whatever.

Limited Value of Certification

Other participants have also lamented that qualifications obtained from upskilling will not increase their salary, hence the need to upskill becomes questionable. Their accounts again illustrate the perception that employers and society at large continue to prize formal educational certification. Participant 10 echoes Participant 13 (refer to section on "Perceptions of Upskilling") in stating that employers see more value in formal qualification as compared to certification from skills upgrading courses (such as WSQ):

Because the cert is from WSQ. … I asked them why am I starting off with a lesser pay than a diploma holders, but what they said was because diploma is more recognised for them.

Similarly, Participant 8 had taken up a human resources diploma only to give it up altogether because she realised:

[6] An expression used to show dismay or exasperation

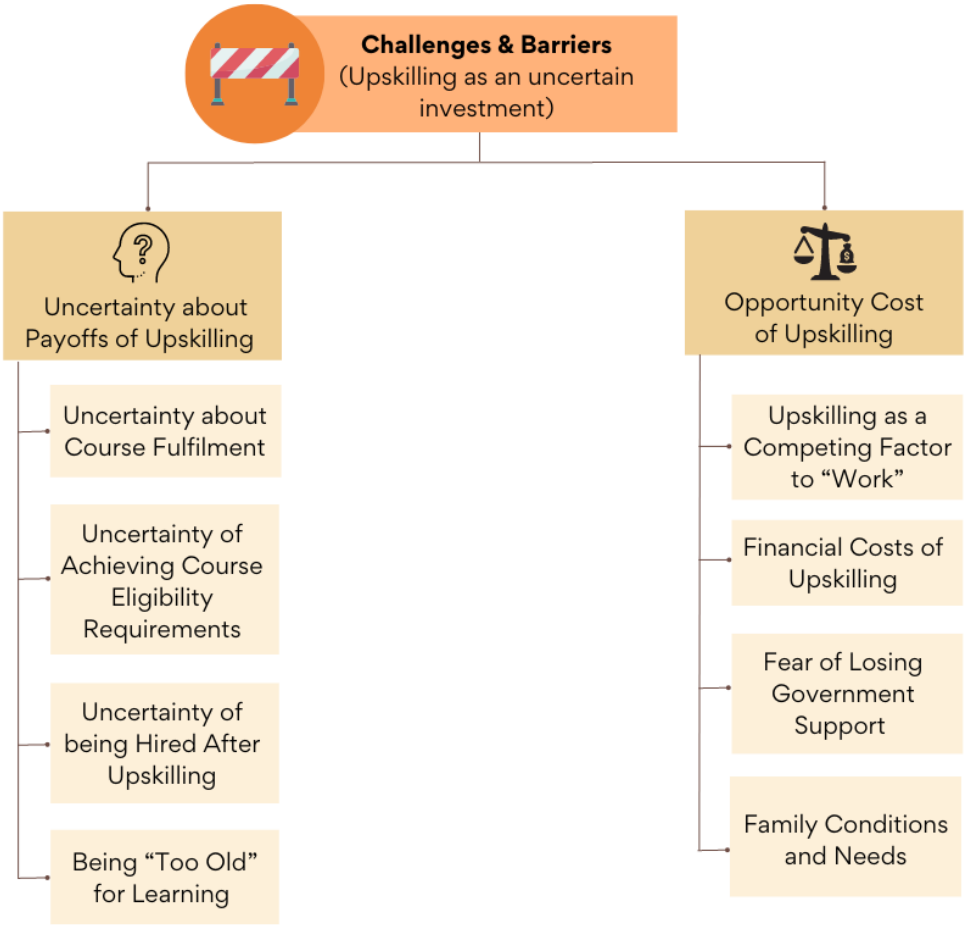
Even if I mention about this course, it doesn't help me in securing the job, given that I don't have any experience, or like any background

The corollary to these findings is that (where upskilling is purely seen as a gateway to achieving a higher income) one has to perceive sufficient potential both in upskilling and in securing a higher-paid job in order to decide to upskill.[7] Therefore, while this study primarily focuses on upskilling, the discourse on upskilling cannot be divorced from the discourse on employability.

[7] We note also that a change of employment does not necessarily come after upskilling. Workers might also be employed first and upskill later through on-the-job training or enrolment in external courses.

Challenges and Barriers of Upskilling

This section documents the barriers faced by low-income adults in their pursuit of upskilling. Broadly, participants perceived and experienced upskilling as an uncertain investment that is risky to embark on. When the risks and uncertainty outweigh the potential payoffs of upskilling, participants tend to opt to remain in the status quo. The risk and uncertainty of upskilling can be categorised into: (1) sense of uncertainty about payoffs of upskilling and (2) opportunity cost of upskilling.



Uncertainty about Payoffs of Upskilling

The follow subsections illustrate in detail how the uncertainty about the payoffs of upskilling is experienced by our participants.

Uncertainty about Course Fulfilment

Participants revealed worries about the heavy demands of course curriculum, being unable to keep up with it and the possible implications if they were unable to complete the course

successfully. This is consistent with SCCT wherein individuals' outcome expectations are closely tied to their self-efficacy. Due to past negative experiences in the academic setting and poor outcome expectations, low-income adults might become hesitant about commencing an endeavour in this area. This is exemplified by Participant 12 whom verbalised her fears on embarking a course which she has no confidence of fulfilling:

> *Like me, I have low self-esteem. So sometimes I'm scared to try new things because, I will say that is it worth it? Maybe after I finish everything, then the, the work find me too old then reject me, how? Wasting my time wasting my effort.*

Additionally, despite the strong desire to learn more, Participant 13 shared that the need to save for an emergency outweighs the need for upskilling due to the uncertainty of course completion:

> *[If] I don't get the degree…then that saving all will go to waste. Yeah. So, I rather like, save up the money for my rainy days. And, you know, not sure if I can.. pass and get that degree.*

With the Covid-19 pandemic accelerating digitisation, many courses have also been restructured to the online setting to allow for remote learning arrangements. As such, course attendees require digital access and fundamental digital literacy skills. However, studies have revealed that there remains a gap in digital access especially among lower income individuals and elderly despite Singapore's almost universal digital availability (Ng et al., 2022). This was also exemplified by Participant 6 whom shared the struggle to be digitally literate for the purpose of attending the course:

> *I tell you ah, this Zoom thing ah, is my… third or fourth time you know. I was scared to do you know, alamak[8] meeting… we meet face to face… I try to.. avoid ah digital [inaudible]. Then slowly slowly now, I [have no choice] everybody doing so I also have to do…*

Uncertainty of Achieving Course Eligibility Requirements

Some participants struggled to find courses that they are eligible for. As many low-income adults have lower educational qualifications (Lim, 2020), a key concern that emerged amongst many participants was the lack of fundamental minimum qualifications to pursue their desired courses. Participant 11 who pursued technical studies in the Institute of Technical Education (ITE) immediately after Secondary Three described his confusion and disappointment when his dreams of pursuing a career as a pharmacy technician were dashed as he lacked the minimum requirement of the N level qualifications

> *I don't know [whether] ITE and [secondary] 3 is it equivalent to N level [qualification]... that made me stop [in my pursuit to apply for courses]. When I look, when I survey the pharmacy*

[8] An expression to display dismay, shock or alarm

tech, alamak! Qualified for N level and above… [Then] I start to… like going to give up [upskilling] already right? … Because it's the N level [requirement], I didn't have N level.

Uncertainty of being Hired After Upskilling

Similarly, some participants did not upskill because they were unsure if the market demand for their desired jobs would dwindle by the time upskilling is completed. Participant 14 – a road cleaner – bluntly stated the vulnerability of low-skill work in the face of the surplus of foreign workers and their competitiveness in being hired as they generally accept lower wages:

> *Singaporean take [supervisor course] also no use, because company also don't want pay… The salary (after upskilling) is $3000 plus. Better they pay the foreigner.*

To cite another example, Participant 6 was in the oil and gas industry and there were many certifications available, such as welding supervision or boiler inspecting. However, such courses are lengthy and expensive. Moreover, the unpredictability of the industry meant that by the time he obtained the certification, demand for the skills that he acquired through courses may have diminished:

> *Let's say take [the course] already… few thousand [dollars] lost (used up)… then go to the job market, don't have (no more availability of the job)… So insecurity about the availability of job… Hard to predict whether can get the job or not*

This also corroborates with our findings as document in the section "Mutual Influence between Upskilling Motivation and Potential for Higher-Paid Employment" (subsection "Limited Value of Certification"), which illustrates that the potential to be employed post-upskilling strongly influences the motivation for upskilling.

Being "Too Old" for Learning

Some participants expressed worries and inhibitions about applying for the courses due to worries about being "too old" for learning. There were several dimensions to this worry – whether they will be able to keep up with the curriculum's pace, reap the benefits of upskilling or even qualify for better employment upon completion of the course, to justify the course fees as a worthy investment. Participant 10 shared:

> *I don't mind learning but at this age I'm a- a little bit slow in absorbing but I can do it. But I, but I know I can do it, but I don't know whether the other side, they will accept that time. Given the time frame for my learning.*

This perception is congruent with Thang et al. (2012)'s finding that older adults have "self-perceived notions of not being able to learn" (p. 6) which becomes a barrier towards upskilling.

High Opportunity Costs of Upskilling

Apart from uncertainty about the payoffs of upskilling, the upskilling process also brings about an opportunity cost – one where the returns on the upskilling investment could be simply too small or even negative. Essentially, participants did not upskill themselves because (a) the input cost (financial or opportunity cost) is too high or (b) the output is uncertain or not worth the input. For some participants, the required input costs are high, yet the results are not guaranteed.

Upskilling as a Competing Factor to "Work"

Notably, there was a significant need for low-income persons to be able to meet their basic needs adequately before they are in the headspace to consider upskilling. Opportunity costs also weigh heavily for some in their calculations as they could spend the time attending courses on earning more money instead. Participant 8 stated:

> *I would rather go out to work than like go and study. Because when you go study... you would be forking out more money than when you are going to work.*

In line with scarcity theory, those under the pressure of scarcity were more focused on the pressing needs of the here and now and earning as much as they can. Money in hand was more psychologically reassuring than the possibility of earning more in the future. Participant 14 asserted:

> *For [the low income], better [to be] realistic... I work, I got money.*

Financial Costs of Upskilling

For many participants, they could not afford the financial costs of pursuing courses and certifications. This could refer to the course fees, application fees, or even transport fares. Participants shared about the different financial costs of upskilling and their inability to afford it on their own. Participant 11 enthused about a dream of becoming a pharmacy technician and attaining the necessary certification. However, the financial costs left the participant disheartened:

> *If use your own money, no la I can't la. I can't afford pay our own money la.*

In order to make courses more affordable, the government has also stepped in to subsidise course fees through co-payment for selected courses via a myriad of schemes available (see introduction). Nevertheless, the timeliness of receiving the subsidy is still a cause for concern, as espoused by Participant 14:

> *Government say, no after you take the course, after that you can get money! Also how many month I wait?*

However, course fees are hardly the only losses participants must consider. Transport expenses were also a key consideration. Many participants shared that they would not be comfortable working further away as it would translate to higher transport expenses.

> *We have to consider things like the distance… of our workplace from my house. Because transport will…require money, so I have to, yeah, consider everything carefully.*

Fear of Losing Government Support

Another aspect of the opportunity cost is the possibility of losing government support should low-income adults obtain a higher-paying job. A higher income might translate to the low-income adult's loss of their eligibility for public assistance schemes, reflecting the cliff effect[9] of social welfare. Participant 14 emphatically shared worries about the opportunity costs such as possible ramifications on family's coping and ability to meet basic needs:

> *Now my pay [low], then my HDB [rent] is $150. Ok, after I get the high pay, my rental … become $400! HDB see already, ok! [Because of] your pay ah, after next 2 years [your rent will] become $450… FAS also cannot get. Everything cannot get. It's the same. You become back to square one also*

Overall, interviews revealed the considerations and careful deliberations participants had to undertake in considering upskilling and committing themselves to the process. After weighing the input costs of upskilling against the possible output and realising that the input outweighed the output significantly, some participants did not pursue upskilling. They also experienced immense uncertainty about whether their investment of time, finances, and energy in upskilling at the expense of their other pressing commitments and needs will pay off in terms of a better job, pay and working hours. This is aptly summarised by Participant 8:

> *You know what you should do, but then… you have very limited resource, then it's like a tedious cycle… It's like being stuck in a well. Like you're crawling up…*

Although fully aware that she needed to upskill or upgrade, she did not possess the necessary resources to do so. As such, she felt "stuck" in a self-perpetuating cycle of not having enough.

Family Conditions and Needs

Family conditions and needs also significantly influenced participants' decisions to upskill. Family conditions broadly refer to barriers originating from their family, such as caregiving or other

[9] Cliff effect refers to an increase in income which results in the disqualification of the family from social assistance but is not sufficient to cover the cost of the lost benefit

domestic responsibilities. In accordance with family systems theory, when an individual adopts a change in role (for instance, a breadwinner who takes on a part-time course while working or quits a job to take a full-time course), this inadvertently affects the behaviour of other family members. The impact of this barrier cannot be understated, especially for young families with multiple children. The pressing demands of caregiving responsibilities meant that participants who wished to upskill had no choice other than to structure their upskilling efforts around the caregiving demands, if at all possible. To illustrate, when asked about online courses, Participant 8 – a part-time receptionist with three children under the age of 12 – responded that she would prioritise an online course during the day when her children are at school:

> *It's something that.. [can] be achieved (doing on online course), because after school hours my kids would definitely be a distraction.*

For some participants, it was a question of time and energy. But for others, family responsibilities were a deeper personal matter. Some participants simply felt that raising their children themselves and spending quality time with family were more important than earning more, a reflection of their parenting values. The most striking example was Participant 1, who turned down three nearby job offers with a (higher) salary of $2000 per month. Emphatically, she said:

> *I still settle with what I'm doing right now is because… I have lost my time with my other children.*

Furthermore, her children had suffered abuse from a past babysitter when she was working shifts. Thus, she was determined to ensure that her youngest son does not undergo similar experiences, perceiving it as redemption for her older children's abuse. She shared:

> *I have five children, the last one is someone that I really want to... focus on... I don't want to make mistakes, just because I want to put food on the table.*

Similarly, Participant 11 simultaneously became the sole caregiver and breadwinner when his wife fell ill. With no other caregiver, he accepted a significant pay cut by becoming a part-time employee to look after his sons. Having no caregiver was unthinkable, because he felt compelled to "push button", a phrase he used to indicate the need to constantly remind his children to do their tasks like complete homework or attend tuition.

> *"Push button, need to inform them. Today you have tuition, today you have Mendaki… If not push button, they will not go. This [why] … I work as a part-time."*

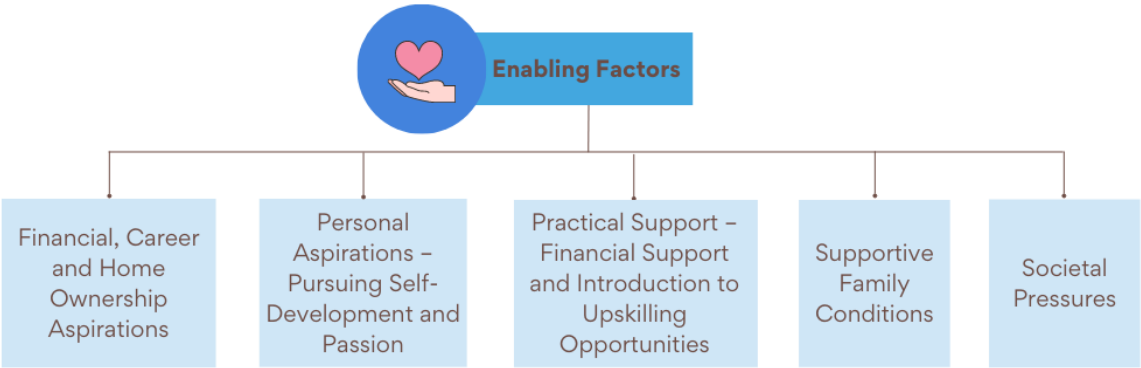
In summary, most participants did not upskill or upgrade because they carefully weighed that the input resources required outweigh the prospective output. Further skewing this equation was that the output was not guaranteed and that participant's mental bandwidth may be pre-occupied by work or family responsibilities. We also observed that none of the participants cited higher risk presenting issues such as mental health conditions, emotional issues such as self-harming ideation

or family violence as possible barriers towards upskilling. This came as a surprise because these complex presenting issues are prevalent amongst the families supported by casework and counselling at SCC. Hence, we speculate that one limitation of our study is that we did not reach low-income persons from families presenting complex and high-risk issues – if so, other barriers might be more pronounced.

To conclude the section on barriers, upskilling or upgrading meant that participants had to step into the unknown and surmount various obstacles. Nevertheless, there were also participants who successfully upskilled and upgraded. The next section documents the factors that enabled participants to upskill.

Factors that Enable Upskilling

Whilst there are several factors that impede low-income adults from upskilling, we have also elicited what enables or motivates upskilling.



Financial, Career and Home Ownership Aspirations

Participants' financial aspirations were an important motivation for upskilling, which is congruent with the perception that upskilling is an essential pathway to higher-paying employment as documented in the section "Perceptions of Upskilling". However, participants had varying end goals for an increased income.

Perhaps a straightforward end goal for participants would be to attain stable employment that pays more, thereby increasing the household income. Several participants verbalised this, and Participant 12 articulated the need for an increased stable income to provide better quality of care for family members and for herself. This also makes her a better daughter, mother, and wife:

> *I also want to give my father better allowance... And I want to give more to my children... And then I also want to have better life... I want something permanent where every month, I know I will receive this amount, and then I can help my husband also, because my mother-in-law is sick... So, when you upgrade you get promotion...*

For Participant 2, upskilling as a means to earning more represented increased financial security, which is important when a sudden need arises:

> *Emergency money, just in case if the children, you know last minute [need something], spectacle broken, that's it.*

Other participants have also expressed their determination to work towards home ownership as they currently reside in a public rental flat. Upskilling is thus a pathway towards a higher paying job, which increases the financial resources for flat purchase. Participant 9 perceives home ownership as a means of "upgrading" their own assets and a personal sense of achievement for

the family, while Participant 1 shared that a larger flat is a more conducive space for a child's education:

> *I want to more upgrade, better ah. Because I want to change a new house... Cause now I stay rental flat, rental flat... Then more, must more upgrade some more. – Participant 9*

> *Want to move forward for a better… living space... No one wants to be in a small space forever, right? … Coming next year I'm already 12 years in this community. So how long more I want to stay here? I need to move forward. I need my son to be in a conducive- space. So that he can.. grow… he can have space where he can develop his creativity. – Participant 1*

Personal Aspirations – Pursuing Self-Development and Passion

Apart from the tangible benefits of upskilling, participants have also shared their desire to achieve personal aspirations through upskilling. Some participants expressed an intrinsic desire for self-improvement and a passion for learning, reflecting the perception that acquiring knowledge or skills is good in itself. For example, Participant 10 shared enthusiastically the desire for upskilling because it is intellectually stimulating:

> *I have the time, but I don't have the money… Because I'm young… I still want to learn… new things…. I've [used my free time] on weekends, to go and learn courses, anything! Anything. I'm willing to learn, yeah. So I just wanted to keep… my brain functioning all the time...*

Similarly, Participant 4 shared that upskilling is a means to personal growth for the sake of one's personal development, even if there are no tangible outcomes from upskilling:

> *I want to upgrade myself... Even I don't go to work, I still work same job, but I still want to.. make myself to know more... If I had chance, I will upgrade myself, for my ownself.*

In addition to the self-actualisation via upskilling, participants have also shared that upskilling is a means to work towards a career that they are passionate about. This is both a career and personal aspiration. For instance, Participant 12 shared that her passion to be a part of the social services comes from the gratitude from being a service user herself:

> *I come across so many social worker… all basically owe everything (feel indebted to them)... There's many things I wish I can change in the system… I wish… if I have the degree… I can be social worker and… change things... my goal in life is… to help low income [persons]… who have… same health problem like me... I see like there's many things that I can offer as a person… So that's why… if I have a choice, one of the jobs I want to do is social worker.*

Practical Support from Peers or Agencies

Financial Support

Other than aspirational factors, many participants also attributed their successful upskilling or upgrading to practical support provided by various informal or formal sources, such as financial support and upskilling recommendations. This mirrors the financial challenges as presented in the "Challenges and Barriers" section.

There was a general appreciation for financial subsidies and grants, even for those who doubted upskilling's effectiveness. This was especially true for SkillsFuture credit, participants felt that since they had it, they might as well use it. For instance, Participant 2 searched for courses online which can be paid for by SkillsFuture credits.

Largely, financial subsidies eliminated the fear of not being able to shoulder the course fees, making the upskilling endeavour less risky. In a more specific example, Participant 12 shared that her new employer provided on-the-job skills upgrading, hence both employment and upskilling were guaranteed. Financial support was also provided by SSAs in various forms apart from cash assistance. For instance, Participant 10 shared that she was provided free WiFi and a laptop to take her courses online. This also reflects that bridging access to digital devices can enable upskilling.

Introduction to Upskilling Opportunities

Awareness efforts were also instrumental catalysts to embark on upskilling and upgrading for some. This included advertisements and formal agencies conducting outreach. For example, Participant 1 - a community connector[10] in the neighbourhood herself - firmly believed in the effectiveness of lift lobby posters. Others took up courses based on the recommendations of agents or social service professionals who introduced upskilling opportunities to them.

Finally, participants also shared the helpfulness of job referrals and recommendations from friends and relatives. In a striking example, Participant 9 upgraded from a cleaner to a maintenance officer at a condominium. This included a pay raise. He started his journey when:

> *[A friend] last time … he ask me, come… join maintenance. Upgrade yourself.*

Initially, Participant 9 was hesitant because he would have to take a training course and doubted he could obtain higher-paying employment. However, his friend then managed to guarantee him a job at a new company and thus, eliminated employment uncertainty. This is again congruent with our finding that one's decision to upskill is contingent on perceiving potential both in

[10] Community connectors are community members whom are actively involved in building relationships with a wide network of residents in the community.

completing upskilling and in securing a higher paid job post-upskilling (refer to section "Mutual Influence between Upskilling Motivation and Potential for Higher-Paid Employment").

Supportive Family Conditions

Although upskilling might appear to be an individual pursuit, it was found that the entire family is impacted when one member decides to embark on upskilling. By applying the concept of circularity in family systems theory, one family member's upskilling behaviour has an influence on all other members, which in turn also impacts the upskilling member. For one to decide to upskill, the family system has to be a conducive environment for this transition.

For example, Participant 1 shared that her husband had to adjust his work schedule to accommodate her upskilling schedule:

> *I want to take my course, [and] my husband have to sacrifice his work. I tell him to stay home, you know? Take care of our son or work half day, because it's enough of thinking of other people. I also need to upgrade myself you see.*

Similarly, Participant 12 had a conversation with her family on "teamwork" to enable her to upskill and obtain a higher-paying stable job:

> *So I told them already, I need full time job and we need to work as a team, as always. We don't consider ourselves family only, we are team, a team need to do everything. Everybody need to pitch in. That's my rule number one in this house.*

Societal Pressures

Participants are also prompted to upskill to cope with societal pressure related to the necessity of possessing the necessary certification for a job. This reveals that certification can both be barrier to attaining higher-paying employment, but also a motivation for upskilling. Participant 12 espoused the pressing need for certification:

> *So everything you need certificate. My husband as a cleaner also, he need to take the hygiene and cleaning certificate… That's why I always say to my children… it's not… you know how to… pick the broom and mop… you can [be a cleaner] already, it's not like that!*

Another form of societal pressure manifests as general peer pressure from the community of people around the participant. Some participants became motivated to upskill when they saw others around them succeed. Participant 11 described his volunteering experience in the community as inspiration for him to upskill:

> *When I involve with community, that started me to improve myself…*

Participant 9 was similarly motivated upon seeing his neighbours move from rental flats to purchased flats:

> *My block side... come out this place already know? All change house already. Really! All got new job already…*

In summary, participants are either deeply motivated by their aspirations towards a better economic conditions or asset-building (such as home ownership), or personal intrinsic motivations of self-development. Environmental factors such as family conditions, practical support from government agencies or SSAs, and societal pressure also serve to motivate participants to upskill. It is also observed that many factors (for instance, financial and family conditions) can serve either as an enabler or barrier to upskilling.

Conclusion and Discussion

This study set out to better understand the low-income population: their perceptions, challenges and enablers when attempting to upskill and obtain a higher income. Our findings are consistent with local literature which suggested that the most common challenges would be financial, conflicts with other responsibilities, lack of employer support, and irrelevance of SkillsFuture (Lee & Morris, 2016; Kim et al., 2021; Devilly et al., 2021).

General Perceptions of Upskilling

Participants mostly had a pragmatic recognition that one needs to acquire knowledge and skills to survive in an economy where the proportion of workers holding University degrees is increasing. They are also cognizant of the reality that wages of low-skilled work might be financially inadequate in the face of inflation. Thus, participants were receptive to the idea of learning to improve themselves. This shows that, to some degree, the low-income population accept the government's narrative that workers must acquire more skills to remain relevant and increase social mobility (Chan, 2021). As such, programs should focus on emphasising that upskilling is possible and feasible.

Barriers to Upskilling

Despite positive perceptions, not all participants pursued upskilling because they were held back by barriers. The experiences of the 14 participants evidently reflected the prevalence of financial and familial barriers. For many, family conditions were the primary barrier, because most of their time, energy, and mental bandwidth was occupied by responsibilities like caregiving or household work. Upskilling could mean disrupting the existing homeostasis of the family (as per family systems theory; Dallos & Draper, 2015) because their existing household responsibilities are now shouldered by others or having to navigate new stressors and persuading other members onboard. Even assuming total cooperation, the caregiver would still have to extensively plan their schedules in a delicate balancing act of family and income versus studies. As such, some simply lack the energy and bandwidth to walk the tightrope. Therefore, this suggests that upskilling initiatives may be more successful by working with the entire family system instead of only individuals.

Employer-related barriers were less conclusive because many participants were part-timers and thus did not require employer approval. Only Participant 5, a security guard, explicitly expressed doubts that his company would approve. As for Lee & Morris (2016)'s assertion that there were insufficient low-skill SkillsFuture courses, none of the participants explicitly shared this view. Instead, participants lacked confidence in the certification's ability to improve their employability

in the eyes of prospective employers. Thus, the issue was not the courses itself, but companies, their hiring practices, and the uncertainty of availability of jobs in the job market.

Most importantly, the findings suggest that participants do not upskill because it tends to be a high-risk endeavour with low or uncertain rewards. Either they could ill-afford high input costs and felt stuck in a self-perpetuating cycle of poverty or they feared the outcome would fall through, leaving them financially drained or even in debt. Unsurprisingly then, many participants concluded that it was better to simply keep working than chase possibilities so that they could have cash in hand to pay bills, feed their family, or squirrel away for emergencies. This preference for having actual cash reflects the mental pressures of scarcity (Bruijn & Antonides, 2021). To one constantly scrambling to meet the next payment deadline, holding a little more money is not just reassuring, but it is being "realistic". Therefore, as with any investment, upskilling's viability could be increased by offsetting the input costs or reducing uncertainty of outcomes. However besides subsidies, peer influences also seemed to mitigate uncertainty to some degree. This is because participants could directly observe that upgrading was indeed possible and within reach. Direct recommendations from trusted peers or agencies may also command greater reassurance because they are perceived as experienced with the process.

Other Individual-Specific Barriers

Perhaps a particularly novel contribution of this study is the exploration of individual-specific barriers. Socially dominant narratives might surmise that low-income individuals do not upskill because they "lack motivation". Even among participants, some barriers cited include the reluctance of low-income adults to leave their "comfort zone" in their current work arrangements, and even the "laziness" to upskill. While possibly true to some extent, there are clearly some nuances to this inertia. For example, it could be a lack of confidence in classroom environments, because of language concerns or technological illiteracy. Or, for some participants, inertia stemmed from discouragement and cynicism after long and unsuccessful wrestling with system barriers. Inertia could also be borne out of indecision. When asked about SkillsFuture, many participants shrugged and said they had not done enough research, indicating the difficulty of knowing the best choice in a veritable library of courses. These suggest the deep complexity hidden beneath the over-generalized barrier that low-income workers "lack motivation" to upskill.

Mutual Influencing between Employability and Upskilling Motivation

Another novel contribution of this study is the finding that the potential to obtain a higher-paid job post-upskilling significantly affects the decision to upskill. This emerges when upskilling is seen purely as a pathway for increased income (and not to pursue individual passions or aspirations). Hence, the upskilling discourse is closely related to the discourse of employability of the low-income.

Enablers of Upskilling

Some of the participants persevered through the barriers, motivated by financial, career, and intrapersonal aspirations. Better housing was an unexpectedly common motivator, which may prove useful for programs targeting rental flat residents. Moreover, the effectiveness of personal passions proved highly effective for sustaining Participant 10 and 12's upskilling efforts. Because they had clear, explicit goals of becoming healthcare workers, they were highly motivated even despite negative feedback. Thus, a program may possibly benefit from allowing the exploration of a wide range of personal passions. As for external motivators, this study suggests that financial incentives and awareness efforts are indeed effective for encouraging low-income adults to upskill.

Implications and Reflections

The study elucidated a strong desire from some participants to upskill. However, it also shed light on the complexities and barriers involved in committing to upskilling and the opportunity costs that many participants had to carefully weigh.

Participant's Hopes for Research

A participatory element was included during the final part of our interview where participants were consulted about their hopes for the aftermath of the research. According to Cornwall and Jewkes (1995, p. 1667), participatory research involves "sequential reflection and action, carried out with and by local people rather than on them". The intent behind the consultation process in this study was to collect participants' feedback to possibly springboard further action either by SSAs or members of the community.

The following points summarise many participants' hopes post-research:

- SSAs such as FSCs could work with community members to enhance employability by providing guidance on resume writing or interview practice.
- Graduating students or youths can be targeted for employment programmes to enhance employability.
- SSAs or government agencies can increase the community's awareness of available upskilling opportunities or related subsidies by increasing the extent of outreach.
- Hinge upon the findings of the research to advocate to relevant employment or government agencies to bridge barriers faced by the community members. This is exemplified by Participant 12:

> *I hope that there is like... It's to understand more not only my family, but other people also. Understand what they need, what actually is the obstacle they face, you know? Yeah… maybe you can go to the correct department, and tell what is the answer [research findings] and represent us. Become the voice. And speak up for us la… (Interviewer: You hope that we will advocate for you?) Yes! That is the word, advocate.*

Recommendations

The research findings have informed us to provide the following recommendations at the agency, community, and policy level. Future research directions are also proposed in this section.

Agency level

The study revealed that the decision to upskill involves the consideration of various opportunity costs and risks for low-income adults. As such, it is critical for social service practitioners to exercise curiosity and empathy towards low-income individuals' lived experiences – especially their dilemmas and worries – when facilitating a conversation about upskilling. This will enable the practitioner to have a holistic understanding of the individual and structural factors of upskilling faced by the service user. The therapeutic alliance between practitioner and service user can also be strengthened as a result.

As revealed by the findings, many low-income adults are focused on meeting basic needs and providing for their family as financial resources are scarce. As such, they might have a lower bandwidth for career planning and are likely to remain in the same employment sector throughout their entire working career. It would be helpful if social service practitioners could collaborate with service users to co-develop employment goals based on their interests, passion, and aspirations for their family. They can then collaboratively chart short and long-term career plans with service users.

Prior to being able to co-develop career plans with service users, social service practitioners must possess adequate knowledge about upskilling as well as the ability to facilitate conversations about upskilling. However, to the best of our knowledge, most social workers do not receive any training in this aspect of career counselling. As financial and employment issues are closely interwoven, it would be helpful for social workers to receive basic training in career assessment tools, hiring practices and the upskilling landscape so they can guide service users along their employment challenges more effectively. Alternatively, SSAs can also consider collaborating with trained career coaches that are attuned to the challenges faced by low-income adults to provide the career counselling.

Community level

Communities can also play an important role in supporting low-income workers' upskilling endeavours. Participant 1 suggested the possibility of mutual learning and support amongst community members (mothers in particular) to discuss issues related to upskilling and mutual motivation:

> *The programs that the mothers… need to have here is… Like have a group meeting… and let the mothers… share their [working] experience first… Then from there, when you share, you learn. When you learn [from each other]… you will… be amazed of how they reacted towards that… interest (that there will be strong interest in learning about each other's experiences).*

Community-based agencies could consider community organising approaches (see Russell (2018) and McKnight & Russell (2018) for examples) to co-tackling issues about upskilling in the community. This can take the form of firstly, starting off with community conversations and then establishing support groups or task groups on issues surrounding upskilling. Community members can even share or recommending upskilling resources or jobs to each other which one participant found helpful. These platforms provide opportunities for families to troubleshoot common challenges faced such as childcare contingencies and co-solution around them, thereby empowering community members to lead or co-lead social action. Through documenting conversations arising from community conversations, community-based SSAs also gain valuable wisdom from the community that can inform complementary programme design and service delivery.

Policy Level

It is observed from interviews that participants viewed upskilling as a necessity to gain access to better-paying employment opportunities. Yet, within this process also lies great uncertainty and risk on whether upskilling will eventually guarantee better-paying employment. Hence, policy makers could consider funding for companies to upskill their workers while they are employed, to develop specific skills required for that particular job. This could encourage companies to hire unskilled or less skilled workers and then providing on-the-job training, which lowers the barrier of entry to employment for the low-income adult. At the same time, the low-income adult is assured job security while upskilling.

Additionally, policy makers could also review the current funding structure for upskilling courses. The 14 participants have shared a myriad of aspirational occupations – including nurse, social worker, security officer, pharmacist, and others. The skills upgrading pathway to attaining these occupations could differ significantly, and by extension, the quantum of financial investment could also differ. Policy makers could consider a funding model that tailors to the upskilling journey of low-income adults in relation to the aspired occupation. This can include funding to attain required qualifications, and even protection measures for low-income adults who successfully upskill but still struggle to be hired even after they are equipped with the pre-requisite qualifications.

Future Research

This research adopted a qualitative approach to studying the interviews of community members limited to SCC's service boundary. Future research could also explore larger scale quantitative studies to determine whether the findings are representative of experiences of the low-income adults in Singapore. Additionally, future research can also look at the relationship between low-income adults' potential for employment and potential for upskilling.

Limitations

The following are some limitations of our study:

- Because participants were directly recommended by FSC workers, there may be some self-selection bias favouring those with upskilling experience or favouring members with substantial rapport with the worker.
- We speculate that participants generally came from relationally and emotionally stable families without major risk or safety concerns. Families with more significant safety concerns could have been under-represented in this study.

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Annex

Coding of Qualitative Data

This section documents the detailed process of how qualitative data were analysed thematically. Our initial analysis was guided by Braun and Clarke's (2006) six steps of thematic analysis, but we also developed the code books as guided by Boyatzis (1998). Dedoose qualitative analysis software was used to code the data.

Step 1: Familiarisation with the Data

The student researcher transcribed the audio-recordings verbatim and read through all transcripts. Due to time constraints, the other two researchers did not manage to read through all the transcripts apart from the assigned transcripts to be coded. Initial ideas about possible codes were also discussed based on the researchers' reflections from the interviews.

Step 2: Generating Initial Codes

Initial Cross-Coding of Three Transcripts

The student researcher, whom was the most familiar with the data, selected three transcripts which were particularly detailed. All three researchers coded the three transcripts. The coding unit used was that of an idea, which ranged from short phrases to sentences[11]. The initial codebook was developed by all three researchers. A hybrid approach (Boyatzis, 1998) was used - some codes were generated inductively, from in vivo coding of the data while others were derived deductively, informed by previous research and theories. For example, scarcity theory states that the stressors associated with poverty place a heavy cognitive burden on the individual (Bruijn & Antonides, 2022), and as such low-income adults may not have the mental bandwidth to consider upskilling. Scarcity theory thus informed the development of the code "insufficient bandwidth". In contrast, the code "lacks awareness" was derived from coding the data inductively (refer to Table 3). Any divergences in coding application were discussed to agreement and the codebook was refined. Coders who disagreed presented their reasons for selecting (or not selecting) a particular code, and if necessary, the third coder mediated the discussion.

[11] It should be noted that participants varied in their level of English proficiency, and most spoke in "Singlish", local colloquial English. The reason why our coding unit extended to several sentences was because some participants struggled to express themselves. In many instances, the interviewer had to ask clarifying questions.

Further Refinement of Code Book

After refining the codebook, we randomly selected two transcripts which were different from the three transcripts which we had used to develop the initial codebook. The intercoder reliability was done manually - each coder presented one of the transcripts code-by-code, and the other 2 coders indicated whether they had selected the same code. Discrepancies were discussed to agreement as with the first round of coding. The refined codebook contained a label for each code, a definition, and an example, as shown in Table 3.

Table 3
Original Coding Scheme (Excerpts)

Label	Insufficient Bandwidth	Lacks awareness
Definition	The participant expresses that s/he is too occupied by existing responsibilities and/or stressors and does not have the time/ bandwidth to upskill.	Unaware of what courses are available or how to access such courses.
Example	"Maybe one day I will find [out about courses]. But I really cannot figure out what is it now. Because maybe too occupied, my mind is too occupied with my children so like I can't even think for myself, like what I want."	"Honestly I.. not sure about that [upskilling] because I am also not very much, uh.. like aware? Of the courses available."

Step 3: Searching for Themes

Initial codes were developed into themes using steps 3 to 5 of Braun and Clarke's guidelines (2006). This transformed qualitative data into our research findings.

We collated and read through all data extracts for each code, discussing potential relationships between codes and identifying similarities between them. Similar codes were grouped together to form themes and sub-themes. For example, the code "Insufficient Bandwidth" (see Table 3) overlapped with "Family Responsibilities (see Table 4 below) and were combined.

Lastly, we sketched a mind map with proposed main and sub-themes (see Figure 3 for a section of the mind map). For example, after realising that "Gender Roles" and "Family Responsibilities" were similar, we linked them in the mind-map.

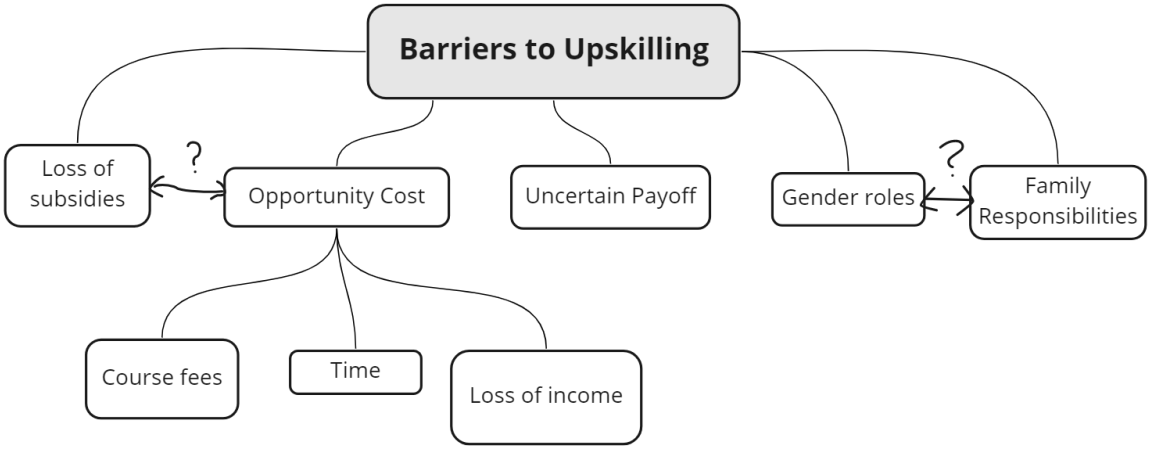
Table 4

Examples of Overlapping Codes that were Combined

Label	Gender Roles	Family Responsibilities
Definition	Participant is expected to adhere to certain responsibilities based on cultural or familial expectations, which means they are unable to pursue upskilling.	Unable to give the required time or attention to upskilling due to childcare/ caregiving/ domestic responsibilities.

Figure 3

Initial mind-map showing potential themes and sub-themes.



Step 4: Reviewing Themes

We read through the data extracts for each potential theme to determine if the extracts within each theme formed a coherent pattern (Braun & Clarke, 2006). We also considered whether each theme and sub-theme was distinct from each other. For example, the themes "gender roles" and "family responsibilities" overlapped - most participants who ascribed to traditional gender roles also had family responsibilities that made it difficult for them to upskill. We decided to combine these two themes to form the theme "family conditions". However, a notable exception was a Malay father[12] who did not subscribe to traditional gender roles – he gave up the opportunity to upskill to supervise his school-going children.

The second level of the reviewing process is supposed to involve determining the "validity of individual themes in relation to the dataset" by re-reading the whole dataset to code additional data and determine whether the themes "work in relation to the data set" (Braun & Clarke, 2006,

[12] Malay families tend to subscribe to traditional gender roles, with women expected to take on more caregiving responsibilities.

pp. 91). Due to time constraints, we did not read through the entire data set – we looked through the coded excerpts and refined the thematic map instead.

For example, referring to Figure 1, we reconsidered the theme "loss of subsidies" whereby participants would lose government subsidies if they found a higher paying job. We subsumed "loss of subsidies" as a subtheme of "opportunity cost" and later renamed it to "fear of losing government support" as "subsidies" were just one possibility of government support.

Step 5: Defining and Naming Themes

There was an overlap between this step and the previous one - we summarized each theme and titled them while reviewing the collated extracts for each theme. While reviewing the data extracts, we realised that "opportunity costs" were usually mentioned in relation to "uncertain payoffs" – participants tended to weigh the cost of upgrading against the likelihood of payoffs while deciding whether to upskill. These themes were hence combined and renamed "uncertain investment", which is the broad theme encompassing the challenges and barriers.

Step 6: Producing the Report

The previous steps in our analysis culminated in the completion of this paper, where themes and subthemes were presented alongside supporting evidence in the form of interview excerpts by participants. Apart from presenting themes, we also provided recommendations for practitioners, policy makers and researchers.