Exploring the Mediating Effect of Resilience on Working Adults' Life Satisfaction in a Malaysian Metropolitan Context

Kai-Ying Beea, You-How Gob and Chuan-Chew Fooc

Abstract: Reported low levels of life satisfaction are concurrent with the rising level of environmental and social pressures in many metropolitan regions. This study considers financial literacy, health status, financial situation, public policy, and educational attainment to explore the mediating effect of resilience on life satisfaction among working adults in Kuala Lumpur, Malaysia. A self-administered questionnaire was designed and distributed to working adults aged between 20 and 39 years. A total of 384 usable questionnaires were obtained with an 85.33% response rate. Using partial least square structural equation modelling (PLS-SEM), our results provide two notable findings. First, individuals who have better financial literacy tend to make decisions by adopting a variety of financial strategies. In turn, their financial stability can lead to better life satisfaction. Second, resilience appears to partially mediate the effects of financial literacy, financial situation, health status and educational attainment on individuals' life satisfaction. Practically, this study will help the government better equip communities for adults in the places in which they live. A more nuanced understanding of the underlying structure of the economic system should be focused on to design more enlightened policies that promote resilience.

Keywords: Life satisfaction; Resilience; Bottom-up theory; Metropolitan; Malaysia

IEL Classification: I150, I280, I310

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1. Introduction

Life satisfaction is gaining keen interest among economists, psychologists, and demographers to evaluate citizens' lives (Lee & Lee, 2019; Jovanovic & Joshanloo, 2019; Dahiya & Rangnekar, 2020). Also, it refers to how individuals can assess the quality of their lives based on their own unique set of criteria (Bhandari, 2012). In this regard, we attempt to place emphasis on the determinants of working adults' life satisfaction in the context of a Malaysian metropolitan region, namely the Federal Territory of Kuala Lumpur (Wilayah Persekutuan Kuala Lumpur, WPKL). In WPKL, most adults normally encounter a high cost of living (DOSM, 2019), high nonperforming loans (NPLs) (Affin Bank, 2018; Alliance Bank, 2019), and poor health (IKU, 2015) due to workplace stress.

In mid-May 1997, during the Asian financial crisis (AFC), Malaysia experienced an economic downturn. Resulting from this crisis, inflation increased from 2.7% in 1997 to 5.3% in 1998, while unemployment increased from 2.5% to 3.2% over the same period. After the crisis, the standard of living in the country decreased (Ariff & Abubakar, 1999). Therefore, the government developed the Malaysian Quality of Life Index (MQLI) across different regions in the country to measure quality of life trends from 1999 to 2011 (Dali et al., 2017). To provide an evaluation of economic policy effectiveness on a broader scope, MQLI was reformulated to become the Malaysian Well-Being Index in 2013. Since the development of public policies and strategies, the index indicates that Malaysians' well-being increased by 1.9% per annum (EPU, 2013).

Furthermore, the number of Malaysians who experienced mental health problems increased from 10.7% in 1996 to 29.2% in 2016 (Chua, 2020). Accordingly, cases of depression and anxiety rose from 12% in 2011 to 29.2% in 2018 (DOSM, 2019). In addition, 79% of workers in WPKL have tertiary education and can generate higher productivity, thereby contributing to a better standard of living (DOSM, 2021). However, the cost-of-living index of 92 in WPKL is two times that of other states in Malaysia (DOSM, 2019). To offset the high cost of living, some individuals suffering from financial strain and with revolving credit take out NPLs that contribute to bankruptcy (Hilmy et al., 2013). Furthermore, 84% of Malaysians typically use their savings to cover payments at the end of each month (FEN, 2019).

Numerous studies show the direct effects on life satisfaction by

considering several determinants, such as financial literacy (Hasibuan et al., 2018), health status (Yang et al., 2018; Jovanovic & Joshanloo, 2019), financial situation (Jovanovic & Joshanloo, 2019), public policy (Kasmaoui & Bourhaba, 2017; Ngoo et al., 2020) and educational attainment (Zanjani et al., 2017; Dahiya & Rangnekar, 2020). More research is needed to examine these effects. The present study takes the first step in the context of WPKL. Workplaces in WPKL are often stressful environments. Some adults are likely to face several adversities and challenges in competitive workplaces (Schulenberg et al., 2004). If they were to explore the mediating effect of resilience, they may ride out the difficulties of managing their bad situations and even find a degree of success.

Resilience and life satisfaction are closely related. Individuals with psychological resilience possess the ability to think rationally in carrying out their responsibilities. They may take specific actions to handle adversity, work-related stresses, and difficult experiences in their working environment (Leppin et al., 2014; Zeti, 2018; Ting & Foo, 2018; Zeti, 2018; Gentle, 2019). In turn, they may have a more balanced and positive life outlook for better problem-solving with their knowledge potential and motivation.

To the best of our knowledge, the existing literature places emphasis on earlier determinants of life satisfaction. Little is known about the role of resilience as a mediator in influencing working adults' life satisfaction in metropolitan regions. In addition, there is little consideration of resilience in the bottom-up theory. The present study is also relevant because developing resilience among working adults in the metropolitan region of WPKL may lead to further economic growth.

2. Literature Review

The bottom-up theory was developed by Kinchla and Wolfe (1979), who assert that individuals' perceptions start with observing simple details in the environment to gather sensory details. This is followed by individuals transferring these sensations to the interpretation of information, then making decisions to fulfil their needs. Diener (1984) further extends the theory to derive individuals' life satisfaction from a summation of pleasurable and unpleasurable moments and experiences. A combination of personal-related matters, such as financial satisfaction, health satisfaction, job, education, family and friends, social support and environment can determine

individuals' life satisfaction (Bhandari, 2012; Loewe et al., 2014; Gan et al., 2020). We further incorporate resilience as a primary target in the framework of the present study, as shown in Figure 1.

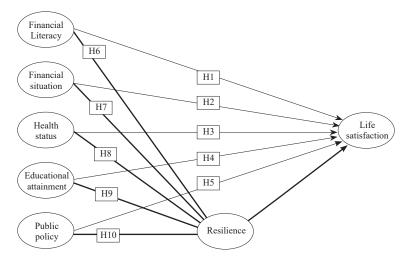


Figure 1. Conceptual Framework of Life Satisfaction in the Metropolitan Context

Following the review of relevant literature on bottom-up theory, several studies demonstrate that financial literacy significantly impacts life satisfaction. Financial literacy enables individuals to make rational financial decisions and commitments when allocating resources during times of uncertainty with proper financial planning. With financial literacy, people with disabilities can also accumulate assets for their future (Kim & Han, 2021). Their ability to manage their money can increase their level of life satisfaction (Hasibuan et al., 2018). Hence, H1 is proposed as follows:

H1: Working adults' financial literacy positively influences their life satisfaction.

Individuals with better financial situations may enjoy better living conditions, in terms of nutrition enhancement, quality of food, good health and better educational opportunities (Loewe et al., 2014). When people do not manage to shield their families from financial concerns, they are likely to live life frugally. Consequently, their life satisfaction would be

negatively affected (Daniel & Brown, 2016; Jovanovic & Joshanloo, 2019). Individuals who obtain sufficiently high incomes would not worry about their financial situation, improving their standard of living in terms of health status, education, personal and household-related factors (Kim & Han, 2021; Tavares, 2022; Muhammad & Joy, 2022). Eventually, their high standard of living would lead to greater life satisfaction. In line with this, H2 is proposed.

H2: working adults' financial situation positively influences their life satisfaction.

Poor health that results from stress can contribute to financial problems through increasing medical expenses, thereby reducing life satisfaction. For example, individuals who suffer from stress and depression tend to consume excess alcohol, decreasing their level of life satisfaction (Goel et al., 2018). Individuals who are in relatively good health are more likely to live independently and perform their daily instrumental activities well (Pan et al., 2019). Due to health-related lost productivity, individuals with chronic illnesses may have a lower level of life satisfaction due to their inability to perform specific tasks (Jovanovic & Joshanloo, 2019; Tavares, 2022). Thus, H3 is proposed as follows:

H3: Working adults' health status positively influences their life satisfaction.

Individuals with higher educational attainment may be more likely to get better job opportunities or promotions. They can apply their educational knowledge in their workplace. Furthermore, those who hold a higher educational qualification would likely show more commitment at work due to their diligence, allowing them to access better job opportunities (Pollmann-Schult, 2021), which would lead them to have better living conditions and a higher level of life satisfaction (Zanjani et al., 2017; Dahiya & Rangnekar, 2020). H4 is proposed as follows:

H4: Working adults' higher educational attainment positively influences their life satisfaction.

Aside from social and cultural factors, public policy can also affect individuals' general well-being, as it determines unemployment benefits, progressive taxation, and income equality. Public policy can also contribute to building infrastructure, establishing good education systems, and promoting healthcare services which impact citizens' welfare (Kasmaoui & Bourhaba, 2017; Ngoo et al., 2020). Due to this claim, H5 is proposed as follows:

H5: The implementation of any public policy positively influences working adults' life satisfaction.

Improving resilience can help with individuals' financial literacy (Maison, 2019) and financial decision-making skills (Rothwell et al., 2016). In turn, their financial capability tends to translate into life satisfaction in general (Jayasinghe et al., 2020). An individual's financial capability is applicable to emergency, social connection, and community support during a crisis (Tahir et al., 2022). In line with this claim, H6 is proposed as follows:

H6: Working adults' resilience mediates the effect of financial literacy on their life satisfaction.

Individuals with resilience skills can find effective ways to offset the financial stresses that threaten their mental well-being. As a result, they can maintain a low debt-to-income ratio by checking in on their financial stability from time to time (Rossi & Bisconti, 2007; Maison, 2019; Salignac et al., 2019; Tourunen et al., 2019). When financial problems are solved, their level of life satisfaction eventually goes up. To support this claim, H7 is proposed.

H7: Working adults' resilience mediates the effect of financial situation on their life satisfaction.

Resilience allows an individual to respond to changes in health status, in terms of making health-related behavioural choices (Guo, 2017; Kasiker & Peker, 2022). As a result, those in good health could have relatively low rates of depression and high work productivity, which contributes to satisfaction in their life (Yang et al., 2018; Yildrim, 2019). Thus, H8 is proposed.

H8: Working adults' resilience mediates the effect of health status on their life satisfaction.

Resilience skills can be particularly beneficial for individuals with anxiety, in terms of advancing in their studies and careers towards better life satisfaction (Kjeldstadli et al., 2006; Ainize et al., 2018). Individuals with high psychological resilience tend to pursue their higher education aspirations, thus shaping their life satisfaction. Thus, H9 is proposed as follows.

H9: Working adults' resilience mediates the effect of educational attainment on their life satisfaction.

Resilient individuals can adapt to public policies. Also, they can make sound decisions in daily life to enhance their life satisfaction. Policymakers may even consume less time implementing new policies when residents show a greater degree of resilience. Resilient individuals' perceptions of policy enforcement may also contribute towards their welfare (Mguni et al., 2011; Bennett, 2015). In line with this claim, H10 is proposed.

H10: Working adults' resilience mediates the effect of public policy on their life satisfaction.

3. Research Methodology

3.1 Population and sampling design

There are 494,600 working adults in WPKL. 58.9% of them are aged between 25 and 34 (DOSM, 2019). In this study, a convenience sampling technique is used to obtain the target respondents, those aged between 20 and 39 in WPKL. This age group is targeted for two reasons. First, socially stressed, and depressed individuals are usually aged between 20 and 39 (IKU, 2019). Second, most workers under 40 years of age are prone to encounter credit card debt and personal loans, thereby leading them to bankruptcy (Fomca, 2011; MFPC, 2018). In this regard, we decided to choose a multipurpose development area close to the city centre of Kuala Lumpur as our sampling location.

3.2 Data collection

The questionnaire was designed to be our instrument for data collection. It consists of two sections. Section A includes nine questions related to demographic characteristics. Section B consists of seven constructs, including financial literacy (FL), public policy (PP), financial situation (FS), health status (HS), educational attainment (EA), resilience (RL) and life satisfaction (LS). There are 41 items used to measure these constructs. All measures are based on a six-point Likert-type scale, ranging from 1 (strongly disagree) to 6 (strongly agree). Table 1 lists the sources of the items used to measure each construct.

Table 1. List and Source of Items for Each Construct

FL		
FL1	Parrotta & Johnson (2011)	I use credit card(s) to pay my loan(s)
FL2	Parrotta & Johnson (2011)	I apply the loan(s) to reduce my commitment(s)
FL3	Parrotta & Johnson (2011)	I allow my friend(s) to use my name to make purchase(s) of vehicle
FL4	Parrotta & Johnson (2011)	I allow my friend(s) to use my name to make purchase(s) of property
FL5	Campara et al (2017)	I buy insurance to reduce my future uncertainty
PP		
PP1	Whiteley et al (2010)	The implementation of the Employment Act would enhance my social network in my career
PP2	Whiteley et al (2010)	The implementation of the Employment Act would enhance my welfare in working
PP3	Subramaniam (2010)	The implementation of the Employment Act protects my job security
PP4	Subramaniam (2010)	The implementation of the Employment Act would provide me flexible working hours
PP5	Subramaniam (2010)	The implementation of the Employment Act would provide a better working environment
PP6	Subramaniam (2010)	The implementation of the Employment Act would enhance my productivity in my career
FS		
FS1	Parrotta (1999)	I feel comfortable with my current salary
FS2	Parrotta (1999)	I am able to encounter my financial problem(s)
FS3	Campara et al (2017)	I have my retirement plan(s)
FS4	Campara et al (2017)	I have regular saving(s)

FS5	Campara et al (2017)	I am able to allocate my expenditure for my family matter(s)
FS6	Campara et al (2017)	I am able to allocate my expenses for emergency purpose(s)
HS		
HS1	Traina et al (2018)	I have normal body weight
HS2	Traina et al (2018)	I have a normal blood sugar level
HS3	Traina et al (2018)	I have normal blood pressure
HS4	Traina et al (2018)	I involve physical activities after working hours
HS5	Traina et al (2018)	I involve physical activities during the weekend
EA		
EA1	Pirls (2006)	The knowledge I learn from school can be applied in real life situations
EA2	Pirls (2006)	A person with a high education level will grow his/her social networks
EA3	Pirls (2006)	A person with a high education level tends to meet his/her expected salary
EA4	Pirls (2006)	A person with a high education level would have a chance in getting a job
EA5	Pirls (2006)	A person with a high education level would have a chance in getting a job promotion
RL		
RL1	Anne (2017)	I have confidence to carry out assigned task(s) by my superior(s)
RL2	Anne (2017)	I always ready to overcome daily challenge(s)
RL3	Anne (2017)	I always show my optimism to others
RL4	Anne (2017)	I consider the challenge(s) as opportunities to improve my problem-solving skills
RL5	Anne (2017)	I am able to handle my stress in working
LS		
LS1	Folkman (1997)	I take a longer time than usual to perform a task
LS2	Hafekost et al (2017)	I have high expectation in handling my daily task(s)
LS3	Aditya (2019)	I always have conflicts with my family member(s)
LS4	Aditya (2019)	I have a good relationship with my superior(s)
LS5	Aditya (2019)	I have a good relationship with my colleague(s)
LS6	Folkman (1997)	I feel uncomfortable when I am alone
LS7	Folkman (1997)	I have lost interest in my daily life
LS8	Folkman (1997)	I have negative emotions in my daily life
LS9	Folkman (1997)	I have sleepless night(s) when I encounter daily life challenge(s)

The data collection through face-to-face interviews was conducted from January 2018 to April 2018 with our target respondents in the city centre of Kuala Lumpur. The self-administered survey was conducted physically during weekdays from 8.30am to 7.30pm. Questionnaires were only administered after target respondents expressed their willingness to participate in the survey. Of the 450 copies of the questionnaires distributed, 384 (85.33%) were returned and deemed useable. Our survey yielded this high percentage of responses as a necessary condition for validity (Krejie & Morgan, 1970). The remaining 66 copies were removed due to the respondents ignoring some statements or providing unusable feedback.

3.2 Demographic description

This sub-section provides a demographic description of 384 working adults in WPKL. As shown in Table 2, approximately 59.89% of them are female and the remaining are males. As many as 42.45% of respondents are aged between 20 years to 24 years, with only 11.19% aged between 35 years to 39 years. Most residents in WPKL are of Chinese and Malay ethnic origin. To represent the population in the city, the survey involved 46.1% Chinese respondents and 34.9% Malay respondents. According to the Malaysian Employers Federation (MEF), Malaysian graduates' starting monthly salary averages between RM2,399 and RM3,199 (Bernama, 2019). Accordingly, 58.07% of respondents with Bachelor's degrees have a monthly income of between RM2,001 and RM4,000. Due to high costs of living in WPKL, 47.92% of respondents have monthly savings below RM500. In addition, 33.85% of respondents who have incomes between RM2,000 and RM4,000 can cover their monthly expenses of between RM1,201 and RM1,800.

Table 2: Respondents' Demographic Characteristics

		Frequency	%
Gender	Male	154	40.11
	Female	230	59.89
Marital status	Single	302	78.65
	Married	78	20.31
	Divorced	4	1.04
Age group	20-24 years old	163	42.45
	25-29 years old	111	28.91
	30-34 years old	67	17.45
	35-39 years old	43	11.19
Ethnic group	Malay	134	34.90
	Chinese	177	46.09
	Indian	73	19.01
	Other	0	0
Level of education	Primary	1	0.26
	Secondary school	30	7.81
	Certificate / diploma	48	12.5
	Bachelor's degree	223	58.07
	Master's degree	67	17.45
	Doctoral degree / Other qualifications	15	3.91
Monthly income	< RM2000	112	29.17
	RM2,001-RM4,000	151	39.32
	RM4,001-RM6,000	64	16.67
	RM6,001-RM8,000	34	8.85
	More than RM8,001	23	5.99
Monthly expenses	< RM600	40	10.42
	RM601- RM1,200	98	25.52
	RM1,201- RM1,800	130	33.85
	RM1,801- RM2,400	62	16.15
	RM2,401 and above	54	14.06
Monthly savings	< RM500	184	47.92
	RM501- RM1,000	104	27.08
	RM1,001- RM1,500	44	11.46
	RM1,501- RM2,000	19	4.95
	RM2,001- RM2,500	18	4.69
	RM2,501 and above	15	3.90

3.3 Measures and procedures for analysis of working adults' life satisfaction

Our study intends to establish a conceptual framework for analysing life satisfaction among working adults in WPKL. The partial least square structural equation modelling (PLS-SEM) was used because it allows for many items or constructs, even with a small sample size (Knock & Hadaya, 2018). We performed the analysis based on several evaluation criteria to access our measurement model. Convergent validity shows the degree to which more items of the same construct should be theoretically related. To fulfil the requirement, factor loading values had to exceed 0.5 to achieve the minimum average variance extracted (AVE) of 0.5 (Hair et al., 2017). Moreover, discriminant validity is based on three criteria. First, loading values for all items under each construct should be greater than those values for items in other constructs. Second, the Fornell-Larcker criterion requires that the square root of AVE for each construct should be greater than the correlations with other latent constructs (Fornell & Larcker, 1981; Hair et al., 2017). Third, the heterotrait-monotrait (HTMT) ratio of correlations must be lower than 0.85 or 0.90 to indicate non-perfect measures among constructs (Henseler et al., 2015).

To meet the requirement that respondents rationally provide their responses for each statement, outer loadings should be at least 0.25 to 0.5. In our study, we used composite reliability as one of measures for internal consistency of reliability in scale items. The composite reliability for each construct must be at least 0.7 to demonstrate an adequate convergence or internal consistency (Hair et al., 2017). An adequate level of convergent validity of constructs is achieved if the value of composite reliability is greater than 0.6 (Fornell & Larcker, 1981; Hair et al., 2017).

 Q^2 is used as an indicator of model adequacy in terms of predictive relevance. The greater value than zero for Q^2 indicates the model has an adequate predictive relevance, where it implies that predictive validity of the model is less than zero (Hair et al., 2017). By using an adequate structural model, we further look at the path coefficients and corresponding p-values for hypothesis testing. To further examine the effects, we calculate f^2 to measure effect sizes. The values at least 0.02, 0.15 and 0.35 represent small, medium, and large effect sizes, respectively (Cohen, 1988).

4. Results and Discussion

4.1 Assessing the measurement model

In assessing the measurement model, we examine the validity and reliability of items for each construct. The results of convergent validity and composite reliability tests are shown in Table 3.

Table 3: Results of Convergent Validity and Composite Reliability Tests

FL	FL1 FL2 FL3 FL4 FL5 FL6	0.382* 0.514 0.838 0.829 0.515	0.778	0.480
	FL3 FL4 FL5	0.838 0.829 0.515		
	FL4 FL5	0.829 0.515		
	FL5	0.515		
	FL6	0.105*		
		-0.125*		
PP	PP1	0.777	0.948	0.752
	PP2	0.875		
	PP3	0.890		
	PP4	0.847		
	PP5	0.911		
	PP6	0.895		
FS	FS1	0.640	0.887	0.569
	FS2	0.718		
	FS3	0.732		
	FS4	0.786		
	FS5	0.816		
	FS6	0.818		
EA	EA1	0.602	0.878	0.593
	EA2	0.790		
	EA3	0.824		
	EA4	0.827		
	EA5	0.785		
HS	HS1	0.695	0.855	0.541
	HS2	0.799		
	HS3	0.772		
	HS4	0.747		
	HS5	0.657		

Construct	Item	Factor loading	Reliability	AVE
RL	RL1	0.815	0.908	0.665
	RL2	0.885		
	RL3	0.792		
	RL4	0.829		
	RL5	0.752		
LS	LS1	-0.569*	0.756	0.441
	LS2	0.326*		
	LS3	-0.109*		
	LS4	0.114*		
	LS5	0.726		
	LS6	0.709		
	LS7	0.696		
	LS8	0.501		
	LS9	0.156*		

Note: * denotes items that would be excluded from the model due to low factor loading values.

The factor loadings for 27 items are found to fulfil the requirement of loading values exceeding 0.7. The loading values for eight items ranged between 0.5 and 0.6999. For example, EA1, FS1, FL1, FL6, HS1, HS5, LS7 and LS8. However, seven items are excluded from the model due to low factor loading values. For example, two items from financial literacy (FL1 and FL6) and five items from life satisfaction (LS1, LS2, LS3, LS4 and LS9). Hence, AVE of the constructs is found to range between 0.4 and 0.7999, whereas the composite reliability for each construct is found to exceed 0.7. After complying with these minimum requirements, all constructs are considered to have achieved the adequate level of convergent validity and composite reliability.

Then, we assess discriminant validity through cross-loading, Fornell-Larcker criterion and HTMT ratio of correlation. The results of these criteria are summarised in Tables 4, 5 and 6.

Table 4: Results of Cross-Loading

	EA	FL	FS	HS	LS	PP	RL
EA1	0.602	-0.146	0.240	0.196	0.169	0.202	0.243
EA2	0.790	-0.034	0.269	0.242	0.194	0.224	0.281
EA3	0.824	-0.072	0.277	0.148	0.149	0.247	0.289
EA4	0.827	0.062	0.238	0.162	0.194	0.181	0.322
EA5	0.785	0.109	0.178	0.174	0.200	0.154	0.299
FL2	-0.076	0.514	0.004	-0.007	0.108	-0.091	0.027
FL3	-0.032	0.838	-0.070	-0.056	0.200	-0.137	0.109
FL4	-0.025	0.829	-0.049	-0.040	0.207	-0.133	0.147
FL5	0.048	0.515	0.271	0.098	0.169	0.251	0.246
FS1	0.247	-0.098	0.640	0.123	0.160	0.218	0.179
FS2	0.209	0.088	0.718	0.278	0.190	0.150	0.312
FS3	0.193	0.073	0.732	0.140	0.151	0.318	0.252
FS4	0.222	0.116	0.786	0.182	0.259	0.235	0.228
FS5	0.255	0.111	0.816	0.134	0.247	0.293	0.286
FS6	0.285	0.042	0.818	0.249	0.213	0.287	0.230
HS1	0.215	0.005	0.171	0.695	0.151	0.058	0.232
HS2	0.167	0.126	0.172	0.799	0.252	0.135	0.339
HS3	0.164	0.099	0.155	0.772	0.230	0.137	0.266
HS4	0.177	-0.117	0.203	0.747	0.235	0.113	0.288
HS5	0.167	-0.105	0.215	0.657	0.213	0.136	0.254
LS5	0.328	0.212	0.282	0.274	0.726	0.120	0.465
LS6	0.081	0.155	0.139	0.222	0.709	0.094	0.223
LS7	0.029	0.174	0.108	0.121	0.696	0.066	0.243
LS8	-0.005	0.129	0.104	0.094	0.501	-0.067	0.130
PP1	0.150	0.023	0.307	0.156	0.038	0.777	0.105
PP2	0.237	0.083	0.324	0.149	0.113	0.875	0.237
PP3	0.144	0.099	0.249	0.127	0.107	0.890	0.172
PP4	0.270	-0.078	0.251	0.151	0.089	0.847	0.173
PP5	0.253	-0.066	0.302	0.101	0.104	0.911	0.195
PP6	0.264	-0.074	0.286	0.165	0.102	0.895	0.192
RL1	0.277	0.209	0.277	0.307	0.344	0.096	0.815
RL2	0.359	0.168	0.320	0.340	0.357	0.185	0.885
RL3	0.356	0.148	0.267	0.305	0.421	0.250	0.792
RL4	0.285	0.253	0.262	0.292	0.388	0.189	0.829
RL5	0.238	0.149	0.231	0.302	0.370	0.145	0.752

Note: FL1, FL6, LS1, LS2, LS3, LS4 and LS9 are removed due to low factor loading values.

	EA	FL	FS	HS	LS	PP	RL
EA	0.770						
FL	-0.012	0.693					
FS	0.310	0.085	0.754				
HS	0.238	0.009	0.248	0.736			
LS	0.236	0.262	0.274	0.299	0.664		
PP	0.259	-0.001	0.329	0.161	0.112	0.867	
RL	0.375	0.227	0.334	0.379	0.462	0.215	0.816

Table 5: Results of Fornell-Lacker Criterion

Table 6: Results of HTMT Ratio of Correlations

	EA	FL	FS	HS	LS	PP
EA						
FL	0.163					
FS	0.378	0.239				
HS	0.303	0.181	0.302			
LS	0.241	0.388	0.311	0.358		
PP	0.293	0.294	0.375	0.187	0.163	
RL	0.438	0.261	0.381	0453	0.516	0.225

To determine the strong representation of the latent variable from the discriminant validity, the diagonal values of loading for each item in Table 4 are greater than those loading for other items from respective constructs. In Table 5, the results of the Fornell-Larcker criterion show that the diagonal values of each construct are greater than the off-diagonal inter-construct correlation values, suggesting an adequate level of convergent validity. Lastly, we obtain the values of HTMT ratio to under investigation. The results presented in Table 6 show the highest ratio of 0.358 is below than 0.85, illustrating that the true correlation between two constructs is reliable with no error. The low ratios indicate that constructs are not perfectly measured. Overall, many items explain the substantial variance for the respective constructs.

4.2 Assessing the structural model

After establishing the measures of constructs of the specified model, the next stage was to assess the adequacy of our structural model. Then, we

proceeded to estimate path coefficients for detecting direct effects by testing H1-H5. The results in terms of model adequacy and hypothesis testing are summarised in Table 7.

Path-related hypothesis	Path coefficients	P-value	VIF	f^2	Supported
H_1 : FL \rightarrow LS	0.181	0.001	1.076	0.042	Yes
H ₂ : FS → LS	0.110	0.047	1.272	0.013	Yes
H₃: HS → LS	0.141	0.018	1.209	0.023	Yes
H_4 : EA \rightarrow LS	0.061	0.418	1.265	0.004	No
H_5 : PP \rightarrow LS	-0.030	0.586	1.166	0.001	No
$R^2 =$	0.276				
$Q^2 =$	0.172				

Table 7: Results of Hypothesis Testing for Direct Effects

As shown in Table 7, all constructs exhibit a low degree of multicollinearity, as the variance inflation factor (VIF) values recorded were less than 5. R^2 is insufficient to be used in assessing the adequacy of model specification (Hair et al., 2017). Therefore, the Q^2 value of 0.172 indicates that our model is established for predictive relevance.

The path coefficient of 0.181 indicates that financial literacy positively influences life satisfaction at the 1% level. This finding supports H1 and implies that the basic need of financial literacy is the most beneficial for working adults to encounter financial adversities. Urban living is often characterised by long working hours and low wages with high costs of living. Due to this, they need to enhance their financial management ability to uplift their life satisfaction.

Furthermore, the path coefficient of 0.110 supports H2 at the 5% level, demonstrating that a sufficiently high level of income could cause individuals to no longer to worry about their financial situation and consequently satisfy their life needs. This finding is in accordance with Jovanovic and Joshanloo (2019). Next, the path coefficient of 0.141 supports H3 at the 5% level. This implies that the effect of good health on better life satisfaction could be expected due to role of competence in contributing to their productivity at work. Higher productivity can lead to increased wages and economic growth (Pan et al., 2019; Jovanovic & Joshanloo, 2019).

However, educational attainment and public policy are found to be insignificant. Regardless of the levels of education they attain, they are predicted to prefer simple living conditions. This finding indicates that individuals' responses reflected low expectations regarding their living conditions for reducing their depression in a highly competitive metropolitan region (Hornesy et al., 2018; Pan et al., 2019). Regardless of policy changes and uncertainties in this region, individuals' daily lifestyles remained the same (Lee & Lee, 2019; Ngoo et al., 2020). Therefore, H4 and H5 are not supported.

Examining these direct effects in detail, f^2 is used as a criterion to capture effect sizes. All constructs are found to provide a small effect size with f^2 values of at least 0.02. Among these, financial literacy is found to exhibit a stronger effect with an f^2 of 0.042 than the effects of other constructs. Considering the high-pressure living in the metropolitan region, financial literacy is found to be the main focus of working adults' life satisfaction.

With an emphasis on resilience as a mediator, we then tested hypotheses H6 to H10. The results are summarised in Table 8.

Path f^2 Path-related hypothesis P-value VIF VAF Supported coefficient 0.068 0.001 27% 0.066 H₆: FL → RL → LS 1.010 Yes (Partial mediation) FS → RL → LS 1.239 H₇: 0.048 0.026 30% 0.027 Yes (Partial mediation) H_o: HS → RL → LS 0.085 0.000 1.103 38% 0.096 Yes (Partial mediation) 56% H_o: EA → RL → LS 0.079 0.010 1.174 0.077 Yes (Partial mediation) 0.004 PP → RL → LS 0.018 0.263 1.161 Suppressor No effect $R^2 = 0.308$ $Q^2 = 0.269$

Table 8: Results of Hypothesis Testing for Mediating Effects

Note: VAF denotes 'variance accounted for', where VAF = indirect effect / total effect.

As shown in Table 8, the Q² value of 0.269 supports established predictive relevance. For the path coefficient of 0.068, it supports H6 at the 5% level, and shows that resilience could mediate the effect of financial literacy on life satisfaction. Resilient workers who can apply their knowledge can make sound financial decisions to improve their living conditions in the present and future. In testing H7, the path coefficient of 0.048 supports the hypothesis at the 5% level. This result suggests that improvement of financial situation with less financial burden could make working adults experience better healthcare and nutrition, quality of food, higher educational opportunities, increase in savings and better shelter that raise their life satisfaction (Lee & Lee, 2019; Maison, 2019; Jayasinghe et al., 2020).

In fact, the higher economic demand for treatment and rehabilitation in the capital city could cause individuals to experience profound changes to their lifestyle. Therefore, high expenditure could play a part in both daily financial and working stresses. For survival, individuals need to cultivate their resilience skills and develop good health-related behaviours to cope with stress and improve their life satisfaction. Therefore, the path coefficient of 0.085 reaffirms this belief by supporting H8 at the 5% level. Additionally, the path coefficient of 0.079 supports H9 at the 5% level, which confirms resilient adults who are highly educated tend to regulate their emotions, dampen threat processing, and habituate stress responses in their working environments. Hence, their performance and productivity would be consciously improved (Ainize et al., 2018).

Lastly, the path coefficient of 0.018 shows that resilience does not play a role in mediating the direct stimulatory effect of public policy on life satisfaction, thereby rejecting H10. This rejection is consistent with Capano and Woo (2017). However, the finding is somewhat surprising, and may reflect their disappointment with public policy in the country, in terms of its promise to deliver an improved standard of living.

With consideration of the mediating effects, the effect sizes are still small because resilience only partially mediates the effects of financial literacy, financial situation, health status and educational attainment on working adults' life satisfaction. These partial mediations signify that working adults perceive a lack of ability to cope mentally or emotionally with challenges in their life. Specifically, resilience could mediate 56% of the effect of educational attainment on life satisfaction. Thus, adults should be approached differently in terms of educational techniques for lifelong

learning to cope with challenges, so that learning can become an integral part of their lives.

5. Concluding Remarks

Our empirical results provide two notable findings. First, higher levels of financial literacy could play a dominant role in directly leading to a greater degree of life satisfaction. Second, resilience is found to show partial mediation effects. The finding implies that working adults perceive that they lack the ability to cope mentally or emotionally with challenges in their life.

Efforts must be made to improve individuals' life satisfaction, especially for those who reside in metropolitan regions. Based on the first finding, it is recommended that the government can encourage saving habits and improve financial literacy among students. For example, imparting financial education via 'children's banks', such as is done in Japan. In addition, the Malaysian Financial Planning Council (MFPC) could offer programmes to further improve financial knowledge, attitude, and management among working adults. Based on the second finding, resilience appears to partially mediate the effects of individuals' financial literacy, financial situation, health status and educational attainment on their life satisfaction. To increase adults' resilience, the government should better equip communities for adults in the places in which they live. As they frequently engage with environmental and social pressures in a metropolitan region, a more nuanced understanding of the underlying structure of economic systems should be focused on to design more enlightened policies that promote resilience.

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