# OLDER ADULTS' EXPECTATION FOR EDUCATION OR ASSISTANCE THAT FACILITATE THEIR

**TECHNOLOGY ADOPTION** 

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#### Technology usage among the elderly

18.2% \*78.2%

No digital device \*Use smartphones

36.3%

No Internet service used

#### **Methods Research Design**

- Mixed Research
- Sample Quotas (n=30)
- Young-old (age 65 74)
- Qualitative Subgroup: 12 participants from the 30 selected for in-depth interviews

### 02 Hypothesis

After controlling for education and disability, elderly expecting more education or assistance (IV) adopt significantly more tech products(DV).

### **Definition**

#### **Education or assistance:**

Guidance, or support services aimed at helping individuals effectively adopt and use technology.

#### **Technology products:**

Devices such as smartphones or computers that support daily tasks and digital interaction.

#### **Control reasons**

Activities of daily

living (ADL) refer

basic self-care tasks

independent living,

such as bathing,

dressing, eating,

and mobility.

to self-assessed

necessary for

Educational level may reflect information processing ability and acceptance of new knowledge.

Physical conditions may affect the need for and acceptance of technological assistance.

## 03 Data preparation

#### a. Reliability analysis of the ten questions of ADL

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.891	.918	10

The Cronbach's  $\alpha$  value was 0.891 ( $\geq$ 0.7). This indicated good internal consistency.

#### b. Facet sum Compute Variable

#### 1.Total score of educational assistance expectations

Q: Which of the following aspects of education or assistance do you think will be most helpful for you to learn new technologies?)

#### 2. Number of technology products used

(Q: Do you use any form of assistive technology to help you with daily activities?)

3. Total score for difficulties in activities of daily living (Q:ADL)

#### c. Recode into Different Variables

Is it disabled?

100 points = no disability

>1 Yes 2 No

99 or below = disabled

## 04 Regression Analysis

#### Model Summary

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	
1	.639ª	.408	.340	1.01592	

 a. Predictors: (Constant), Education, Total expectation education/assistance, Disability

#### **Model Summry**

 $R = 0.639, **R^2 = 0.408$ 

→ 40.8% of the variance in the number of technology products used, indicating a moderate-to-strong linear relationship between predictors and outcome.



「我覺得粵語教學影片也不錯,聽得懂,可以 隨時溫習。」

→ With **proper support**, the willingness to adopt technology will increase significantly.

(Mr. HO | 72 years old | Post-secondary education)



「熱線援助是我的救星,讓我可以立即得到幫 助。」

→ The availability of technical support increases willingness and motivation to use.

(Mrs. CHAN | 65 years old | Primary school)

#### Support varies by background

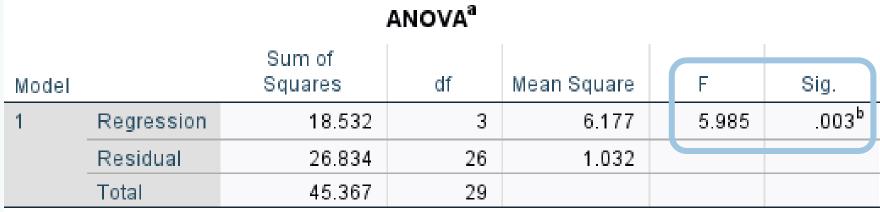
Higher education → self-learning

Primary education → phone support / direct guidance

### **OLDER ADULTS' EXPECTATION FOR EDUCATION** OR ASSISTANCE THAT FACILITATE THEIR **TECHNOLOGY ADOPTION**

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## **Regression Analysis**



- a. Dependent Variable: Total technology products adopted
- b. Predictors: (Constant), Education, Total expectation education/assistance, Disability

Many of the elderly interviewed clearly stated that

- whether someone teaches
- how they are taught
- the way they are taught will determine whether they are willing to use technology
- > Prove that the education or assistance method is the most influential factor





#### **ANOVA**

F = 5.985, \*\*p = 0.003 (p<0.05)

→ Statistically significant, suggesting that at least one predictor meaningfully explains variation in technology adoption.



「中英夾雜的課程,讓我更加迷惘,而且更 加沒信心使用科技。」

→ Language unfamiliarity in teaching reduces clarity and undermines learning confidence.

(Mrs. WU | 65 years old | Primary school)

			Coef	ficients <sup>a</sup>				
Model		Unstandardized B	coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confider Lower Bound	nce Interval for B Upper Bound
1	(Constant)	.285	.873		.327	.747	-1.509	2.079
	Total expectation education/assistance	.567	.201	.428	2.827	.009	.155	.979
	Disability	486	.501	147	970	.341	-1.515	.544
	Education	.625	.223	.425	2.802	.009	.167	1.084

a. Dependent Variable: Total technology products adopted

#### **Coefficients**

#### **Education/Assistance Expectation:**

B = 0.567, \*\*p = 0.009  $\rightarrow$  Significant positive predictor

Expectation of education or assistance: 1 point 1

Technological products they use: 0.567 species

#### **Education Level:**

B = 0.625,  $p = 0.009 \rightarrow Significant positive predictor$ 

• Elderly people with higher education levels also use more types of technology products

#### **Disability Status:**

B = -0.486,  $p = 0.341 \rightarrow \text{not significant}$ 

Not statistically significant



「雖然我的腿走不到太遠,如果能夠在家學

習,我亦會嘗試。」

→ Home-based learning reduces mobility barriers and supports tech use.

(Mr. NG | 69 years old | Primary school)



### Conclusion

The more support, the higher the technology usage  $\rightarrow$  Hypothesis is established



• Funding for on-site science and technology education

Government

- Released Cantonese teaching videos
- Launch of Elderly Technology Hotline



- Designing course content for the elderly
- Recruiting elderly volunteers to accompany students in their studies



#### **Tech Companies**

- Develop elderly-friendly interface and voice navigation products
- Provide technology product trials and equipment rental plans

#### References