澳門未成年人網絡素養專題報告
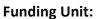## Special Report on the Digital Literacy of Minors in Macao (2024)

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Special Report on the Digital Literacy of Minors in Macao
Executive Summary

In today's era of smart internet, digital literacy and AI literacy have become hot topics of discussion in society. The focus of current social attention is how to ensure that minors' digital literacy and AI literacy keep pace with the development of artificial intelligence technology, allowing them to grow healthily while mastering technological tools. Therefore, Macao Association for Internet Research(MAIR) successfully conducted a random sampling telephone survey from July to August 2024, interviewing 1,000 eligible residents aged 6 to 84 in Macao. The aim was to understand the state of digital literacy and AI literacy among minors in Macao. All survey results in this report are weighted by gender and age according to the officially released demographic data. The main results of this study are as follows.

- The internet adoption rate among minors aged 6-11 remains above 80%, while all minors aged 12-17 are online, primarily for leisure and entertainment purposes

- Based on previous survey research, the report categorizes internet literacy into four dimensions: internet skills, internet safety, internet ethics, and self-management, and calculates an overall score for internet literacy

- The overall score for internet literacy among internet users in 2024 is 3.5 (on a scale of 1 to 5), which is the same as in 2022 and 2023, showing a stable trend.

- The scores of internet users of different age groups in the four dimensions of internet literacy are as follows:

Internet Literacy (2024)	Overall score	Internet skills	Internet safety	Internet ethics	Self-management
Internet users	3.5	3.8	3.6	3.8	3.1
6-11	3.5	3.6	3.6	3.8	3.3
12-17	3.6	4.0	3.5	3.9	3.1
18-84	3.5	3.8	3.6	3.8	3.1

- Minors with longer internet usage periods and daily online time tend to score higher in "internet skills," but lower in "self-management"

- Among minors aged 12-17, the score for "internet skills" is relatively high (4.0), while the score for "self-management" is relatively low (3.1)

- Minors aged 6-11 show a higher willingness to report/complain about inappropriate information, but they are also more likely to use hostile language to attack others

- The "self-management" score for users aged 6-11 shows a declining trend each year (2022: 3.7, 2023: 3.4, 2024: 3.3)

- The usage rate of "generative AI" among minors is slightly higher (28%) than that of adults (27%)

- The report categorizes AI literacy into three dimensions: foundational knowledge, application skills, and risk. The overall score for AI literacy among internet users is 3.3, the scores of internet users from different age groups in the three dimensions of AI literacy are as follows:

Internet Literacy (2024)	Overall score	Foundational knowledge	Application skills	Risk awareness
Internet users	3.3	3.3	3.5	3.1
6-17	3.6	3.5	3.8	3.5
18-84	3.2	3.2	3.4	3.1

- Minors score higher than adults in all aspects of AI literacy

Research Recommendations

- Society should help minors expand the breadth and depth of their internet applications and strengthen internet ethics education to assist them in being responsible online

- Parents and guardians need to lead by example, demonstrating reasonable internet use in front of their children, and collaboratively establish internet usage rules to enhance minors' self-management awareness

- The education sector should continue to strengthen internet and AI literacy education for minors, creating a collaborative educational ecosystem where AI and human intelligence (HI) work together