
From Memories to Healthspan: Rethinking Healthy Ageing
Through Reminiscence and Innovation

Reminiscence Activities and the Adoption of Gerontechnology in **Hong Kong**



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Session 2: Innovation & Co-Creation Opportunities for Reminiscence & Ageing

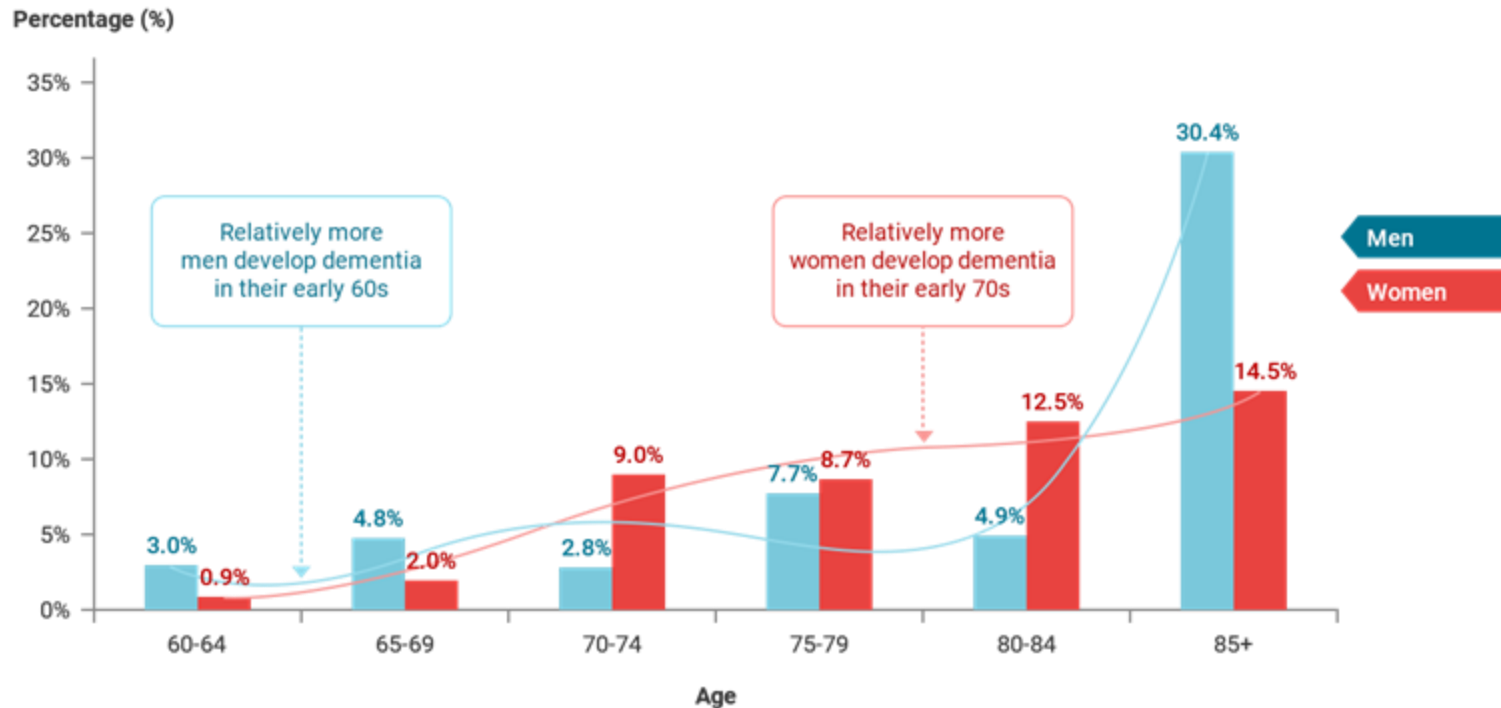
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Dementia Society in Hong Kong

PREVALENCE OF DEMENTIA IN HONG KONG



Prevalence is higher among females aged 70 or above.

- 1 in every 10 local seniors aged 70+ are living with dementia.
- 1 in every 3 local seniors aged 85+ are living with dementia.

- As population ages, the prevalence of dementia will sharply increase. The number of local people affected is estimated to rise to 390 thousands by 2045.
- Each family may have a person living with dementia.

Sources :

- Hong Kong Alzheimer's Disease Association, 2025

- Department of Health

- Hong Kong Population Projections 2022-2046, Census and Statistics Department



Dementia Society in Hong Kong



- Policy Address in 2017 announced a series of initiatives to enhance the provision of dementia community care and support services.
- The Social Welfare Department (SWD) from September 2018 has launched a 3-year "Dementia Friendly Community Campaign" with the aim of promoting public awareness on dementia in Hong Kong.

- Enhance public understanding on dementia

- Encourage care and support for persons with dementia and their family

- Build a dementia friendly community



Dementia Society in Hong Kong

- There are many treatments that can defer disease progression.
- Proper treatment and care may enable someone with dementia to live well with the condition.



- Care and support should be “person-centred”, with the needs and preferences of the person being the primary concerns.



- Companion, care, support and understanding from family members, friends and neighbours are crucial as well.

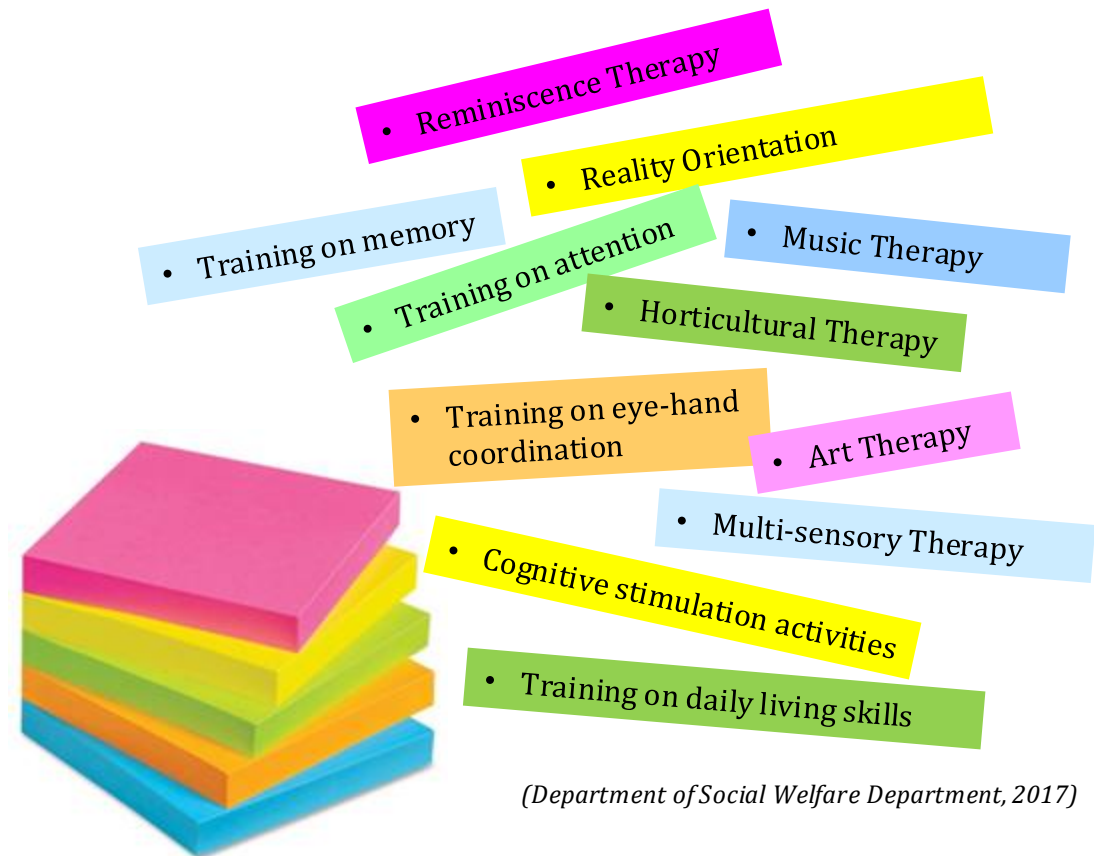
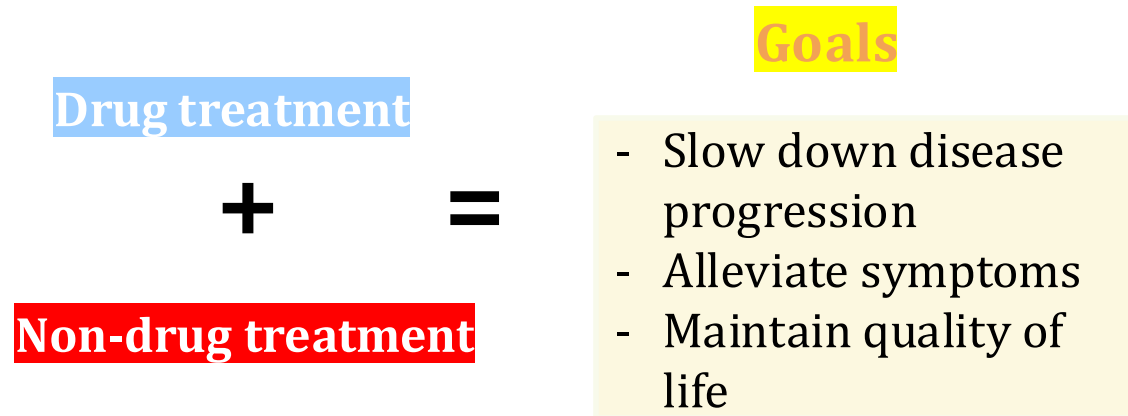


Appropriate treatment and support

Non-drug treatments

- A combined approach of the two can achieve better results.

- Non-drug treatments help defer cognitive decline and maintain the physical, mental and social wellbeing of a person living with dementia.
- Suitable activities and training include:



(Department of Social Welfare Department, 2017)



Reminiscence Therapy

People living with dementia are guided to recollect and share their stories, and encouraged to develop positive attitudes towards their past experience, in order to help maintain their long-term memory, stimulate their cognitive functions and improve their mood.

Examples:

- Retain some items they frequently used and cherished in the past
- Select decorations and furniture similar to the ones they used before
- Accompany or assist them in organising photo albums in accordance with the time sequence, and revisit the past with them
- Choose some familiar places for family gatherings, such as dining in traditional Chinese restaurants or shopping at vintage furniture stores





Reality Orientation

People living with dementia are trained to master the concept of time, people, place and environment, in order to alleviate their anxiety and consolidate their existing community living abilities.

For example:

- Establish a regular daily routine
- Refer more to information relevant or important to them in daily conversation, such as mentioning today's weather every morning
- Put relevant items, food and decorations at home before festive occasions
- Place a recent family photo at home





Multisensory Therapy

Exposing people living with dementia to different stimuli in daily life will help improve their mood and alleviate their hyperactive behaviour. It can also sustain their abilities to receive, analyse and respond to stimulation so as to stay connected with the environment.

For example:

- Take them to a walk in the park, where the sounds of different animals, insects or kids playing can be heard.
- They may also touch and smell various plants



感官刺激活動





Cognitive stimulation activities

Activities that match with their abilities and interests are arranged in order to train their memory, attention, spatial recognition and calculation, which can slow down the decline in cognitive functions.

For example:

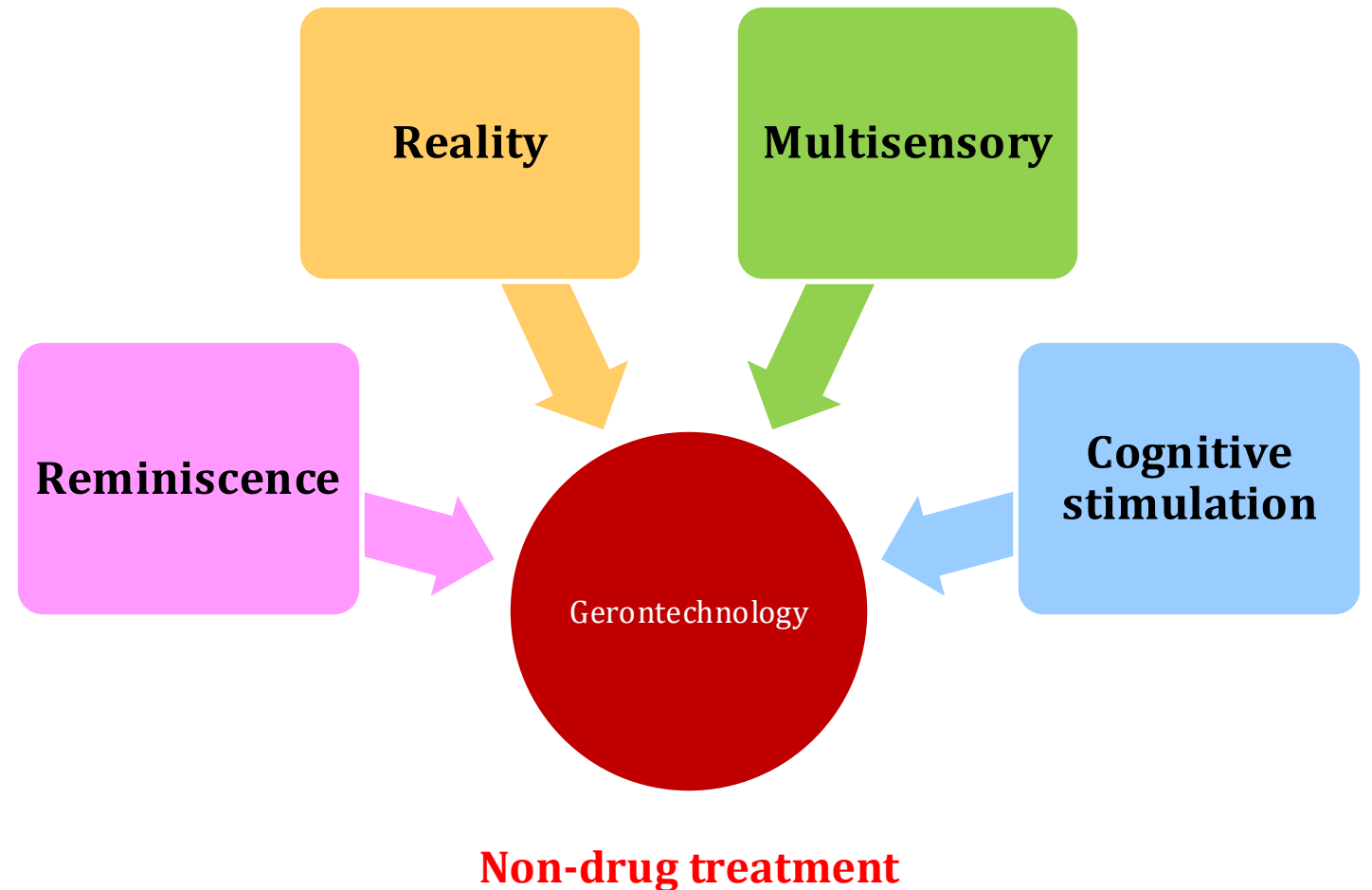
- Ask them to purchase goods within a designated amount, or to assist in calculating the total price of the purchased goods when shopping in supermarkets.
- Invite them to handle simple household chores, such as hanging the laundry (sorting clothes/pairing socks).





Gerontechnology

- Gerontechnology is an interdisciplinary field of scientific research and product development in which innovations in technology are directed towards caring for elderly persons.
- Aims at helping the elderly to live in the community and institutions comfortably, healthily and independently while remaining closely connected to the community and their families.





Innovation and Technology Fund for Application in Elderly and Rehabilitation Care (I & T Fund)

樂齡及康復創科應用基金



The Government has earmarked \$1 billion for setting up the I&T Fund in December 2018. An additional \$1 billion has also been injected in 2024-2025.

- To subsidise eligible elderly and rehabilitation service units to **procure, rent and trial use** technology products, so as to **↑ the quality of life** of service users as well as **↓ the burden and pressure** of care staff and carers
- In 2023, the scope of the I & T Fund has been expended to cover gerontech products **suitable for household use**. Eligible service units can procure suitable technology products for lending to elderly persons, persons with disabilities and their carers for use at home

- Until 2023, the I & T Fund has approved \$520 million of grants, subsidising about 1,600 elderly and rehabilitation service units to procure or rent over 13,000 technology products.

- The types of products that more service units applied for include **medical care ultra-low beds, equipment and assessment tools for occupational therapy/physiotherapy/speech therapy, tilt-in-space/height adjustable shower chair, companion robot, smart anti-wandering system.**



I & T Fund details



Reference List of Recognised
Technology Application Products



Geron Multifunctional Smart Training System

- NeuroGym is an innovative cognitive training tool for seniors, offering games like Mahjong and Calligraphy therapy to facilitate independent mental exercise and prevent cognitive decline.
- It's user-friendly and engaging, allowing seniors to use it independently, thereby reducing caregiver stress.
- Institutions can access usage data to design more effective rehabilitation plans.





1. 書法治療



Geron Multifunctional Smart Training System

GERON INGENIOUS :



- Utilizes virtual reality (VR), high-definition ground projection detection, and motion-sensing controls.
- Includes multi-sensory and motion-based training games tailored to improve cognitive function, balance, and daily living skills.
- Adjustable difficulty levels to suit users of different abilities.
- The system aims to enhance cognitive abilities, improve physical balance, and support daily life management, ultimately helping to slow the progression of cognitive decline.



Virtual Reality World with XR Technology



- Redefining conventional rehabilitation training, lay the foundation with a 1:1 immersive virtual space through the XR SPACE system.
- Tailored to diverse training objectives and accommodating user capabilities.
- Reminiscence Therapy: Utilizing the virtual space to recreate bygone societal environments, VR reminiscence therapy aids the elderly in organizing memories and psychological states. It initiates discussions and in conjunction with different activities, enhances memory and cognitive abilities.



Sensory – Smell Machine

- Future applications of digital smell technology from different perspectives.
- Multi-sensory relaxation through scent and sound.



- Future development: sight, touch, taste and hearing?



Benefits of Reminiscence Training with Gerotechnology

- ✓ Gerotechnology significantly **enhances the effectiveness of reminiscence therapy** for seniors by leveraging advanced technological tools and methods to make the therapy more **engaging, interactive, and personalized.**
- ✓ RT is a **multi-sensory treatment that uses a combination of sight, touch, smell and sound** to help PWD remember events, people and places from their past lives (Woods et al., 2018; Sun et al., 2020).....Provide PWD with the opportunity to **explore with their caregivers** about what holds meaning for them (Klein et al, 2018).



Benefits of Reminiscence Training with Gerotechnology

✓ Enhancing **Social Interaction** and Reducing Loneliness

Use virtual reality VR technology and interactive platforms and applications to promote social interaction and reduce loneliness. (Shin et al., 2023)

✓ Improved Cognitive Stimulation

Seniors often **experience reduced stress and increased happiness** when engaging in reminiscence therapy with the help of gerontechnological tools. (Tominari et al., 2021)

✓ Practical and Accessible Implementation

Gerotechnology makes it easier for **caregivers and healthcare providers** to implement reminiscence therapy. For example, VR headsets and interactive platforms can be easily set up and used in various settings, including senior communities and care facilities. (Tominari et al., 2021)



Challenges Faced

Access to Technology

Technological Barriers:

- The use of gerontology products, especially those **incorporating technology** (e.g., **virtual reality, mobile applications**), may face challenges in cultures with limited access to technology or lower levels of digital literacy among older adults.

Infrastructure and Resources:

- In some countries, the lack of infrastructure to support technological interventions can limit **the effectiveness of reminiscence therapy products**, particularly in rural or underserved areas.



Challenges Faced

Sensitivity in Program Design:

Customization of Therapy Programs:

- Reminiscence therapy programs need to be culturally sensitive and tailored to the specific needs and preferences of older adults in different cultural contexts. This customization can be **resource-intensive and requires a deep understanding of the target population's** background.

Incorporation of Cultural Artifacts:

- Using culturally relevant artifacts (e.g., music, photographs, traditional stories) in reminiscence therapy can enhance engagement but **requires careful consideration** of what is meaningful to different cultural groups.

? and Localization.



Future Directions

- The future of gerontechnology in reminiscence therapy holds great promise, with **advancements in VR, AR, AI, robotics**, and mobile technologies set to revolutionize the field.
- By integrating these technologies with culturally sensitive and **personalized approaches**, future gerontechnology products can significantly enhance the effectiveness of reminiscence therapy, improving the cognitive function, emotional well-being, and quality of life for older adults.



樂齡科技創新點子實驗場暨「出門三寶」設計比賽



背景

比賽旨在增進參賽者對樂齡科技設計的認識，讓大眾更深入了解銀髮市場產品及推動對認知障礙症長者的關注。

流程

10月6日: 截止報名
10月16日: 簡介會及工作坊(一): 認識認知障礙症
10月24日: 工作坊(二): 長者機構實地參訪
11月14日: 工作坊(三): 專利申請知多啲
11月20日至23日: 參觀樂齡科技博覽暨高峰會
11月29日: 「出門三寶」設計比賽

「出門三寶」設計比賽日

日期: 2025年11月29日(六)
時間: 14:00-17:30
地點: MPL12, M+
匯報及產品展示 (需備有製作模型及拍攝 3-5 分鐘介紹作品短片)

參加資格

- 年滿16歲或以上，可以個人或小組(2-4人)形式參加並製作模型(製作津貼: 每隊可獲1,000元製作模型費用，需提交正本收據，實報實銷)。
- 本科生、研究院的學生及大學畢業兩年內的畢業生。
- 賽馬會樂齡科技與智友安居計劃樂齡科技專員證書課程或社會企業家培訓證書課程的學員。

詳情及報名



計劃詳情 報名: <https://forms.office.com/7sfZv0Ya19P>

- 每件獲選的產品將會於嶺大賽馬會樂齡科技體驗館及樂齡科技展覽中進行展示，以及進一步其服務或產品原型的發展。

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Gerontech Incubation Lab-cum-Design Competition

- Aims to increase understanding of gerontech design, raise public awareness of products for the silver market, and assist the elderly with cognitive impairments.





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Project brief
<https://bit.ly/2LUU61N>



Website
<https://bit.ly/3iClq2R>

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