

# The Kaleidoscope of Later Life: Lay Perceptions of the Activity Theory, Continuity Theory, and Disengagement Theory among Older Adults in Singapore

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## **Background**

The question of what makes for a good later life is central to gerontology. Researchers have long sought to answer this call, wherein the Activity Theory (AT), Continuity Theory (CT), and Disengagement Theory (DT) paved the way in early gerontological studies (von Humboldt, 2016). These models prescribed social activity (Havighurst & Albrecht, 1953), the utilization of strategies tied to past experiences (Atchley, 1989), and social withdrawal (Cumming & Henry, 1961), respectively, to be ideal ways of living the later life. This triangle of classic theories is frequently pitted against one another (e.g. Lim-Soh et al., 2023), and despite decades of existence, they are still highly influential in the current literature. Their propositions are even traceable in the fundamental premises of many later aging theories, models, and concepts, such as Rowe and Kahn's successful aging model (1987), socioemotional selectivity theory (Carstensen, 1992), and productive aging (Butler & Gleason, 1985).

Despite their decades-old formulations, and longstanding critiques about prescriptions of a singular "normal" pattern of aging, as well as contentions about measuring social activity, the views of older adults themselves regarding these three theories of aging have scarcely been considered. For these three classic theories, subjectivity was theorized secondary to behaviors and activities. Yet, works demonstrating the diversity in aging experiences (e.g. Calasanti, 2019; Nelson & Dannefer, 1992) suggests the analytical importance of examining lay views on later life given its heterogeneity. This is especially glaring with a growing body of literature revealing the dissonance between researcher-defined and lay-perceived ideal models of later life (e.g. Feng & Straughan, 2016; Gu et al., 2016). Moreover, ideas and norms on aging differ and change with time and location (Löckenhoff et al., 2009; Ng et al., 2015; Torres, 1999). Given the intersubjective and multidimensional nature of aging experiences, examining what aging well means for older adults, and how it varies, will greatly enrich present understandings of aging and aging experiences. Not only that, the prioritization of subjective perspectives helps minimize researchers' bias in conceptualization and measurement, while also accounting for cultural and structural influences (Shogo et al., 2021). This practice is in line with the person-centered approach (Rogers, 1979) and also the United Nations (UN) and World Health Organization (WHO)'s call to recognize the "voices and perspective of older adults in all their diversity" (WHO, 2020).

This study seeks to address this pressing issue. The small but highly developed island-state of Singapore serves as an ideal case study with a quarter of its population projected to be aged 65 or older by 2030 (Prime Minister's Office, 2024). Its multicultural composition – 75.6% Chinese, 15.1% Malay, 7.6% Indian, and 1.7% others – combined with its colonial history and status as a global hub, fosters a unique blend of Western and Eastern influences. This is evident in local aging policies, which integrate Western theoretical frameworks with Confucianist and various Eastern perspectives (Malhotra et al., 2018). With the over-representation of Western samples in the field, Singapore's distinctive context thus provides a

valuable opportunity to examine lay perspectives on later life and address a fundamental question in gerontology.

### **Study Design**

The data used in this study are from the Lifelong Education for Aging Productively (LEAP) in Singapore project, a national survey funded by the government of Singapore. The LEAP survey aimed to investigate the attitudes and activities of Singapore's older people aged 65 to 80 years old. The Chinese sample of the LEAP survey was from the SG70 project, which was based on the longitudinal survey of the Singapore Chinese Health Study (SCHS). The Malay and Indian participants were randomly sampled from a list of households containing at least one Malay and Indian older person aged 65 to 80 provided by the Department of Statistics, Singapore. The total sample was 2545 individuals, with 1694 Chinese, 428 Malays, and 423 Indians. A weight variable was developed, which was based on the age-gender-race/ethnicity distribution from the 2020 census.

To examine lay perception, we asked respondents to evaluate the following three statements separately derived from the three classic theories: “Older people should actively engage in social activities and social interactions”, “Older people should continue their habits, activities and relationships that they had cultivated when they were young”, and “Older people should quit their jobs and disengage from society when they get older, as it will be beneficial to both themselves and the society”. These statements represent the AT, CT, and DT, respectively. For each statement, we used a 5-point Likert scale with options ranging from “strongly disagree”, “disagree”, “neutral”, “agree” to “strongly agree”. We excluded 13 respondents who responded with “don’t know” to these questions, obtaining a final sample size of 2532. To study factors of these lay perspectives, a series of sociodemographic, socioeconomic, and health-related variables found to be highly related to life quality at older ages were examined.

We first used descriptive statistics and a bar chart to explore the distribution of lay perceptions on each of the classic models. We then used a logistic regression model to explore the affecting factor of lay perception for each classic theory, in which “strongly agree” was merged with “agree”, and the other responses were recoded as “did not agree” (reference group). We then paid special attention to how these perceptions compete and overlap with each other in reality using a Venn diagram. Next, we explored the models about the good later life amongst older Singaporeans using Latent Class Analysis (LCA), which classified survey participants based on their responses over the three dimensions of measurements. By applying LCA, we could uncover distinct patterns of lay perspectives and thus observe the structure of how older Singaporeans perceived the ideal aging models. To further explore associated factors of found typology membership, logistic regression models were used.

### **Selected Preliminary Results and Brief Discussion**

The proportions of lay preference to the three classic theories are shown in Figure 1, which has been weighted according to the prevalence in the population. As expected, respondents were significantly more agreeable (agree or strongly agree) to the AT (about 87%) than the CT (about 49%) and DT (about 24%). The support for the CT and DT, however, was not negligible, showing the diversity in choices of older Singaporeans in later life. It is noteworthy as well that for each model, there were always about 10% of respondents who expressed neutral views instead of supportive or opposing ones, which further revealed the complexity of lay views about the ideal later life.

Figure 1. Bar plot of weighted proportion of responses to the AT, CT, and DT

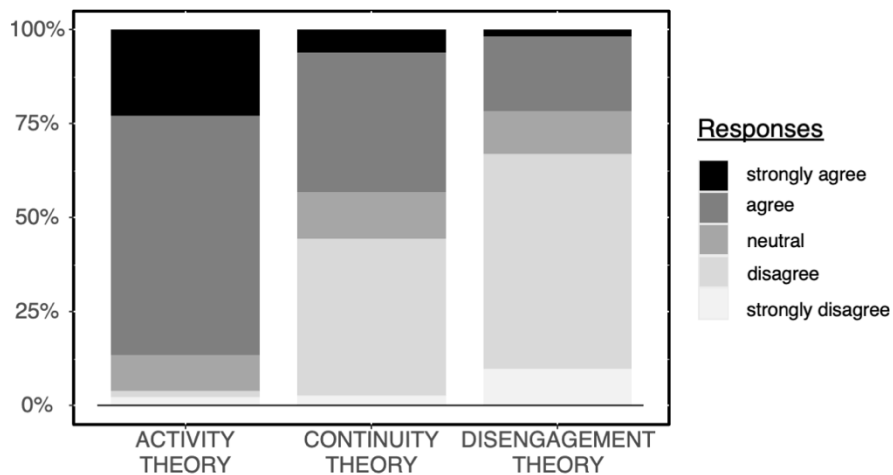
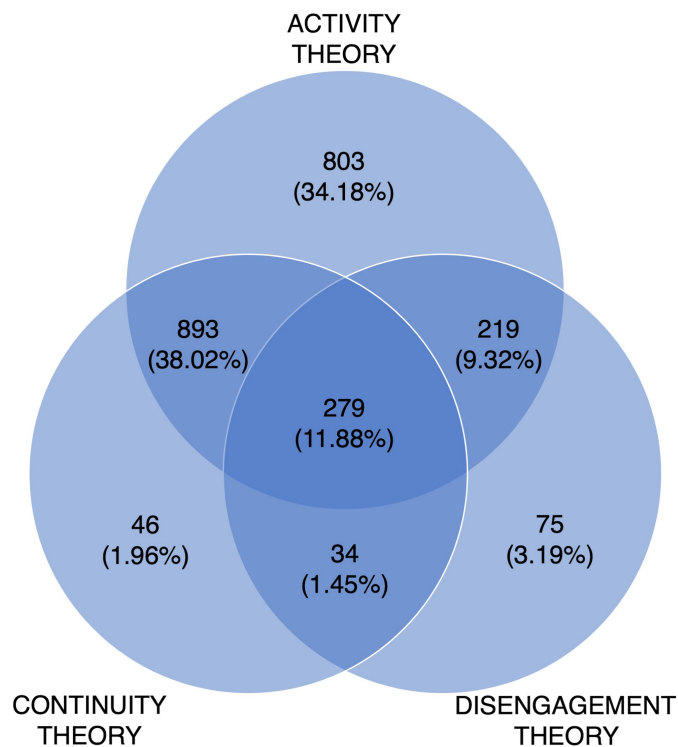


Figure 2 shows the supportive responses (‘agree’ and ‘strongly agree’ responses) for the three classic theories. Clearly, perceptions of a good later life are not mutually exclusive, as suggested by the theoretical debates, and laypersons could subscribe to more than one, and even all of the models. More specifically, although about 34% of respondents only support the AT, 38% agree with propositions from both the AT and CT. It was rare for older Singaporeans to endorse only the CT (about 2%), or the DT (about 3%), or both the CT and DT (approximately 1%); Yet, about 9% of respondents endorsed both the AT and DT, and approximately 12% were even positive to all three theories.

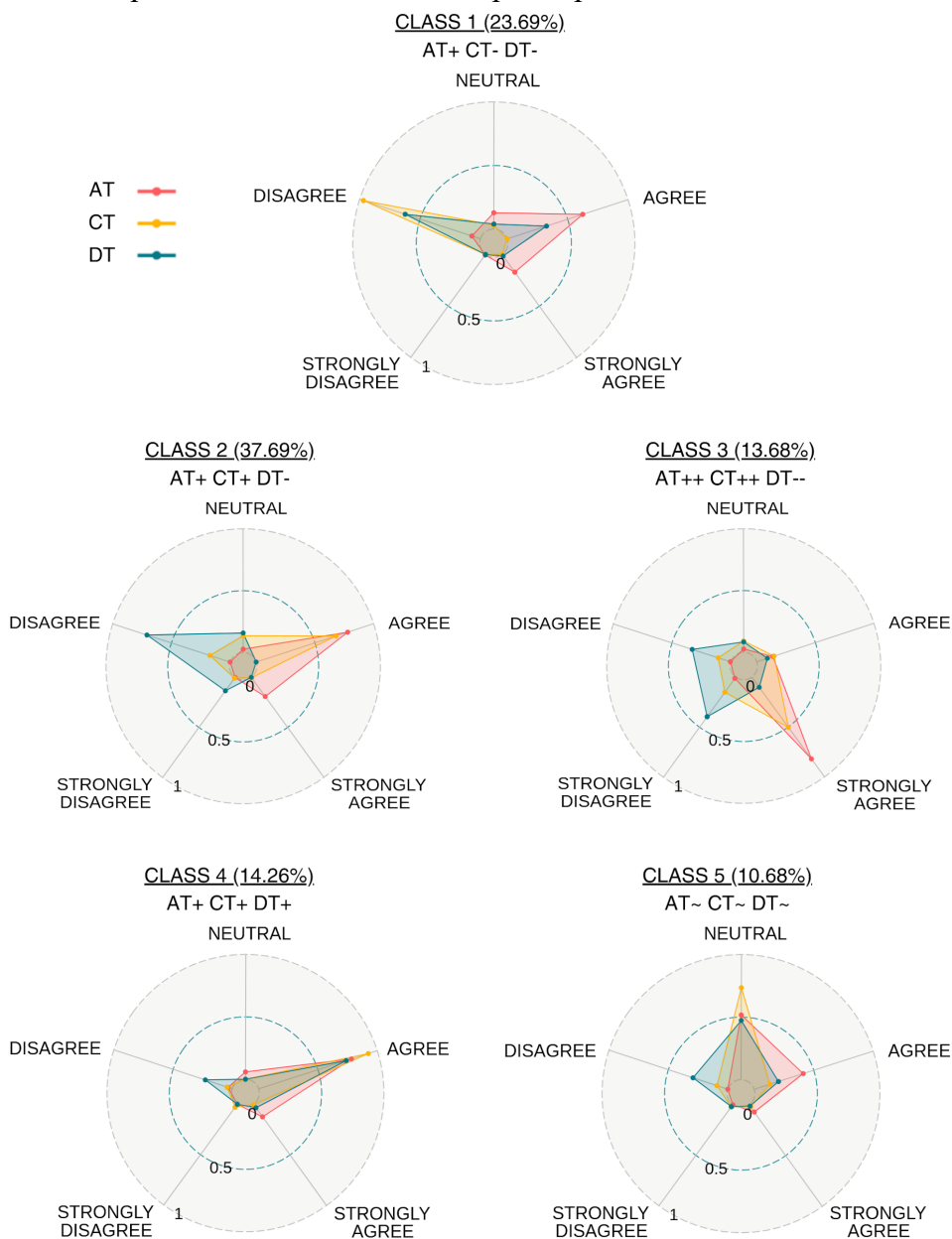
Figure 2. Venn diagram of “agree” and “strongly agree” responses to the AT, CT, and DT



LCA was then conducted to identify typologies of lay perceptions, which revealed five distinct types (Figure 3). Class 1 (about 24% of the population of older adults) consists of

older adults who are agreeable to the propositions of the AT only and disagreeable to both the CT and DT (AT+, CT-, DT-). This is the typology that is most aligned with public initiatives of active aging. Class 2 and 3, approximately 38% and 14% of the population respectively, consist of older adults who are agreeable to the propositions of the AT and CT but not the DT; however, these two types differ in the degree of agreement to the AT and CT where the latter expressed more extreme attitudes. We thus describe Class 2 as AT+, CT+ and DT-, and Class 3 as AT++, CT++ and DT--. Older adults in Classes 2 and 3 tended to be of higher socioeconomic status and better health. Unsurprisingly, the AT was still favoured by most older Singaporeans and interestingly, more so by Malay and Indian older adults than Chinese older adults; however, those endorsing the AT were also likely to support the CT (Classes 2 and 3) and even the DT, as in Class 4 (AT+, CT+, DT+). Moreover, the result also confirmed the existence of about 11% of older adults who were neutral to all three classic models (Class 5; AT~, CT~, DT~). These older adults tended to be younger and more depressive.

Figure 3. Radar plots of class conditional response probabilities to the AT, CT, and DT



References:

- Atchley, R. C. (1989). A continuity theory of normal aging. *The Gerontologist*, 29(2), 183–190. <https://doi.org/10.1093/geront/29.2.183>
- Butler, R. N., & Gleason, H. P. (Eds.). (1985). *Productive aging: Enhancing vitality in later life*. Springer Pub. Co.
- Calasanti, T. (2019). On the intersections of age, gender and sexualities in research on ageing. In A. King, K. Almack, & R. L. Jones (Eds.), *Intersections of Ageing, Gender and Sexualities* (1st ed., pp. 13–30). Bristol University Press. <https://doi.org/10.46692/9781447333036.005>
- Carstensen, L. L. (1992). Motivation for social contact across the life span: A theory of socioemotional selectivity. *Nebraska Symposium on Motivation. Nebraska Symposium on Motivation*, 40, 209–254.
- Cumming, E., & Henry, W. E. (1961). *Growing old*. Basic Books.
- Feng, Q., & Straughan, P. T. (2016). What Does Successful Aging Mean? Lay Perception of Successful Aging Among Elderly Singaporeans. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, gbw151. <https://doi.org/10.1093/geronb/gbw151>
- Gu, D., Feng, Q., Sautter, J. M., Yang, F., Ma, L., & Zhen, Z. (2016). Concordance and Discordance of Self-Rated and Researcher-Measured Successful Aging: Subtypes and Associated Factors. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, gbw143. <https://doi.org/10.1093/geronb/gbw143>
- Havighurst, R. J., & Albrecht, R. E. (1953). *Older people*. Longmans, Green.
- Lim-Soh, J., Ang, S., & Malhotra, R. (2023). Trajectories of Informal and Formal Social Participation After Retirement. *Work, Aging and Retirement*, waad022. <https://doi.org/10.1093/workar/waad022>

- Löckenhoff, C. E., De Fruyt, F., Terracciano, A., McCrae, R. R., De Bolle, M., Costa, P. T., Aguilar-Vafaie, M. E., Ahn, C., Ahn, H., Alcalay, L., Allik, J., Avdeyeva, T. V., Barbaranelli, C., Benet-Martínez, V., Blatný, M., Bratko, D., Cain, T. R., Crawford, J. T., Lima, M. P., ... Yik, M. (2009). Perceptions of aging across 26 cultures and their culture-level associates. *Psychology and Aging, 24*(4), 941–954.  
<https://doi.org/10.1037/a0016901>
- Malhotra, R., Bautista, M. A. C., Müller, A. M., Aw, S., Koh, G. C. H., Theng, Y.-L., Hoskins, S. J., Wong, C. H., Miao, C., Lim, W.-S., Malhotra, C., & Chan, A. (2018). The Aging of a Young Nation: Population Aging in Singapore. *The Gerontologist*.  
<https://doi.org/10.1093/geront/gny160>
- Nelson, E. A., & Dannefer, D. (1992). Aged Heterogeneity: Fact or Fiction? The Fate of Diversity in Gerontological Research. *The Gerontologist, 32*(1), 17–23.  
<https://doi.org/10.1093/geront/32.1.17>
- Ng, R., Allore, H. G., Trentalange, M., Monin, J. K., & Levy, B. R. (2015). Increasing Negativity of Age Stereotypes across 200 Years: Evidence from a Database of 400 Million Words. *PLOS ONE, 10*(2), e0117086.  
<https://doi.org/10.1371/journal.pone.0117086>
- Prime Minister's Office. (2024). *Population in Brief 2024*. Prime Minister's Office.  
[https://www.strategygroup.gov.sg/files/media-centre/publications/Population\\_in\\_Brief\\_2024.pdf](https://www.strategygroup.gov.sg/files/media-centre/publications/Population_in_Brief_2024.pdf)
- Rogers, C. R. (1979). The foundations of the person-centered approach. *Education, 100*(2), 98–107.
- Rowe, J. W., & Kahn, R. L. (1987). Human Aging: Usual and Successful. *Science, 237*(4811), 143–149. <https://doi.org/10.1126/science.3299702>

Shogo, I., Gu, D., & Feng, Q. (2021). Subjectively Rated Successful Aging. In D. Gu & M.

E. Dupre (Eds.), *Encyclopedia of Gerontology and Population Aging* (pp. 4819–4825). Springer International Publishing. [https://doi.org/10.1007/978-3-030-22009-9\\_477](https://doi.org/10.1007/978-3-030-22009-9_477)

Torres, S. (1999). A culturally-relevant theoretical framework for the study of successful ageing. *Ageing and Society*, *19*(1), 33–51.

<https://doi.org/10.1017/S0144686X99007242>

von Humboldt, S. (2016). *Conceptual and Methodological Issues on the Adjustment to Aging*

(Vol. 15). Springer Netherlands. <https://doi.org/10.1007/978-94-017-7576-2>

WHO. (2020). *UN Decade of Healthy Ageing: Plan of Action 2021-2023*. World Health Organization. [https://cdn.who.int/media/docs/default-source/decade-of-healthy-ageing/decade-proposal-final-apr2020-en.pdf?sfvrsn=b4b75ebc\\_28](https://cdn.who.int/media/docs/default-source/decade-of-healthy-ageing/decade-proposal-final-apr2020-en.pdf?sfvrsn=b4b75ebc_28)