

High Five for Life: A Feasibility Study To Implement The Finger-model For Younger Persons In Memory Of Axel Hallinder

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The High Five For Life (HFFL) study is a pioneering feasibility study aiming to promote brain health in younger adults and expand research efforts surrounding the renown FINGER model. Twenty-six students at Imperial College London aged 18-25 years old consented to the study and were invited to complete: 1) A Baseline visit, 2) Four workshops covering the five lifestyle domains of the FINGER model and 3) An 8-week self-guided intervention period with focus groups. Retention rates reached 88.5% and exceeded the limit initially set as a threshold for success. Adherence to the study assessments remained high throughout the study. The study was well received by the participants who reported a positive change in attitudes towards general wellbeing and cognition. Sleep was identified as one of the major concerns.

INTRODUCTION	METHODS	RESULTS	CONCLUSIONS																																																																					
Background: The vast majority of current research related to ADRDs and other brain related diseases has focused mainly on middle aged and elderly populations. Very limited research has been conducted among younger populations. According to UN figures, young adults are classified as those between the ages of 15 and 24, accounting for 16% of the global population (1). Brain maturation continues beyond adolescence, extending until around age 25 years (2-4). Risks associated with dementia start accumulating early in life e.g. low education, malnutrition and socio-economic factors. A healthy lifestyle approach at young adulthood can reduce the risk for future development of dementia (5). The High Five For Life study (HFFL) is a feasibility study building on the renown FINGER model (6). The pilot was initiated in June 2025 and was concluded end of January 2026. Funds for the study were secured through a fundraising campaign conducted by StepStone Group LP, in memory of Axel Hallinder.	Students at Imperial College London aged 18-25 years old were recruited via on-site recruitment stalls and posters across the University campus. Inclusion Criteria: • Young adults aged 18-25 years old • Cognitively healthy young adults • Students at Imperial College London at time of study initiation • Cognitively healthy • See a need for a lifestyle improvement • Willingness to consent and attend visits N=20 Baseline visit (1.2 hours): I. Demographic questionnaire, II. Baseline questionnaires, III. Cognitive function test 1. Diet Workshop 2. Physical activity Workshop 3. Cognitive training Workshop 4. Health check Workshop 8-week self-guided intervention Follow up visit (1.2 hours): I. Cognitive function test, II. Feedback questionnaire, III. Follow-up questionnaires IV. Focus groups Each workshop: 45 minutes - 1 hour. The 4 workshops will take place over 1-2 weeks. Figure 1. Schematic Diagram of the Study: Recruitment, Screening and Baseline Assessments	26 students consented 76 students interested 3 students withdrew after Baseline • Study Recruitment rate was 34.2% • Retention rate reached 88.5% and exceeded the limit of 66% initially set as a threshold for success. Adherence to the study assessments remained high throughout the pilot study. <table><tr><th colspan="2">Participant Characteristics</th></tr><tr><td>Sex, N Female (%)</td><td>14 (54%)</td></tr><tr><td>Age (Median)</td><td>23 yrs</td></tr><tr><td colspan="2">Ethnicity</td></tr><tr><td>Asian or Asian British</td><td>12 (46%)</td></tr><tr><td>Black, Black British, Caribbean, or African</td><td>3(11%)</td></tr><tr><td>White</td><td>9(35%)</td></tr><tr><td>Middle East</td><td>2(8%)</td></tr><tr><td colspan="2">Current Education</td></tr><tr><td>Undergraduate</td><td>9(35%)</td></tr><tr><td>Postgraduate</td><td>9(35%)</td></tr><tr><td>PhD</td><td>8(30%)</td></tr><tr><td colspan="2">Living Conditions</td></tr><tr><td>Living alone</td><td>9(35%)</td></tr><tr><td>Living with family (children, brother, sister, parents)</td><td>4(15%)</td></tr><tr><td>Cohabiting (friends, congregation)</td><td>10(38%)</td></tr><tr><td>Living in a couple</td><td>2(8%)</td></tr><tr><td>Other</td><td>1(4%)</td></tr><tr><td colspan="2">Medical Conditions</td></tr><tr><td>Yes</td><td>9(35%)</td></tr><tr><td>No</td><td>17(65%)</td></tr></table> Table 1. General Demographics <table><tr><th colspan="2">Assessments – Completion Rates</th></tr><tr><td colspan="2">Cognitive Function Test Completion</td></tr><tr><td>Baseline</td><td>24(92.3%)</td></tr><tr><td>Follow up</td><td>18(73%)</td></tr><tr><td colspan="2">IPAQ</td></tr><tr><td>Baseline</td><td>26(100%)</td></tr><tr><td>Follow up</td><td>21(91.3%)</td></tr><tr><td colspan="2">SFBDQ</td></tr><tr><td>Baseline</td><td>26(100%)</td></tr><tr><td>Follow up</td><td>22(96%)</td></tr><tr><td colspan="2">GHQ12</td></tr><tr><td>Baseline</td><td>24(92.3%)</td></tr><tr><td>Follow up</td><td>19(83%)</td></tr></table> Table 2. Completion rates of self-report assessments at Baseline and Follow	Participant Characteristics		Sex, N Female (%)	14 (54%)	Age (Median)	23 yrs	Ethnicity		Asian or Asian British	12 (46%)	Black, Black British, Caribbean, or African	3(11%)	White	9(35%)	Middle East	2(8%)	Current Education		Undergraduate	9(35%)	Postgraduate	9(35%)	PhD	8(30%)	Living Conditions		Living alone	9(35%)	Living with family (children, brother, sister, parents)	4(15%)	Cohabiting (friends, congregation)	10(38%)	Living in a couple	2(8%)	Other	1(4%)	Medical Conditions		Yes	9(35%)	No	17(65%)	Assessments – Completion Rates		Cognitive Function Test Completion		Baseline	24(92.3%)	Follow up	18(73%)	IPAQ		Baseline	26(100%)	Follow up	21(91.3%)	SFBDQ		Baseline	26(100%)	Follow up	22(96%)	GHQ12		Baseline	24(92.3%)	Follow up	19(83%)	• 58% reported vitamins intake including C, D and Omega 3 • 42% consume alcohol, 3.8 units/week on average • Time flagged as biggest hinderance to eating healthy • 54% of participants eat limited range of food or pre-prepared meals, but cook by themselves Physical Activity Vigorous activity Moderate activity last 7 days Vigorous activities: e.g. heavy lifting, aerobics, or fast bicycling, etc. Sitting per Day Moderate activities: e.g. carrying light loads, bicycling at a regular pace, tennis etc. – not walking included Figure 2. Physical activity as reported at Baseline and Follow up Participant feedback -Workshops Overall Workshop Satisfaction Relevance to participant Physical Activity Diet Cognition Health Check • Desk Workouts • Aerobic activities • Reduction sedentary lifestyle • Baseline online physical activity webpage/apps • Stretching exercises • Culture substrates • Food-system effect considerations • Types of fibre recommended and fibre benefits • Protein • Dairy intake • Types of diets • Sleep and stress • How to maintain good sleeping habits • Neuroplasticity • Brain function • Cognitive domains and tests • Sleep • Mental wellbeing • Stress Management • Publications on sleep and stress • Health Risk factors • Auditory health Other topics of interest to explore Figure 3. Workshop satisfaction and topics of interest to explore further • Sleep flagged as a major concern – ways to improve sleep quality necessary • Would like ways to de-stress without use of technology • A need to connect more with co-participants during the intervention	The study was positively received by participants and was associated with improved attitudes toward general wellbeing and cognitive functioning. Sleep and stress were identified as major areas of concern. The results of the HFFL study will help guide the design of a longitudinal study in a larger and more diverse population of young adults. CONTACT Parthenia Giannakopoulou, PhD Ageing Epidemiology (AGE) Research Unit School of Public Health Imperial College London parthenia.giannakopoulou13@imperial.ac.uk REFERENCES 1. Nations U. Youth [cited 2024 17 September]. Available from: https://www.un.org/en/global-issues/youth. 2. Lebel C, Beaulieu C. Longitudinal development of human brain wiring continues from childhood into adulthood. J Neurosci. 2011;31(30):10937-47. 3. Hochberg ZE, Konner M. Emerging Adulthood, a Pre-adult Life-History Stage. Front Endocrinol (Lausanne). 2019;10:918. 4. Hedman AM, van Haren NE, Schnack HG, Kahn RS, Hulshoff Pol HE. Human brain changes across the life span: a review of 56 longitudinal magnetic resonance imaging studies. Hum Brain Mapp. 2012;33(8):1987-2002. 5. Livingston G, Huntley J, Liu KY, Costafreda SG, Selbaek G, Alladi S, et al. Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission. Lancet. 2024;404(10452):572-628. 6. Kivipelto M, Mangialasche F, Snyder HM, Allegri R, Andrieu S, Arai H, et al. World-Wide FINGERS Network: A global approach to risk reduction and prevention of dementia. Alzheimers Dement. 2020;16(7):1078-94.
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