

Cultural considerations in health messaging for physical activity interventions – A comparison of the meaning of health to Chinese and UK school-aged children

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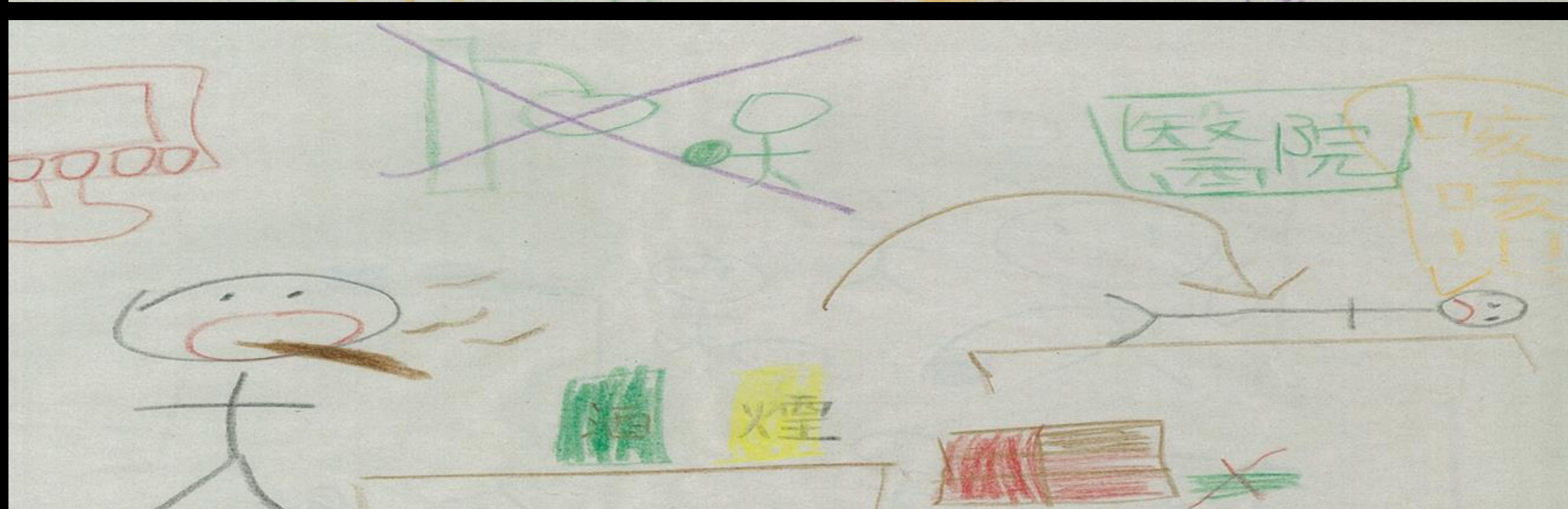
Introduction

- Physical activity (PA) interventions to combat childhood obesity have been largely ineffective.
- Possible explanations for ineffectiveness from health messaging perspective -
 - Many interventions preach the importance of health based on what health means to researchers or public health workers, as such, health messages do not resonate with what children value about health.
 - 'Selling' PA to INACTIVE children might have put them off from intervention engagement as they see PA as undesirable. In COM-B terms, this has adversely impacted their automatic motivation¹.
- Health messages should be tailored according to what health represents to children, and incorporated in PA interventions².
- Aim of the study – Explore and compare the meaning of health to Chinese and UK children through focus group discussions.

Participants & Procedure

	Hong Kong (1 primary school in southern region)	UK (3 primary schools in SE England)
N	320	146
Age	Range 6-12yrs Mean = 9.00yrs ± 1.75	Range = 6-10yrs Mean = 8.75yrs ± 1.06
Sex	52% boys	50% boys
Focus group no.	22 groups (sub-sample n=65)	18 groups (sub-sample n=49)

- Invitation to focus group - based on participants' age, sex and habitual PA level.
 - Habitual PA measurement considerations
 - All participants wore a piezo-electric pedometer for 3 weeks (New Lifestyle 800), only week 3's data were used in order to account for reactivity.
 - Most physically active (top 25%) and least physically active (bottom 25%) were considered for focus group discussions.
 - Age, sex considerations
 - Each focus group comprised of 3 participants same sex and study year group.
- Participants first drew who they thought was health and unhealthy for initial engagement, followed by discussions on the reasons for the depicted people, themselves and/or other people being (un)healthy.



Results

Themes identified on meaning of health for Chinese and UK children (top themes are shared by both cultures), and mean steps/day for the respective low active and high active children.



Illness/presence of symptoms Optimal body functioning, including physical capability Weight status High energy level (distinction between 'good' and 'bad' tiredness - UK) Mood Independence (physically able to look after oneself)	
Sweating (Chinese medicinal beliefs)	Social interaction
Relaxed (physical, psychological)	Ability to make appropriate lifestyle decisions
Alertness	Creativity
Mean steps/day: Low active group 6,610 ± 1,506 High active group 10,870 ± 1,402	Mean steps/day: Low active group 6,510 ± 2,356 High active group 13,001 ± 2,948

N.B. In yellow – Physical health; In pink – Psychological health; In orange – Social health; In blue – Cognitive health

Discussion

- Some of the shared themes also resonate with previous studies with children from different cultures, particularly themes on physical health and mood^{3,4}.
- The social environment seems to play a more important role in shaping UK children's meaning of health than Chinese children.
- Research implication – Findings can be used to design culture-specific questionnaires to measure children's quality of life.
- Practical implication – Health promotion should focus on 'selling' what children value about health in lifestyle interventions.

Key messages

- While cultural differences are often acknowledged, they are seldom considered in health promotion or in research related to lifestyle changes. Greater understanding of the needs and values of different cultural groups is warranted for better tailoring of health messages that would 'speak to' the target population.
- Public health or lifestyle interventions (e.g. for PA/eating behaviours) should emphasize how the initiatives could meet their target population's health value for long-term engagement.

References

- Michie, S., van Stralen, M.M. & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*, 6, 42. <https://doi.org/10.1186/1748-5908-6-42>.
- Williamson, C., Baker, G., Tomasone, J.R. et al. (2021). The Physical Activity Messaging Framework (PAMF) and Checklist (PAMC): International consensus and user guide. *International Journal of Behavioral Nutrition and Physical Activity*, 18:164. <http://doi.org/10.1186/s12966-021-01230-8>.
- Bilinski, H.N., Duggleby, W., & Rennie, D. (2010). The meaning of health in rural children: A mixed methods approach. *Western Journal of Nursing Research*, 32(7), 949-966.
- Wee, H.L., Chua, H.X., & Li, S.C. (2006). Meaning of health-related quality of life among children and adolescents in an Asian country: A focus group approach. *Quality of Life Research*, 15, 821-831.