Validity of the self-report Strengths and Difficulties Questionnaire among Japanese adolescents

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Background : The Strength and Difficulties Questionnaire (SDQ) is a widely used brief screening tool to assess emotional and behavioral problems in children and adolescents. Although the Japanese version of the parent and teacher SDQs have been validated, those of the self-report SDQ remain unexamined. This study evaluated the factor structure and validity of the self-report SDQ among Japanese adolescents.

Methods : A total of 945 junior high school students in Japan, aged 12 to 15, completed the self-report SDQ via KOKOROBO-J study. In addition to the self-report SDQ, almost all of the participants completed the Patient Health Questionnaire for Adolescents (PHQ-A), assessing depressive symptoms. The self-report SDQ data were analyzed by confirmatory factor analysis (CFA), in which the model specified five factors —emotional symptoms (ES), conduct problems (CP), hyperactivity/inattention (HI), peer problems (PP), and prosocial behaviour (PB). The total difficulties score (TDS) was computed by summing these factors except PB. Internal consistency, test-retest reliability and convergent and divergent validity were also evaluated.

Results : CFA showed that the original five-factor model exhibited modest fit (root mean square error of approximation (RMSEA)=0.084; comparative fit index (CFI)=0.845), and a removal of reversed items improved the fit indices (RMSEA=0.058; CFI=0.938). Internal consistency and test-retest reliability of the ES were good, whereas they were low especially for the CP and the PP. The TDS was correlated with PHQ-A (Pearson's correlation R=0.643), and the ES exhibited the highest correlation with PHQ-A (R=0.581) among all the factor.

Conclusion : The Japanese version of the self-report SDQ demonstrated modest fit consistent with parent and teacher versions; excluding reversed items improved model fit.

Association of 'Oshikatsu' with social isolation in the Japanese population: FAV-WELL Study

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Background : 'Oshikatsu' refers to the act of supporting someone or something that you particularly like. It is unclear what kind of impact Oshikatsu has on the connection with individuals and society. This study aimed to investigate the association between Oshikatsu and social isolation.

Methods : This nationwide cross-sectional study included Japanese general population aged 18 to 79 years from March to April in 2025 (FAV-WELL Study). The main exposure was the act of enthusiastically supporting someone: Oshikatsu or non-Oshikatsu groups. Additionally, we divided the Oshikatsu group into those who enjoy Oshikatsu with others or alone, defining the secondary exposure across these three groups. The primary outcome was social isolation assessed by the Japanese version of the abbreviated Lubben Social Network Scale (LSNS-6). Adjusted variables were age, gender, educational level, marital status, household income, and comorbidities. We performed modified Poisson regression models to estimate risk ratios (RRs) and 95% confidence intervals (CIs). This study was approved by the ethics committee of Kyoto University Graduate School and the Faculty of Medicine (approval number: R4885)

Results : In total of 10,000 participants, 3,781 participants (38%) enjoyed Oshikatsu, and 744 participants (7.4%) engaged in Oshikatsu with others. In primary analysis, the adjusted RR (95% CI) of social isolation in the Oshikatsu group compared to the non-Oshikatsu group was 0.88 (0.84–0.91). In additional analyses, the adjusted RR (95% CI) of social isolation in Oshikatsu with others was 0.72 (0.66–0.79) and in Oshikatsu alone was 0.91 (0.88–0.95), compared to the non-Oshikatsu group.

Discussion : Oshikatsu is associated with the lower risk of social isolation. Oshikatsu, undertaken either alone or with others, may contribute to the prevention of social isolation.

Sleep Quality and Anemia in Female Workers: The HERLIFE Study

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Objective : To examine the association between anemia and sleep difficulties in women.

Method : This study was conducted as part of the "Internet Survey on Women's Health and Work (HERLIFE Study)."In June 2024, 30,000 women aged 20 to 60 years who worked at least 30 hours per week were recruited through an internet survey company.The independent variable was history of anemia treatment, and the dependent variable was sleep difficulties.Adjustment variables included age, educational background, marital status, household annual income, employment status, and history of seeking treatment for insomnia or mental disorders. Poisson regression analysis was performed, adjusting for the above covariates.

Results : 51.0% experienced sleep difficulties on three or more days per week.In the age-adjusted model, both individuals with a history of anemia who reported having received treatment in the past but not currently and those receiving ongoing treatment for anemia showed a significant association with sleep disorders compared to workers who reported "never having been treated for anemia."(History: IRR=1.16, 95% CI: 1.13-1.20; Treatment: IRR=1.13, 95% CI: 1.07-1.20). In the multivariate model, anemia remained significantly associated with insomnia in individuals with a history of anemia, but the association between anemia and insomnia disappeared in those receiving anemia treatment(IRR=1.02, 95% CI: 0.96-1.08).

Discussion : Our findings suggest that anemia is associated with sleep difficulties. Specifically, individuals with a history of anemia treatment who are not currently receiving treatment were more likely to experience sleep disorders. Since most anemia cases are iron deficiency anemia, a condition that is generally responsive to iron supplementation, treating anemia may potentially alleviate sleep disorders.

Conclusion : Anemia may be associated with sleep difficulties in women.

Household Smoke Exposure and Infant Growth Outcomes in Predominantly Breastfed Infants in Rural Kenya

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Background : Standardised anthropometric indicators are widely used to evaluate infant growth and community health. However, few studies in low-resource settings have examined environmental determinants of early growth. We assessed predictors of growth outcomes in predominantly breastfed infants in Kwale County, Kenya, using WHO z-scores.

Methods : We analysed data from 47 infants aged 2-6 months enrolled in the Kenya Environmental and Child Health Survey. Newborns were registered at birth through the Pregnant Women and Infant Registration System jointly managed by Nagasaki University and the Kenya Medical Research Institute, and their growth was monitored. Trained fieldworkers collected sociodemographic and household information using structured questionnaires, and infant anthropometric measurements were conducted. Height/length-for-age (HAZ), weight-for-age (WAZ), and weight-for-length/height z-score (WHZ) Z-scores were calculated using WHO standards. Associations with household and environmental factors were examined using regression models.

Results : The mean age of participants was 5.8 months; 65% were male. Six infants (13%) were stunted (HAZ <- 2). Sixty percent had experienced illness, 92% lacked access to safe drinking water, and 4% slept in unventilated rooms. Infants living in households with a smoker had significantly lower HAZ ($\beta = -1.09$, SE=0.49, p=0.03) and WAZ ($\beta = -0.93$, SE=0.39, p=0.02). Poor ventilation was borderline significant for both outcomes (p=0.09). No predictors were significantly associated with WHZ.

Conclusion : Household smoke exposure was associated with impaired linear and weight growth among predominantly breastfed infants in Kwale. Reduced exposure to household smoke may improve growth in similar settings. These findings highlight the need for environmental health incorporation in maternal and child health programs, and the need for large, prospective studies to confirm associations and guide targeted interventions.