

**Methods** Data for 6,421 singleton children, born in 2000–2002 and followed up to 14 years of age as part of the UK Millennium Cohort Study, were analysed. Mothers reported breastfeeding duration, and children's cognitive abilities were assessed at 5, 7, 11, and 14 years using validated measures. Standardised verbal (age 5 to 14) and spatial (age 5 to 11) cognitive scores were compared across groups of breastfeeding using multivariable linear regression models, adjusting for SEP, maternal cognitive ability, and other confounders/mediators.

**Results** At age 5, longer breastfeeding duration showed a graded association with higher verbal cognitive scores (coefficient,  $\geq 12$  months vs never breastfed: 0.34; 95%CI: 0.25 to 0.44). Adjustment for SEP approximately halved the effect sizes and further adjustment for maternal cognitive scores removed the remaining association (coefficient: 0.06; 95%CI: -0.03 to 0.14). Findings were similar for ages 7 and 11 but not for age 14, in which the score of those who breastfed for  $\geq 12$  months remained 0.20 s.d. (95%CI: 0.08 to 0.31) higher than the score of those never breastfed, after full adjustment. The crude results for spatial scores at age 5 showed that participants breastfed for  $\geq 12$  months scored 0.21 s.d. (95%CI: 0.12 to 0.31) higher than those never breastfed. After full adjustment, the differences vanished (coefficient: -0.03; 95%CI: -0.12 to 0.07). However, those participants breastfed for  $\geq 4$  and  $< 6$  months scored 0.10 s.d. (95%CI: 0.02 to 0.18) higher than those never breastfed, after full adjustment. Results were similar for ages 7 and 11. Exclusive breastfeeding showed similar patterns. However, even after full adjustment, a duration of  $\geq 4$  months was associated with improved verbal scores at age 14 (coefficient: 0.11; 95%CI: 0.02 to 0.20) and spatial scores at age 7 (coefficient: 0.09; 95%CI: 0.01 to 0.17) and 11 (coefficient: 0.09; 95%CI: 0.01 to 0.18).

**Conclusion** The positive associations between any breastfeeding duration and cognitive development were explained in full after adjusting for SEP and maternal cognitive scores, except at age 14 (verbal). Exclusive breastfeeding duration seemed to be associated with improved cognitive verbal scores at age 14 and spatial scores at ages 7 and 11 after full adjustment, although with modest effect sizes.

**P05 PARENTS' PERSPECTIVES AND EXPERIENCES OF PARENTING AND CARING FOR YOUNG CHILDREN ON A LOW INCOME IN THE NORTH EAST SCOTLAND**

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**Background** Families with young children, and lone parent families in particular, are at greater risk of poverty and food insecurity, compared to other UK population groups. Tackling child poverty has been a key Scottish Government policy since the introduction of the Child Poverty Act (2017) in which local authorities and health boards are required to report on their Local Child Poverty Action Plans. In north east Scotland little formal research had focussed on the lived experiences of parents and parents of infants and young children in relation to the challenges they face parenting on very low incomes, and, on questions about income maximisation strategies to alleviate child poverty. This paper focuses on some key

findings of a study undertaken to address this knowledge gap in Grampian in 2020.

**Methods** Parents with young children supported by an Aberdeen City-based poverty alleviation social enterprise were invited to take part in an interview study. One-to-one semi-structured telephone interviews lasting between 30–40 minutes took place during July and August 2020. Interviews were transcribed and thematically analysed.

**Results** Ten women took part; two participants lived with partners. Eight participants were unemployed and two worked part-time. Each had between one and five child(ren), and all had one child under school-age. Five key *impact* themes emerged, i. limited participation in paid employment; ii. insufficient social security income; iii. household food insecurity experiences; iv. practical and emotional challenges and anxiety associated with their children's overall development; and v. anxieties related to treats and special occasions. Four *coping strategy* themes were also revealed, i.e. i. budgeting and bill prioritisation; ii. self-sacrifice; iii. relying on others, and iv. keeping up appearances. Food coping strategies were explored in more depth, and two broad themes emerged: *acquisition methods* and *management techniques*.

**Discussion** Parents with young children experience significant barriers accessing paid employment due to caring responsibilities. Consequently, generating sufficient household income from alternate income sources, such as social security, is problematic. Parents reported devoting significant emotional and physical energy to dealing with the challenges of raising children in poverty, and it was notable that participants employed a range of sophisticated coping strategies and skill to make ends meet and maximise food resources, within highly constrained budgets. This research challenges notions that budgeting education initiatives have much to offer low income parents already well-versed on this issue. Strategies to increase their incomes seem a more effective way of alleviating their related anxieties.

**P06 THE ROLE OF SOCIOECONOMIC INEQUALITIES IN TRANSITIONING TO NEUROCOGNITIVE DISORDERS; EVIDENCE FROM THE ENGLISH LONGITUDINAL STUDY OF AGEING**

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**Background** The association between socioeconomic position (SEP) and dementia is well studied. However, scant attention has been given to the relationship with mild cognitive impairment (MCI), often considered a transient state between normal cognition and dementia. The purpose of this study was to determine the role of various SEP markers such as education and wealth on transitioning to MCI and dementia.

**Methods** We used nationally representative data from adults aged 50+ from the English Longitudinal Study of Ageing followed-up over a four-year period. We ascertained MCI and dementia over four years, using a validated algorithm based on physician diagnosis and lower cognitive performance (1 standard deviation below the mean) on multiple standardised tests adjusted for age and education. A Multistate Markov survival model was utilised to investigate whether different SEP markers increased the risk of specific transitions between

normal cognitive performance and MCI or dementia, with the latter being considered an absorbing state

**Results** During the study period, a quarter of participants progressed to MCI from the normal state. Being in the lowest quintile of wealth was associated with a lower probability of transitioning back to a normal cognitive state from MCI, compared with those in the highest quintile. Greater wealth was weakly associated with a lower risk of transitioning from normal cognitive state to MCI and from MCI to dementia.

**Conclusion** The overall results imply that socioeconomic advantage might be protective against rapid progression from mild to more severe neurocognitive disorders such as dementia in later life. This research indicates that older adults from different socioeconomic backgrounds have different probabilities of transitioning between different stages of neurocognitive disorders in a population sample and this could help us to define prevention strategies to delay cognitive impairment.

**P07 DOES SOCIAL MEDIA INFLUENCE ADOLESCENT ENGAGEMENT IN HEALTH RISK BEHAVIOURS? FINDINGS FROM A SYSTEMATIC REVIEW**

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**Background** Social media (SM) may influence adolescents' perceived social norms and subsequent health risk behaviours, although the evidence base around this is still developing. We conducted a systematic review of the relationship between SM and adolescent health risk behaviours: alcohol/tobacco/drug use, e-cigarettes, diet, physical activity, antisocial behaviours, gambling, sexual risk behaviours and multiple health risk behaviours, in adolescents aged 10–19 years.

**Methods** We searched CINAHL, EMBASE, MEDLINE, APA PsycINFO, SocINDEX, preprint repositories and Google Scholar for studies published post-1996 reporting at least one relevant outcome with an SM measure (PROSPERO: CRD42020179766). Exposures of interest were time on SM, frequency of use, and exposure to health risk behaviour content (HRBC). Screening and risk of bias (RoB) were completed independently by two reviewers using a modified Newcastle Ottawa Scale. Following Cochrane guidance, we conducted synthesis based on direction of effects (benefit vs harm), sign testing and estimation of the proportion of datapoints reporting adverse effects (presented). Meta-analyses will produce average effect sizes (underway).

**Results** Of 13,150 hits, 84 studies were included. Twenty studies were low RoB, 27 moderate, and 38 high. Between studies all outcomes were addressed, the most common being alcohol use (n=25) and sexual risk behaviours (n=20). Twelve studies investigated >1 outcome. For alcohol use, most datapoints reported harmful effects of time spent (88.9%; 95% CI 56.5–98.0%, p=0.04), frequency (79.3%; 61.6–90.2%, p=0.002), exposure to HRBC (100.0%; 75.8–100.0%, p<0.001) and other SM activity measures (81.8%; 52.3–94.9%, p=0.07). Datapoints examining sexual risk behaviours mostly reported harmful effects of time (75.0%; 30.1–95.4%, p=0.63), frequency (91.7%; 64.6–98.5%,

p=0.006), HRBC (100.0%; 43.9–100.0%, p=0.25), and other SM activity (76.2%; 61.5–86.5%, p<0.001). For e-cigarettes (n=8) and antisocial behaviour (n=17), all datapoints reported harmful effects of SM (e-cigarettes 95% CI 67.6–100.0%, p=0.008; antisocial behaviour 95% CI 81.6–100.0%, p<0.001). Across all outcomes, exposure to HRBC on SM was most likely to report a harmful effect (100.0 vs 83.0% for other exposures, p=0.0062). Harmful effects were similar for datapoints at high (85.6%) and low/moderate (86.7%) RoB.

**Conclusion** SM use is adversely associated with adolescent health risk behaviours, particularly exposure to content pertaining to these behaviours. The current evidence base is limited by methodological weaknesses, including a lack of longitudinal data (risking reverse causation) and future robust research to assess causality is needed. Given the increasing targeting of SM by unhealthy commodity industries, available evidence suggests action to reduce the risk adolescents face from exposure to health risk behaviours is needed.

**P08 SOCIAL MEDIA USE AND SOCIAL CONNECTEDNESS IN ADOLESCENCE: RISKS AND BENEFITS**

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**Background** Connectedness to school, family and peers is a key determinant of adolescent mental health. The relationship between social media use (SMU) and social connectedness is complex, potentially improving closeness to peers, whilst possibly diminishing school connectedness. Evidence to date has been piecemeal and contradictory with particular gaps in research on school and family connectedness. In this qualitative study we explore the relationship between SMU and these three areas of social connectedness using the Displacement Hypothesis and the Stimulation Hypothesis as competing theoretical lenses.

**Methods** In-depth paired and individual interviews were conducted with nineteen girls and five boys aged 13–14 years in two English secondary schools. Interviews covered various topics relating to SMU and well-being. Interviews were transcribed verbatim, coded and thematically analysed.

**Results** Thematic analysis of the transcripts identified six themes: (i) 'Time displacement', (ii) '(Mis)Trust', (iii) 'Generational disconnect', (iv) 'Personal and group identity', (v) 'Keeping in touch', and (vi) 'Social obligation'. Results indicated support for both the Displacement and Stimulation Hypotheses. School connectedness was undermined through displacement of time spent on homework and feeling misunderstood by teachers, but enhanced by maintaining relationships with classmates. Family connectedness appeared to be weakened through the same feeling of being misunderstood by parents, not feeling trusted to responsibly navigate SMU or displacing time spent together. However, SMU also provided opportunities for parents to demonstrate trust, to share in entertainment and allowed young people to stay in contact with family members overseas. In line with the Stimulation Hypothesis, connectedness to close friends was strengthened through self-disclosure and a sense of shared identity, but broader peer relationships were undermined by feelings of mistrust.