Parental Perspectives on Children's Screen Time: A Survey of Families at St Paul's CIW Primary School, Cardiff

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***Abstract*—**This paper reports a baseline parental survey on children's screen time, carried out by St Paul's CIW Primary School, Cardiff, as part of its initiative to reduce recreational screen time and increase outdoor, two-generation play. The survey instrument was designed by Ruth Wiltshire, Head Teacher, and its content verified by Dr Selvakumar Ramachandran. It was distributed to all 203 families on roll and returned 40 complete, anonymous responses (19.7% response rate); no personally identifiable information was collected. Eighty-two percent of respondents reported being concerned about their child's screen time (57% "somewhat concerned," 25% "very concerned"). Screen time was markedly higher at weekends than on weekdays: 42.5% of children exceeded three hours of recreational screen time on a typical weekend day, compared with 15.0% on a typical weekday. Tablets (57.5%) and televisions (52.5%) were the most commonly used devices. Most families already apply some combination of time limits, parental controls and screen-free activities, and 77.5% want the school to provide further support, mainly school-led screen-free challenges (72.5%) and ideas for screen-free activities at home (65.0%). Read against the wider evidence on screen-use context, parental mediation and outdoor play, these findings support the school's planned model of outdoor, facilitator-led play as a complement to, rather than a simple restriction of, family screen use.

Index Terms*—screen time, parental survey, primary school, outdoor play, Wales*

I. INTRODUCTION

Concern about children's recreational screen time has become a prominent feature of UK education and public health policy. In March 2026 the UK government issued its first national screen-time guidance for young children, recommending that screen use be avoided altogether under age two, limited to around one hour a day for ages two to five, and kept away from mealtimes and bedtimes (UK Government, 2026). Schools are increasingly asked to support families in applying guidance of this kind, despite limited local evidence on what families already do and what help they actually want.

This survey was commissioned by the school as the baseline stage of its wider initiative to reduce children's screen time and increase outdoor, two-generation play, delivered through a staffed outdoor "Pod" and co-designed with parents, staff and the school's Additional Learning Needs (ALN) specialist. A follow-up survey using the same instrument is planned, to allow a direct before/after comparison.

The present paper reports that baseline instrument's first administration. Its objectives were to: (1) establish current levels of parental concern and recreational screen time among the school's families; (2) document what measures families already take to manage screen use; (3) gauge appetite for school-led support and identify which forms of support parents would value most; and (4) provide a quantitative baseline against which a future endline survey can be compared.

II. LITERATURE REVIEW

Screen-use context, not raw screen time, drives outcomes. A 2024 systematic review and meta-analysis of 100 studies (176,742 children) found that *how* screens are used matters more than how long: programme viewing ($r = -0.16$) and background television ($r = -0.10$) were negatively associated with cognitive outcomes, while co-use with a caregiver was positively associated ($r = 0.14$); solo use and app or game use alone showed no significant association (Mallawaarachchi et al., 2024). This argues against blanket time limits as the sole lever, and toward guidance on *how* families use screens together.

Television and gaming, not "screen time" overall, predict academic performance. A meta-analysis of 30 studies (106,653 children aged 4–18) found television viewing ($\beta = -0.19$) and video gaming ($\beta = -0.15$) negatively associated with academic performance, particularly mathematics, while an undifferentiated "screen time" measure showed no significant association (Adelantado-Renau et al., 2019). This supports asking families *which* devices and activities their children use, as this survey did, rather than total hours alone.

School-based interventions produce small but real reductions. A meta-analysis of 204 studies evaluating behaviour-change techniques found a small overall benefit for screen-time reduction (SMD = 0.116, 95% CI 0.08–0.15), with interventions using goal-setting, feedback and planning techniques performing best (SMD = 0.145) (Jones et al., 2021). A systematic review of randomised controlled trials in preschoolers likewise found that programmes combining repeated parental counselling with concrete alternative-activity guidance were more often effective than child-only or obesity-framed programmes (Rico-González et al., 2025). Together, these reviews set realistic expectations: school-led programmes can expect a modest, not transformative, effect on screen time

itself, and should be built around parent-facing goal-setting and practical alternatives.

Outdoor play may buffer, not just replace, screen time. A cohort study of over 800 children found that frequent outdoor play (≥30 minutes, six to seven days a week) mediated approximately 18% of the association between high screen time at age two and lower communication and daily-living skills at age four (Sugiyama et al., 2023). This gives a developmental mechanism, not only an activity substitute, for programmes such as the school's planned outdoor Pod, which increase structured outdoor play alongside screen-time guidance.

Taken together, the literature suggests an effective school-led response should: (a) address the *context* of screen use (co-viewing, content, device) rather than hours alone; (b) set concrete, parent-facing goals with feedback, rather than relying on information alone; and (c) treat outdoor play as a developmental buffer in its own right. These priorities are reflected in the survey instrument and in the discussion of findings below.

III. METHODS

Instrument design and validation. The survey instrument was developed by Ruth Wiltshire, Head Teacher at St Paul's CIW Primary School, Cardiff, to capture parental confidence, home play and screen-use habits. Content was independently verified by Dr Selvakumar Ramachandran prior to distribution. The final instrument comprised eleven items: child's year group; level of parental concern; recreational screen time on a typical weekday and weekend day; devices regularly used; current measures taken to manage screen time; whether school support was wanted; preferred forms of school support; whether the child had additional educational needs; and frequency of attendance at playgroups or clubs. Closed, tick-all-that-apply and single-select response formats were used throughout; no open-text or identifying fields (name, child's name, class, email, contact details) were included.

Sampling and distribution. The survey was distributed electronically to all 203 families with a child on roll at the school. Responses were collected over a three-day window (7–9 October 2026). Forty valid responses were received, a response rate of 19.7% (40/203).

Ethics and anonymity. The survey collected no personally identifiable information: no names, contact details, or free-text fields capable of identifying a respondent or child were requested, and year group was the only identifying field, recorded at group rather than individual level. Participation was voluntary and anonymous. As an anonymous, non-identifying baseline poll of an existing parent population, it was treated as low-risk service evaluation rather than research requiring individual consent.

Analysis. All 40 responses were analysed. Descriptive statistics (frequencies and percentages) were computed for each item; for tick-all-that-apply items, percentages are of the 40 respondents and sum to more than 100%. To test for association between ordinal variables, Spearman's rank-order correlation (ρ) was computed for key pairs (parental concern, weekday and weekend screen time, year group, playgroup frequency and support preference), with statistical significance set at $p < .05$. Given the sample size (n = 40), correlational results are reported as exploratory and are not adjusted for multiple comparisons.

IV. RESULTS

N = 40 valid responses (19.7% of 203 families; percentages below are of n = 40 unless stated otherwise).

A. Sample Characteristics

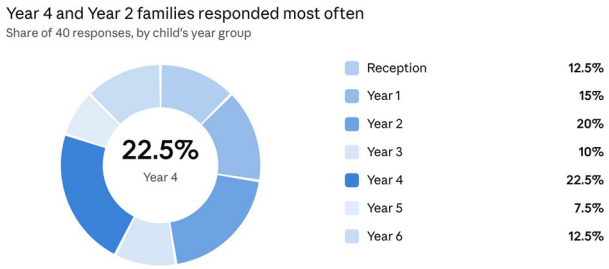


Fig. 1. Survey responses by child's year group (n = 40).

B. Parental Concern About Screen Time

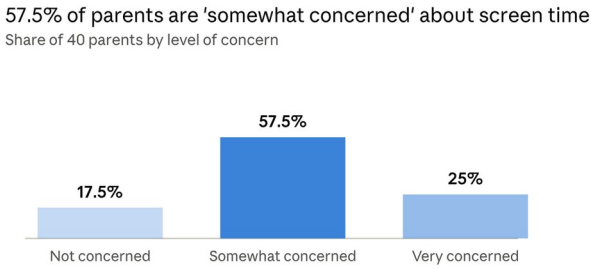


Fig. 2. Parental concern about screen time, by level (n = 40).

In plain terms: the great majority of parents are at least a little concerned, and around one in four say they are very concerned.

C. Recreational Screen Time: Weekday vs. Weekend

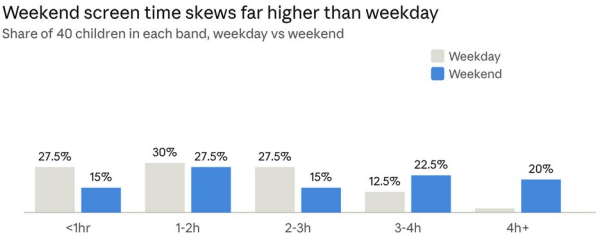


Fig. 3. Recreational screen time on a typical weekday vs. weekend day (n = 40).

In plain terms: far more children are still on screens for long stretches at the weekend than on an ordinary school day, even though most families keep weekday use fairly modest.

D. Devices Regularly Used (Tick All That Apply)

TABLE I

DEVICES REGULARLY USED BY CHILDREN (N = 40)

Device	n	% of respondents
Tablet/iPad	23	57.5%
Television	21	52.5%
Mobile phone	9	22.5%
Laptop/computer	5	12.5%
Games console	5	12.5%

E. Current Measures to Manage Screen Time (Tick All That Apply)

TABLE II

MEASURES PARENTS USE TO MANAGE SCREEN TIME (N = 40)

Measure	n	% of respondents
Time limits on devices	23	57.5%
Parental controls or monitoring apps	21	52.5%
Screen-free family activities	18	45.0%
Restricting access to certain apps/games	18	45.0%

F. Appetite for, and Preferred Forms of, School Support

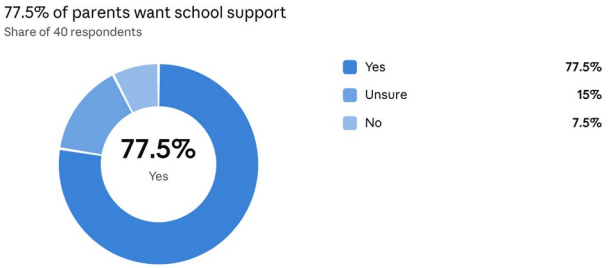


Fig. 4. Whether parents want school support to reduce screen time (n = 40).

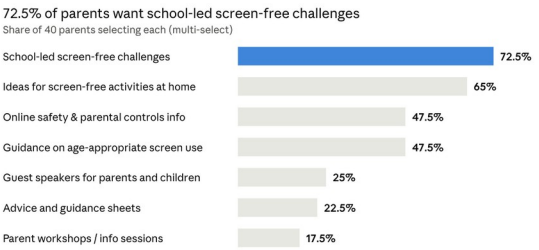


Fig. 5. Parents' preferred forms of school-led support (multi-select; n = 40).

Among the forms of support offered, school-led screen-free challenges and ideas for screen-free activities at home were requested far more often than parent workshops or advice sheets, indicating a preference for structured activity over information provision alone.

G. Additional Educational Needs and Out-of-School Activity

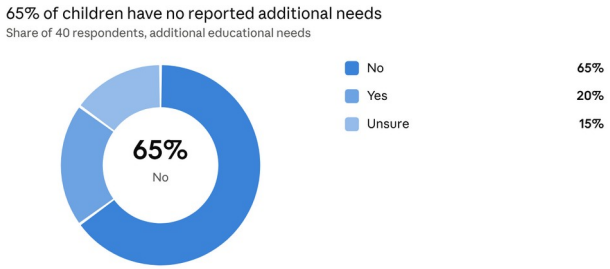


Fig. 6. Whether the child has additional educational needs (n = 40).

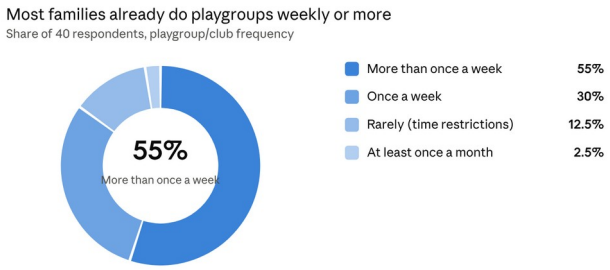


Fig. 7. Frequency of playgroup or club attendance (n = 40).

H. Correlational Analysis (Spearman's Rank Correlation)

To see which survey answers tend to move together, we calculated Spearman's rank correlation (written ρ, said “rho”) for every pair among seven key items (n = 40). In plain terms, ρ runs from -1 to +1: a positive ρ means two things tend to rise together (for example, older children and more screen time), a negative ρ means one rises as the other falls, and a ρ near 0 means no real relationship either way. The p-value is the chance of seeing a correlation this strong purely by luck if there were really no relationship; by convention, p below .05 (less than a 1-in-20 chance) counts as a real pattern rather than a fluke. Results are shown in the matrix below: cell shade shows the direction (green = positive, red = negative) and strength of each pairing, and an outlined cell marked *reached $p < .05$.*

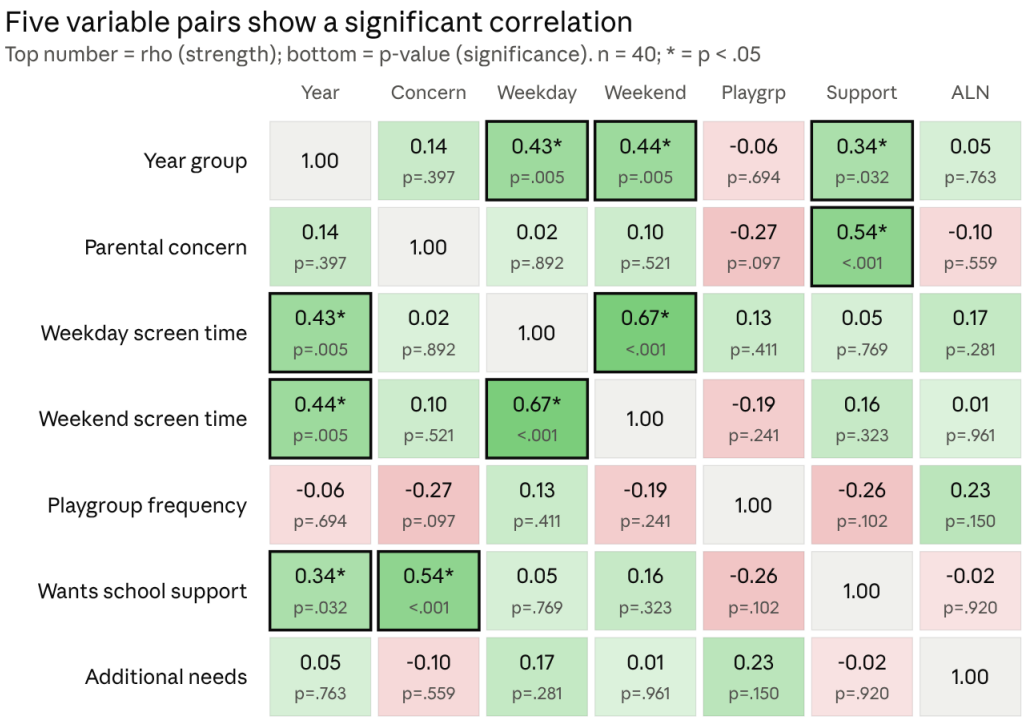


Fig. 8. Spearman's rank correlation matrix across seven survey items (n = 40).

Five pairings reached statistical significance (Figure 8). Weekday and weekend screen time were strongly linked ($\rho = 0.667$, $p < .001$). In plain terms: children who are on screens more during the week are also on screens more at weekends, rather than a busy week being balanced out by a quiet weekend. Parental concern was moderately linked to wanting school support ($\rho = 0.539$, $p < .001$): worried parents are, in practice, the ones asking for help, which backs up the 72.5% figure for school-led screen-free challenges as a genuine, concern-driven priority rather than a generically popular tick-box. Year group was moderately linked to weekday screen time ($\rho = 0.435$, $p = .005$), weekend screen time ($\rho = 0.439$, $p = .005$) and wanting school support ($\rho = 0.339$, $p = .032$): older children are allowed more screen time, and their parents are correspondingly more likely to want the school's help. Notably, parental concern was **not** significantly linked to the child's own reported screen time (weekday $\rho = 0.022$, $p = .892$; weekend $\rho = 0.104$, $p = .521$). In plain terms, how worried a parent is does not predict how much screen time their own child actually has; concern seems to reflect general attitudes toward screens rather than a read on that specific child's habits. Playgroup or club frequency showed no significant link to screen time in either direction, though the weekend figure trended negative as expected ($\rho = -0.190$, $p = .241$); with only 40 responses, this pattern is too weak to call either way.

All figures above are Spearman rank-order correlations; p-values are two-tailed and have not been adjusted for running several comparisons at once (testing many pairs at the same time raises the chance that one looks significant purely by luck). The five significant results above should therefore be read as a useful early signal, not firm proof, given the exploratory nature of this baseline survey.

V. DISCUSSION

Concern is high, but so is weekend-specific exposure. Eighty-two percent of parents expressed concern about their child's screen time, consistent with the climate of national attention reflected in the UK's 2026 screen-time guidance. However, concern does not map neatly onto current behaviour: weekday screen time was broadly in line with guidance (57.5% of children under two hours), but weekend screen time was substantially higher (42.5% at three or more hours). This weekday/weekend gap suggests unstructured time, rather than routine daily habits, is the primary driver of excess screen time in this cohort, a pattern the literature's emphasis on *context* over raw hours (Mallawaarachchi et al., 2024) would predict, and one a structured outdoor "Pod" offering weekend or holiday activity could directly address. This disconnect is echoed in the correlational analysis (Section IV-H): parental concern showed no significant association with the child's own reported screen time ($\rho = 0.022$–0.104, both $p > .5$). In plain terms, how concerned a parent is reflects their general attitude toward screens, not a read on their own child's actual usage.

Families are already engaged, not passive. Only 35% of children have no personal device at all, yet most families report active management: time limits (57.5%), parental controls (52.5%) and screen-free family activities (45.0%) were all common. This is a population already motivated to act, which is favourable: Rico-González et al. (2025) found parent-facing

programmes most effective when they built on existing parental engagement rather than starting from zero.

The appetite for support is specific, not generic. Parents' top two requests (school-led screen-free challenges, 72.5%, and ideas for screen-free activities at home, 65.0%) are precisely the intervention type with the clearest, if modest, trial support: goal-setting and planning techniques, concrete alternative activities and externally-led structure (Jones et al., 2021; Rico-González et al., 2025). Generic information provision (parent workshops, 17.5%; advice sheets, 22.5%) ranked lowest, suggesting families want structured activity, not more information.

Outdoor play has direct developmental, not only substitutional, relevance. Given that weekend screen time is where excess use concentrates, and that outdoor play has been shown to mediate a meaningful share of the association between early screen time and developmental outcomes (Sugiyama et al., 2023), the school's planned outdoor Pod model is well targeted: it answers both the *when* (weekends and unstructured time) and the *why* (a plausible developmental mechanism, not just distraction) of these findings.

Additional needs and offline activity. Twenty percent of respondents reported a child with additional educational needs (15.0% unsure), underscoring the importance of an ALN-specific protocol and ALN specialist involvement in any school-led response. Most families (55.0%) already take their child to playgroups or clubs more than once a week, though 12.5% reported doing so rarely, citing time restrictions: a small but identifiable group worth reaching deliberately through family engagement outreach.

VI. LIMITATIONS

This survey has several limitations. First, the response rate (19.7%) is modest, and non-response bias is likely: parents who responded may be more concerned about, or more engaged with, screen-time issues than non-respondents, which would inflate the apparent levels of concern and support demand reported here. Second, all measures are self-reported by parents, with no independent verification of actual screen time or device use, and tick-all-that-apply items are susceptible to recall and social-desirability bias. Third, the survey is cross-sectional and descriptive; it establishes a baseline but supports no causal or before/after claims until compared with a future endline survey using the same instrument. Fourth, findings are specific to this school's population, and this administration was in English only, which may under-represent the views of EAL (English as an additional language) families. Finally, the survey did not collect data on the child's exact age in months, exact hours of screen time (response bands were used instead), or household composition, limiting the granularity of sub-group analysis possible at this stage.

VII. CONCLUSION AND RECOMMENDATIONS

This baseline survey establishes that parental concern about screen time is high (82.5%), that current management strategies are already widespread but concentrate on weekday routines, and that excess recreational screen time is concentrated at weekends. Parents want school involvement (77.5%) and are specific about what would help: structured, school-led screen-free activity rather than information alone. These findings, read alongside evidence that screen-use *context* and *outdoor play* both independently shape developmental outcomes, support proceeding with the school's planned model of an outdoor, facilitator-led Pod as its central mechanism, complemented by concrete at-home activity ideas rather than generic parent workshops.

Recommendations for delivery:

1) Prioritise the design of school-led, outdoor screen-free challenges and take-home activity ideas over workshop-style information sessions, reflecting both parent demand and the stronger trial evidence for structured, goal-based formats.
2) Target weekend and holiday periods specifically, where the weekday/weekend gap in this data is largest.
3) Retain and, where possible, extend ALN-specific and EAL-translated versions of this instrument for a future endline survey, to enable disaggregated pre/post comparison.
4) Track the small (12.5%) group of families reporting limited offline/playgroup activity as a priority group for family engagement outreach.

ABOUT THE SCHOOL AND AUTHORS

St Paul's CIW Primary School serves 203 children in Grangetown, Cardiff. Its vision is “an inclusive, diverse and supportive environment where teachers, parents and members of the community positively impact on children's learning.” Estyn's most recent inspection independently found the school “diverse, welcoming and inclusive” and “at the heart of its local community.”

Ruth Wiltshire is the school's Head Teacher. Estyn's most recent inspection rated St Paul's provision for pupils with additional learning needs “highly effective,” reflecting her focus on inclusive, need-led education. She believes children need a healthy balance of screen-based technology and hands-on, real-world activity. Email: ruth.wiltshire2@cardiff.gov.uk

Dr Selvakumar Ramachandran FBCS FRSA teaches Software Engineering, Artificial Intelligence, and Social Innovation at the University of Oxford's Department for Continuing Education (Oxford Lifelong Learning). His research looks at finding the right balance between Artificial Intelligence and Natural Intelligence: how AI-driven tools and real, in-person human activity can work together rather than one crowding out the other. Email: selvakumar.ramachandran@conted.ox.ac.uk

REFERENCES

[1] M. Adelantado-Renau, D. Moliner-Urdiales, I. Cavero-Redondo, M. R. Beltran-Valls, V. Martínez-Vizcaíno, and C. Álvarez-Bueno, “Association between screen media use and academic performance among children and adolescents: A systematic review and meta-analysis,” *JAMA Pediatrics*, vol. 173, no. 11, pp. 1058–1067, 2019. https://doi.org/10.1001/jamapediatrics.2019.3176

[2] A. Jones, B. Armstrong, R. G. Weaver, H. Parker, L. von Klinggraeff, et al., “Identifying effective intervention strategies to reduce children's screen time: A systematic review and meta-analysis,” *International Journal of Behavioral Nutrition and Physical Activity*, vol. 18, Art. 126, 2021. https://doi.org/10.1186/s12966-021-01189-6

[3] S. Mallawaarachchi, J. Burley, M. Mavilidi, et al., “Early childhood screen use contexts and cognitive and psychosocial outcomes: A systematic review and meta-analysis,” *JAMA Pediatrics*, vol. 178, no. 10, pp. 1017–1026, 2024. https://doi.org/10.1001/jamapediatrics.2024.2620

[4] M. Rico-González, E. Holsbrekken, R. Martín-Moya, and L. P. Ardigò, “Interventions for reducing screen time of preschoolers: A systematic review of randomized controlled trials,” *Journal of Primary Care & Community Health*, vol. 16, pp. 1–10, 2025. https://doi.org/10.1177/21501319241306699

[5] M. Sugiyama, K. J. Tsuchiya, Y. Okubo, et al., “Outdoor play as a mitigating factor in the association between screen time for young children and neurodevelopmental outcomes,” *JAMA Pediatrics*, vol. 177, no. 3, p. e225356, 2023. https://doi.org/10.1001/jamapediatrics.2022.5356

[6] UK Government, “Government issues first national screen-time guidance for under-fives,” Guidance, panel led by R. de Souza and R. Viner, Mar. 27, 2026.