

Supplementary file 12. Pupils' dental caries outcomes: associations with school Types – full models

Table 1. Association between school Type (4-group Typology) and dental outcomes

Coefficient	Presence of dental caries symptoms in the last 3 months Odds Ratio	Number of dental caries symptoms in the last 3 months Incidence Rate Ratio	Past dental caries treatment Odds Ratio
Pupils	1,825	1,825	1,825
Schools	36	36	36
SFS Type: 2	1.10 (0.51-2.39) p = 0.806	0.80 (0.55-1.15) p = 0.224	1.40 (0.67-2.92) p = 0.374
SFS Type: 3	0.98 (0.73-1.33) p = 0.916	0.97 (0.85-1.10) p = 0.597	0.94 (0.72-1.24) p = 0.681
SFS Type: 4	1.90 (0.93-3.89) p = 0.079	1.27 (0.94-1.70) p = 0.118	1.16 (0.60-2.22) p = 0.664
Sex: Male	0.77 (0.63-0.96) p = 0.018	0.81 (0.74-0.89) p < .001	0.80 (0.65-0.98) p = 0.032
Sex: Other	1.00 (0.56-1.80) p = 0.996	1.01 (0.81-1.26) p = 0.937	0.62 (0.36-1.08) p = 0.094
Age	1.01 (0.75-1.36) p = 0.946	0.89 (0.78-1.01) p = 0.063	0.71 (0.53-0.94) p = 0.017
Ethnicity: Asian/Asian British	0.92 (0.67-1.26) p = 0.595	1.05 (0.92-1.20) p = 0.494	1.05 (0.78-1.41) p = 0.761
Ethnicity: Black/African/Caribbean/Black British	0.65 (0.41-1.04) p = 0.071	0.84 (0.68-1.04) p = 0.116	0.55 (0.34-0.89) p = 0.014
Ethnicity: Mixed/Multiple	0.71 (0.46-1.10) p = 0.123	0.90 (0.74-1.10) p = 0.318	0.94 (0.61-1.44) p = 0.774
Ethnicity: Other	1.00 (0.56-1.77) p = 0.987	1.10 (0.88-1.39) p = 0.407	0.90 (0.52-1.54) p = 0.690
IMD Quintile: 2	1.07 (0.77-1.49) p = 0.680	0.82 (0.71-0.95) p = 0.006	0.74 (0.54-1.00) p = 0.053
IMD Quintile: 3	1.01 (0.72-1.42) p = 0.942	0.86 (0.75-0.99) p = 0.042	0.66 (0.48-0.91) p = 0.012
IMD Quintile: 4	0.92 (0.64-1.31) p = 0.632	0.94 (0.81-1.09) p = 0.404	0.81 (0.57-1.14) p = 0.227
IMD Quintile: 5	1.14 (0.79-1.65) p = 0.474	0.99 (0.85-1.15) p = 0.875	0.84 (0.59-1.19) p = 0.327
Percent BME	1.00 (0.99-1.00) p = 0.353	1.00 (0.99-1.00) p = 0.024	1.00 (0.99-1.00) p = 0.479
Percent FSM	1.00 (0.98-1.01) p = 0.929	1.00 (1.00-1.01) p = 0.185	1.01 (0.99-1.02) p = 0.363
School Level IDACI	0.99 (0.98-1.00) p = 0.183	0.99 (0.99-1.00) p = 0.005	0.99 (0.98-1.00) p = 0.101
Sixth Form: Yes	1.34 (0.99-1.83) p = 0.057	1.16 (1.02-1.32) p = 0.029	0.99 (0.74-1.31) p = 0.938
Provision: External	1.43 (1.09-1.86) p = 0.009	1.22 (1.09-1.37) p = 0.001	0.94 (0.73-1.21) p = 0.647
Year collected: 2020/2021	0.72 (0.46-1.11) p = 0.136	1.00 (0.82-1.21) p = 0.997	0.97 (0.64-1.47) p = 0.875
Year collected: 2021/2022	0.91 (0.71-1.17) p = 0.469	0.96 (0.87-1.07) p = 0.480	0.71 (0.56-0.89) p = 0.003
Year: 9	0.86 (0.45-1.65) p = 0.656	1.09 (0.83-1.44) p = 0.518	2.03 (1.10-3.75) p = 0.024
Year: 10	0.89 (0.35-2.25) p = 0.805	1.32 (0.89-1.95) p = 0.168	3.33 (1.38-8.04) p = 0.008
Brushing Frequency: At least twice a day	0.70 (0.51-0.94) p = 0.019	0.79 (0.71-0.89) p < .001	0.73 (0.56-0.97) p = 0.030
Home flouridation level	1.37 (0.55-3.40) p = 0.495	1.06 (0.74-1.51) p = 0.754	0.69 (0.30-1.60) p = 0.389

Coefficient	Presence of dental caries symptoms in the last 3 months Odds Ratio	Number of dental caries symptoms in the last 3 months Incidence Rate Ratio	Past dental caries treatment Odds Ratio
School flouridation level	0.67 (0.25-1.82) p = 0.436	0.96 (0.65-1.42) p = 0.837	1.08 (0.43-2.72) p = 0.864

Table 2. Association between school Type (6-group Typology) and dental outcomes

Coefficient	Presence of dental caries symptoms in the last 3 months Odds Ratio	Number of dental caries symptoms in the last 3 months Incidence Rate Ratio	Past dental caries treatment Odds Ratio
Pupils	1,825	1,825	1,825
Schools	36	36	36
SFS/SFP Type: 1 B	1.04 (0.71-1.50) p = 0.851	0.98 (0.84-1.14) p = 0.789	1.41 (1.00-2.00) p = 0.053
SFS/SFP Type: 2 B	1.13 (0.52-2.48) p = 0.760	0.78 (0.54-1.13) p = 0.196	1.32 (0.62-2.79) p = 0.467
SFS/SFP Type: 3 A	1.04 (0.71-1.51) p = 0.854	0.93 (0.79-1.09) p = 0.386	0.96 (0.68-1.36) p = 0.810
SFS/SFP Type: 3 B	0.96 (0.68-1.36) p = 0.840	0.98 (0.85-1.14) p = 0.815	1.07 (0.77-1.48) p = 0.684
SFS/SFP Type: 4 A	1.91 (0.93-3.92) p = 0.080	1.26 (0.94-1.70) p = 0.122	1.31 (0.67-2.54) p = 0.433
Sex: Male	0.78 (0.63-0.96) p = 0.020	0.81 (0.74-0.89) p < .001	0.82 (0.67-1.00) p = 0.054
Sex: Other	1.00 (0.56-1.80) p = 0.996	1.01 (0.81-1.26) p = 0.927	0.63 (0.37-1.10) p = 0.107
Age	1.01 (0.75-1.36) p = 0.935	0.89 (0.78-1.01) p = 0.060	0.71 (0.53-0.94) p = 0.018
Ethnicity: Asian/Asian British	0.92 (0.67-1.25) p = 0.581	1.05 (0.92-1.20) p = 0.466	1.04 (0.77-1.41) p = 0.789
Ethnicity: Black/African/Caribbean/Black British	0.65 (0.41-1.04) p = 0.072	0.84 (0.68-1.04) p = 0.117	0.56 (0.35-0.91) p = 0.018
Ethnicity: Mixed/Multiple	0.71 (0.46-1.10) p = 0.124	0.90 (0.74-1.10) p = 0.321	0.93 (0.61-1.43) p = 0.757
Ethnicity: Other	1.00 (0.56-1.77) p = 0.990	1.10 (0.87-1.39) p = 0.411	0.90 (0.52-1.55) p = 0.704
IMD Quintile: 2	1.06 (0.77-1.48) p = 0.714	0.82 (0.72-0.95) p = 0.008	0.72 (0.52-0.98) p = 0.038
IMD Quintile: 3	1.00 (0.71-1.41) p = 0.980	0.87 (0.75-1.00) p = 0.050	0.66 (0.48-0.91) p = 0.012
IMD Quintile: 4	0.91 (0.64-1.31) p = 0.619	0.94 (0.81-1.09) p = 0.418	0.81 (0.57-1.14) p = 0.225
IMD Quintile: 5	1.14 (0.79-1.65) p = 0.473	0.99 (0.85-1.15) p = 0.889	0.84 (0.60-1.20) p = 0.341
Percent BME	1.00 (0.99-1.00) p = 0.361	1.00 (0.99-1.00) p = 0.021	1.00 (0.99-1.00) p = 0.477
Percent FSM	1.00 (0.98-1.01) p = 0.908	1.00 (1.00-1.01) p = 0.195	1.00 (0.99-1.02) p = 0.913
School Level IDACI	0.99 (0.98-1.01) p = 0.260	0.99 (0.98-1.00) p = 0.009	1.00 (0.98-1.01) p = 0.590
Sixth Form: Yes	1.34 (0.99-1.83) p = 0.060	1.16 (1.02-1.32) p = 0.026	1.03 (0.77-1.37) p = 0.842
Provision: External	1.43 (1.10-1.87) p = 0.008	1.21 (1.08-1.36) p = 0.001	0.91 (0.71-1.17) p = 0.465
Year collected: 2020/2021	0.70 (0.45-1.11) p = 0.134	1.01 (0.82-1.23) p = 0.936	1.06 (0.69-1.64) p = 0.787
Year collected: 2021/2022	0.91 (0.71-1.17) p = 0.462	0.96 (0.87-1.07) p = 0.463	0.71 (0.56-0.89) p

Coefficient	Presence of dental caries symptoms in the last 3 months Odds Ratio	Number of dental caries symptoms in the last 3 months Incidence Rate Ratio	Past dental caries treatment Odds Ratio
			= 0.003
Year: 9	0.86 (0.45-1.64) p = 0.645	1.10 (0.84-1.44) p = 0.508	2.03 (1.10-3.75) p = 0.024
Year: 10	0.88 (0.35-2.22) p = 0.788	1.32 (0.89-1.96) p = 0.161	3.30 (1.36-8.00) p = 0.008
Brushing Frequency: At least twice a day	0.70 (0.52-0.94) p = 0.020	0.79 (0.71-0.89) p < .001	0.75 (0.56-0.98) p = 0.039
Home flouridation level	1.36 (0.55-3.36) p = 0.512	1.07 (0.75-1.52) p = 0.729	0.65 (0.28-1.52) p = 0.318
School flouridation level	0.67 (0.25-1.81) p = 0.428	0.97 (0.65-1.43) p = 0.860	1.19 (0.47-3.02) p = 0.711