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## OBJECTIVES

- Evaluate the associations between ethnic background and child TV viewing at age 2, 3, 4, 6, and 9 years;
- Evaluate moderation of this association by family socioeconomic status at age 2, 3, 4, 6, and 9 years;
- Assess the association between ethnic background and child TV viewing trajectory.

## BACKGROUND

To prevent childhood overweight, interventions can focus on children's television (TV) viewing. Studies support that ethnic minority groups spend more time watching TV than their native counterparts. Little is known about whether and how ethnic differences in television viewing time change from early to late childhood.

## CONCLUSIONS

- Children from ethnic minority groups are at an increased risk for high levels of TV viewing compared with native Dutch children, independent of family socioeconomic position.
- TV viewing trajectories are different for the ethnic subgroups and at each educational level.
- Interventions aimed to reduce TV viewing time should target children from ethnic minority groups.

## METHODS

A total of 4,833 children from the Generation R Study was included. We used parent-reported child TV viewing time at age 2, 3, 4, 6, and 9 years. Using generalized logistic mixed models, odds ratios (95%CI) of watching TV  $\geq 1$  hour/day for Moroccan, Turkish and Surinamese children (reference group: native Dutch children) were computed. Effect modification by family socioeconomic status was assessed.

## RESULTS

Over 25% of the children belonged to a ethnic minority group. The percentage of children watching TV  $\geq 1$  hour/day increased from age 2 to 9 years for all children (Table 1).

Table 1. Characteristics of the Study Population (n=4833)

	Total N=4833	Ethnic Background			
		Dutch n=3561	Turkish n=498	Moroccan n=317	Surinamese n=457
Family Characteristics					
Maternal educational level (%)*					
Low	20.3	12.8	52.5	47.1	30.4
Middle	29.8	26.4	34.4	36.6	48.6
High	49.9	60.8	13.1	16.3	21.0
Child Characteristics					
Gender, boy (%)					
	51.1	50.4	52.6	50.2	55.6
Television viewing time $\geq 1$ hour/day (%)*					
2 years	12.3	10.0	17.4	23.9	30.2
3 years	30.9	27.5	47.1	50.0	46.7
4 years	36.8	32.4	54.5	56.5	54.3
6 years	57.6	52.9	70.8	75.6	73.4
9 years	72.8	69.8	84.8	80.1	89.0

\* P < 0.05

Ethnic differences changed according to educational level at each age. Surinamese children were more likely to watch TV  $\geq 1$  hour/day compared with native Dutch children at all ages, with the highest risk at age 9 years (Table 2).

Table 2. Associations of Ethnic Background with TV viewing time at each age, OR (95%CI) with reference group 'Dutch children' (n=4833)

		Measuring time point				
		2 years	3 years	4 years	6 years	9 years
High	Moroccan	2.25 (0.62, 8.21)	2.82 (1.03, 7.77)	5.93 (2.38, 14.8)	2.40 (1.11, 5.22)	2.01 (0.76, 5.33)
	Surinamese	3.45 (1.70, 7.00)	2.53 (1.36, 4.71)	3.02 (1.76, 5.18)	2.43 (1.47, 4.02)	6.61 (2.53, 17.3)
	Turkish	1.11 (0.32, 3.88)	2.00 (0.91, 4.42)	2.71 (1.34, 5.47)	1.92 (1.00, 3.70)	2.64 (1.06, 6.58)
Middle	Moroccan	1.90 (0.85, 4.24)	1.49 (0.77, 2.90)	1.48 (0.82, 2.70)	1.39 (0.83, 2.33)	1.13 (0.54, 2.34)
	Surinamese	2.95 (1.78, 4.90)	1.53 (0.94, 2.49)	1.69 (1.12, 2.56)	1.56 (1.08, 2.26)	1.83 (1.06, 3.17)
	Turkish	1.76 (0.98, 3.14)	1.67 (0.99, 2.80)	1.86 (1.16, 2.98)	2.03 (1.30, 3.17)	1.54 (0.78, 3.04)
Low	Moroccan	0.84 (0.39, 1.79)	0.81 (0.41, 1.59)	0.83 (0.47, 1.44)	1.92 (1.05, 3.50)	0.65 (0.29, 1.45)
	Surinamese	1.20 (0.61, 2.36)	0.83 (0.43, 1.61)	0.83 (0.47, 1.48)	1.75 (0.99, 3.10)	1.55 (0.62, 3.92)
	Turkish	0.43 (0.22, 0.83)	0.64 (0.39, 1.06)	0.78 (0.49, 1.22)	0.84 (0.56, 1.28)	0.94 (0.46, 1.92)

TV viewing trajectories were different for ethnic subgroups at each educational level (figures A, B, C).

