

Predicting Child Safety Practices: Maternal Age as an Overlooked Variable

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Importance of Safety Practices



Unintentional injuries sustained in the home are among the most common causes of infant and childhood death.

In-home unintentional injuries among preschool children can be prevented with the use of safety devices (e.g. child safety gates; Hapgood et al., 2000; Mulvaney & Kendrick, 2010). Few other parental characteristics have been examined in relation to the use of child safety equipment.

Low SES has been linked to decreased use of child safety equipment within the home (Hapgood et al., 2000; Mulvaney & Kendrick, 2010). Few other parental characteristics have been examined in relation to the use of child safety equipment.

Mother characteristics

We suspect that maternal personality (specifically conscientiousness), is one factor that might play a role in mothers' safety behaviours. In addition, conscientiousness has been shown to increase with age, so it is likely that mother age is another important variable to consider.

The goal of this study was to see if mother characteristics such as the five dimensions of personality and age would predict mother's safety practices after other predictors (SES and child characteristics) were accounted for.

Method

Parents with children between 1 and 3-years-old were recruited parents then completed an online survey.

Sample. Cross sectional parental reports of walking attainment were available from 485 full-term healthy 1- to 3-year-olds. Of these, 440 provided us with complete data on all covariates (53% male).

Sample Characteristics

Continuous Variables	Mean	SD	Minimum	Maximum
Maternal Age (years)	28.7	4.7	17	42
Gestational Age (weeks)	39.9	1.3	36.0	42.6
Safety Practices (percentage of safety items used)	55.5	16.4	8.3	100

Note. n = 440 for all variables.

Safety practices were assessed by asking mothers to indicate whether each of 13 different safety devices, had been used before the child first walked (0 = *not used*, 1 = *used*). A safety practices score was obtained by calculating the proportion of items used by the parent.

Regression Analysis was used to examine the influence of maternal age and mother personality as predictors for practices. Each predictor was retained through all steps of the regression analysis regardless of significance.

Covariates. Other predictors of the outcome, overall safety score, included: **gestational age, gender, style of home, SES, maternal education, and number of children.**

In Home Safety Practices as Predicted by SES, Maternal, and Child Characteristics

Variable	β	F
Intercept	43.3	44.1*
Step 1: SES Characteristics		2.8*
Subjective SES	-0.2	0.2
Education	-0.5	1.2
Housing Style	-1.3	6.5*
Step 2: Child Characteristics		2.0
Gender	-3.1	3.9*
Gestational Age	-0.4	0.6
Number of Children in Household	1.2	1.6
Step 3: Mother Characteristics		3.6*
Extraversion	0.6	1.2
Emotional Stability	1.3	3.6
Agreeableness	-1.0	1.5
Conscientiousness	2.2	9.5*
Openness	< -0.1	0.0
Mother Age	0.4	4.1*

Note. Adjusted F(model) = 3.07* (12, 427); * p < .05.

The five personality dimensions were entered as a group. Only **conscientiousness was found to be related to safety practices**, $F(12, 427) = 9.50$, $p = .00$. That is, as mothers' degree of conscientiousness increased, the number of safety items used in the home also increased.

Mother age was the final predictor entered into the model. Maternal age was a significant predictor of safety practices ($F(12, 427) = 4.1$, $p < .05$). **As maternal age increased the number of safety items also increased.**

Maternal Age & Personality Predicts Safety Behaviour

We are among the first to find evidence of a relationship between maternal characteristics and age each played a significant role in the number of safety devices used. Mother age is not just a proxy for conscientiousness because the age effect on device use remained essentially unchanged after removing conscientiousness variance.

Moreover, mother age can not be explained by its association with SES components like more education and higher income because those effects have been removed as well.

The processes implicated by the maternal age construct are unclear, and the present results argue for studying it more carefully.

