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The Effect of Parent Education on Children's Activity Preference, Self-Efficacy, and Screen Time

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ABSTRACT

• This correlational study strived to identify the relationship between parents' education (PE) and their children's self-efficacy (SE), activity preference (AP), and screen time (ST). Parent education was found to be positively correlated with activity preference (along with outdoor time (OT)) and negatively correlated with screen time. Self-efficacy was also found to be negatively correlated with screen time.

BACKGROUND

•Direct relationship between inactivity and the time children spend using a screen each day, whether through TV, video games, or the internet (Rideout & Hamel, 2006).

•Education level of parents can have a significant effect on their child's development and self-efficacy (Bandura et. al, 2001).

•On average, a child with parents who have a high school diploma will spend significantly more time watching TV in a typical day than children whose parents are college graduates (Rideout and Hamel (2006).

PURPOSE

•Identify relationship between parents' level of education and their children's AP, SE, and ST.

•Discuss implication that parent education serves as a preventive and vital step in the process of achieving a healthier lifestyle.

HYPOTHESES

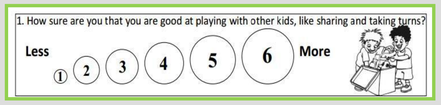
•Parental education will have a significant relationship with children's health, measured through AP, ST, and SE.

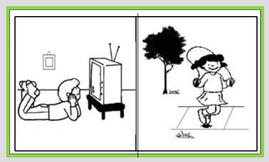
• As PE↗, AP↗ • As PE↗, SE↗ •As PE↗, ST↘

MEASUREMENTS

•ST measured by asking parents: "How much time per day does your child spend watching TV, playing video games, or working on the computer?"

•SE measured using worksheet that asked children to rate how well they thought they performed certain tasks by coloring shapes of different sizes.





•AP measured by asking children to circle one activity

LEGEND

AP: Activity Preference
ST: Screen Time
PE: Parent Education
SE: Self-Efficacy
OT: Outdoor Time

MATERIALS AND METHODS

Materials

• Parent surveys: a self-evaluation and an evaluation of their child.
• Kindergarteners and first graders completed activity preference measures during class time, using graphs or worksheets.
• These were adapted from measures created by Janie Leary (2008).

Methods

• AP coding: active activity = 1 sedentary activity = 0
0-5 – sedentary 6-9 – neutral 10-15 – active

• PE coding:
  • 4- college 3-in college 2-some college 1-high school/GED
  • Highest education = highest level between the two parents.

• ST coding:
  • Method 1: (0) 0 mins., (1) 5-59, (2) 60-119, (3) 120-179, (4) 180-240
  • Method 2: minutes spent outside per day (on average)

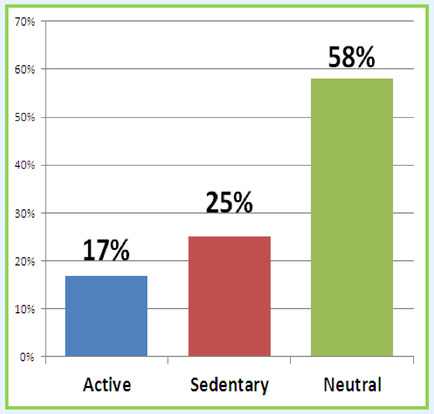
• Correlational analysis was employed to assess relationships between child and parent scores.

Participants

• 310 children in Holland area participated in study: 159 were in kindergarten and 151 were in first grade.
• 70 children were female and 84 were male.
• 108 students identified as Caucasian, 26 as Hispanic, 9 as Asian, 2 as African American, and 7 as mixed race.
• 165 Mothers and 144 fathers.

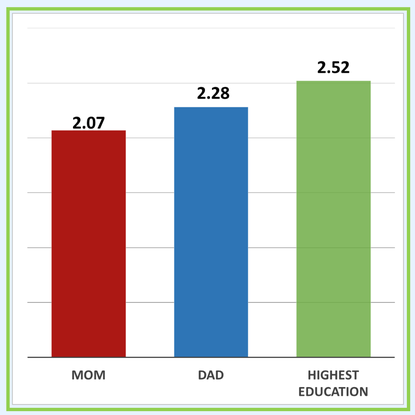
ANALYSIS

Kid's Activity Preference



Overall distribution of Kid's AP

Parent Education



Average PE level

		Child Activity Preference	Child Self-Efficacy	Child Screen Time (M1)	Child Screen Time (M2)	Child Outdoor Time
Mom Education	Pearson Correlation	**.408***	.175	---	.139	.171
	Significance (2-tailed)	.048	.194	---	.158	.081
	N	24	57	---	105	105
Dad Education	Pearson Correlation	-.029	.158	---	.079	.065
	Significance (2-tailed)	.894	.205	---	.404	.492
	N	23	66	---	113	113
Highest Education	Pearson Correlation	**.358***	.187	**-.250***	.080	**.215***
	Significance (2-tailed)	.041	.086	.013	.343	.010
	N	33	85	94	142	142

*Correlation is significant at .05 level (2-tailed)

RESULTS

- Mean for highest education = 2.52 (SD=1.24), mean for mothers' education = 2.07 (SD=1.24), mean for fathers' education = 2.28 (SD=1.14). Significant positive correlation between mothers' education and AP of $r(22) = 0.408$, $p<.05$, as well as highest education and AP of $r(31) = 0.358$, $p<.05$
- Unexpected: Highest education positively correlated with child outdoor time, $r(141) = 0.215$, $p<.05$
- Method 1 of coding screen time (grouped into hours instead of minutes)
  - Highest education and ST significantly negatively correlated, -.250, p=.013
  - SE statistically significantly negatively correlated with ST, -.250, p=.010

CONCLUSIONS

- Mothers may spend more time with their children (traditionally, more mothers are stay-at-home parents) so they might have a larger influence on their child.
- While mothers' and fathers' level of education was positively correlated with child's self-efficacy, these relationships were not significant.
- PE was found to be directly beneficial to children's AP and ST, and indirectly beneficial to their SE.
- A higher level of parent education can greatly improve a child's well-being.

REFERENCES

Bandura, A., Barbaranelli, C., Caprara, G., Pastorelli, C. (2001). Self-efficacy as shapers of children's aspirations and career trajectories. Child Development, 72(1), 187-206.

Leary, J. M., Adams, D., Gaines, S. K., Wold, J. L., & Mink, M. (2008). Measurements of activity preferences of preschoolers and caregivers. Education and Health, 26(4), 67-69.

Rideout, V., & Hamel, H. (2006). The media family: Electronic media in the lives of infants, toddlers, preschoolers and their parents. Kaiser Family Foundation, 1-33.