



Ethnicity and Negative Post-Operative Behavioral Changes



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Background

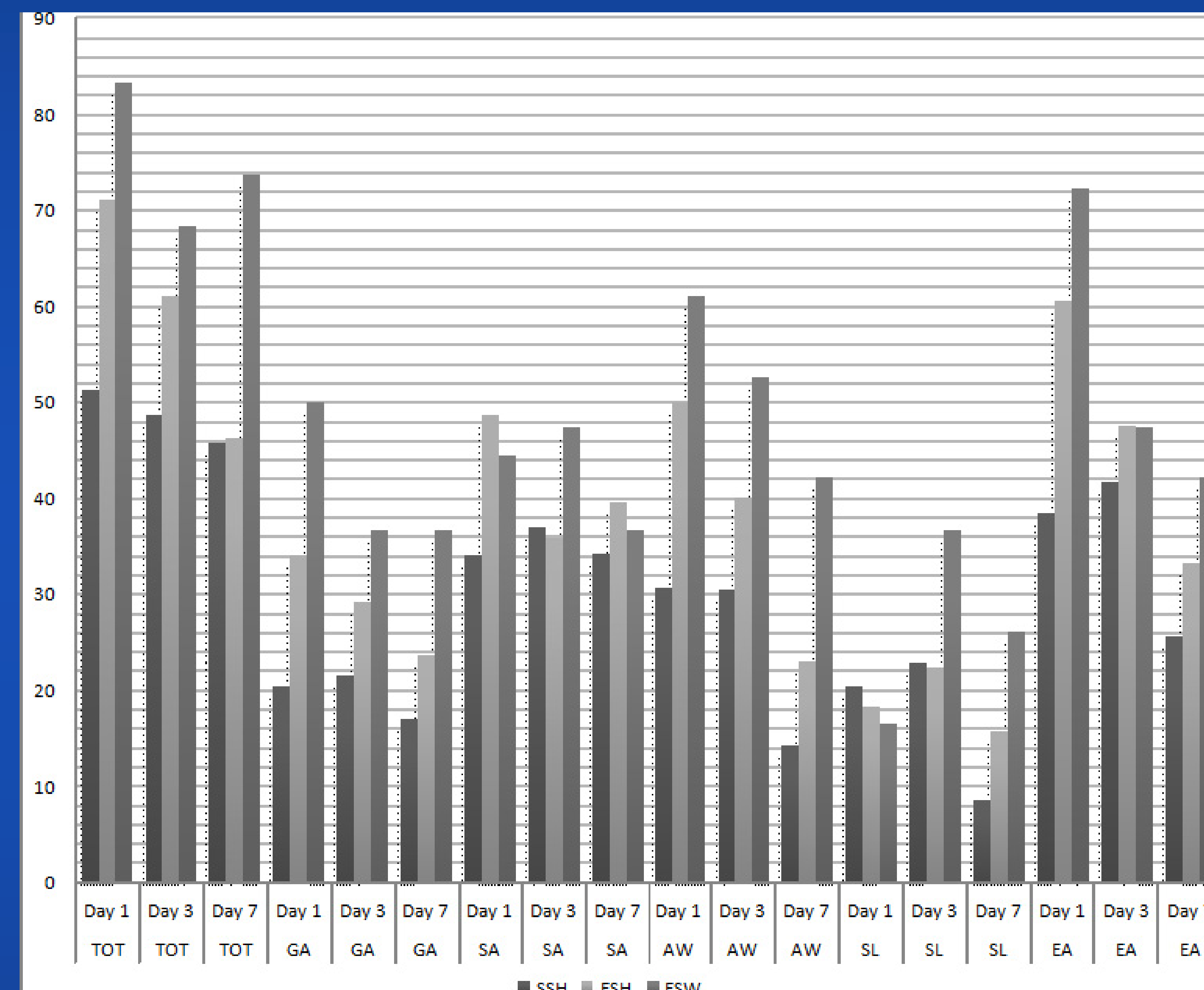
Studies show that indicators of children's post-operative recovery should include maladaptive behavioral changes after surgery, in addition to traditional indicators like pain. (1-3) Although some level of post-operative behavioral change is expected in children, it is unclear whether these changes vary by ethnicity. More specifically, with a growing Hispanic population in the United States, it would be important to understand the influence of Hispanic ethnicity on post-operative behavioral expression. The purpose of this study was to examine the potential differences in frequency of parent-reported negative behavioral changes between English-speaking White (ESW), English-speaking Hispanic (ESH), and Spanish-speaking Hispanic (SSH) parents.

Methods

288 parents of children undergoing elective outpatient surgery at CHOC Children's Hospital participated in the study. Eligible children had no developmental delays or history of prematurity, and had to have an ASA status of I or II. Parents completed two surveys assessing their children's behavioral changes, pain, and demographics on post-operative days 1, 3, and 7. The Post-Hospitalization Behavioral Questionnaire measured behavioral changes about general and separation anxiety, aggression toward authority, eating disturbances, apathy/withdrawal, and sleep disturbances. Parents' post-operative pain measure was an observational behavioral checklist for parents to rate their children's pain.

Results

Most parents reported post-operative negative behavioral changes in their children. The top behaviors noted were apathy/withdrawal and eating disturbances by ESW and ESH parents; eating disturbances and separation anxiety by SSH parents. After controlling for demographic differences and children's concurrent pain, SSH parents reported significantly lower negative behavioral changes on all three assessment days compared to ESW parents (day 1: $p < .01$; day 3: $p < .001$; day 7: $p < .10$), and on days 1 and 3 compared to ESH parents (day 1: $\chi^2(1) = 6.72$, $p = .01$; day 3: $\chi^2(1) = 7.98$, $p = .005$). Also, SSH parents had lower reports of general anxiety, apathy/withdrawal, and eating disturbances in their children.



Participant demographics (n=202).

	English-speaking White (ESW)	English-speaking Hispanic (ESH)	Spanish-speaking Hispanic (SSH)	Differences
Child age (years)	5.11 (4.15)	5.72 (3.83)	6.20 (3.75)	n.s
Child gender (% female)	50.0	46.7	48.6	n.s
Household income	\$81,000-\$100,000	\$31,000-\$50,000	\$11,000-\$20,000	ESW>ESH>SSH***
Parental age (years)	36.59 (8.79)	31.34 (6.13)	34.82 (6.41)	ESW, SSH>ESH***
Parental education (years)	15.51 (2.28)	13.22 (2.29)	9.37 (3.34)	ESW>ESH>SSH***

Note: *** $p < .001$

Household income was a categorical variable, and thus the mean category is presented.

Conclusions

This study demonstrates that children's post-operative recovery may be influenced by ethnicity and language, which may reflect differences in cultural values. The results highlight the need for culturally sensitive medical assessment. Specifically, healthcare providers should not equate the lack of verbal pain or behavioral changes as an indication of a lack of pain within the SSH population.

References

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