

Improving Health Literacy 5 Minutes at a Time: Brief teaching intervention improves mothers' ability to read nutrition labels

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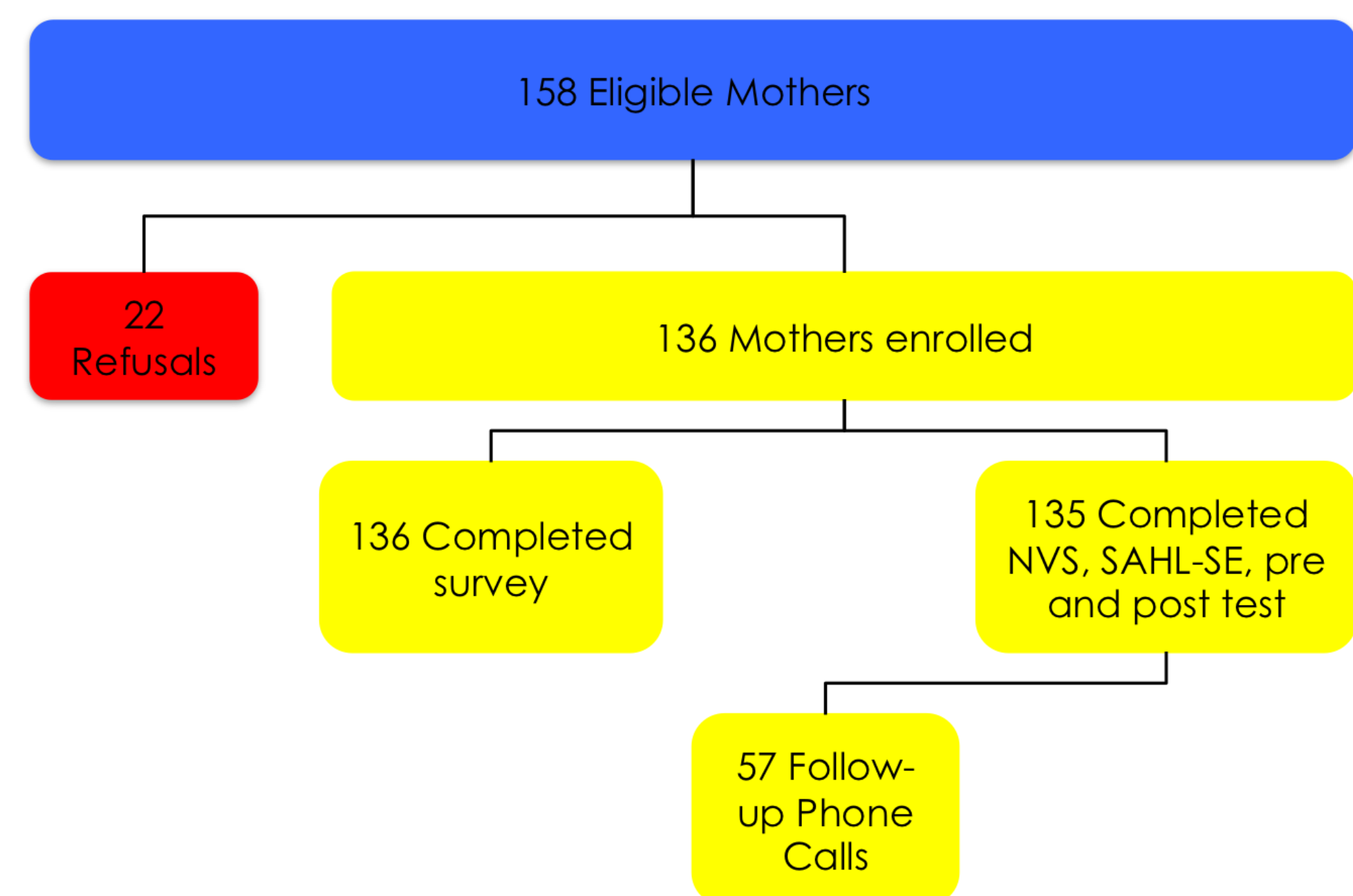
BACKGROUND

- Maternal health literacy affects the health of the entire family
- Poor nutrition label comprehension correlates with limited health literacy and numeracy skills
- 2009 pilot study showed that exposure to a teaching module improved mothers' ability to read labels

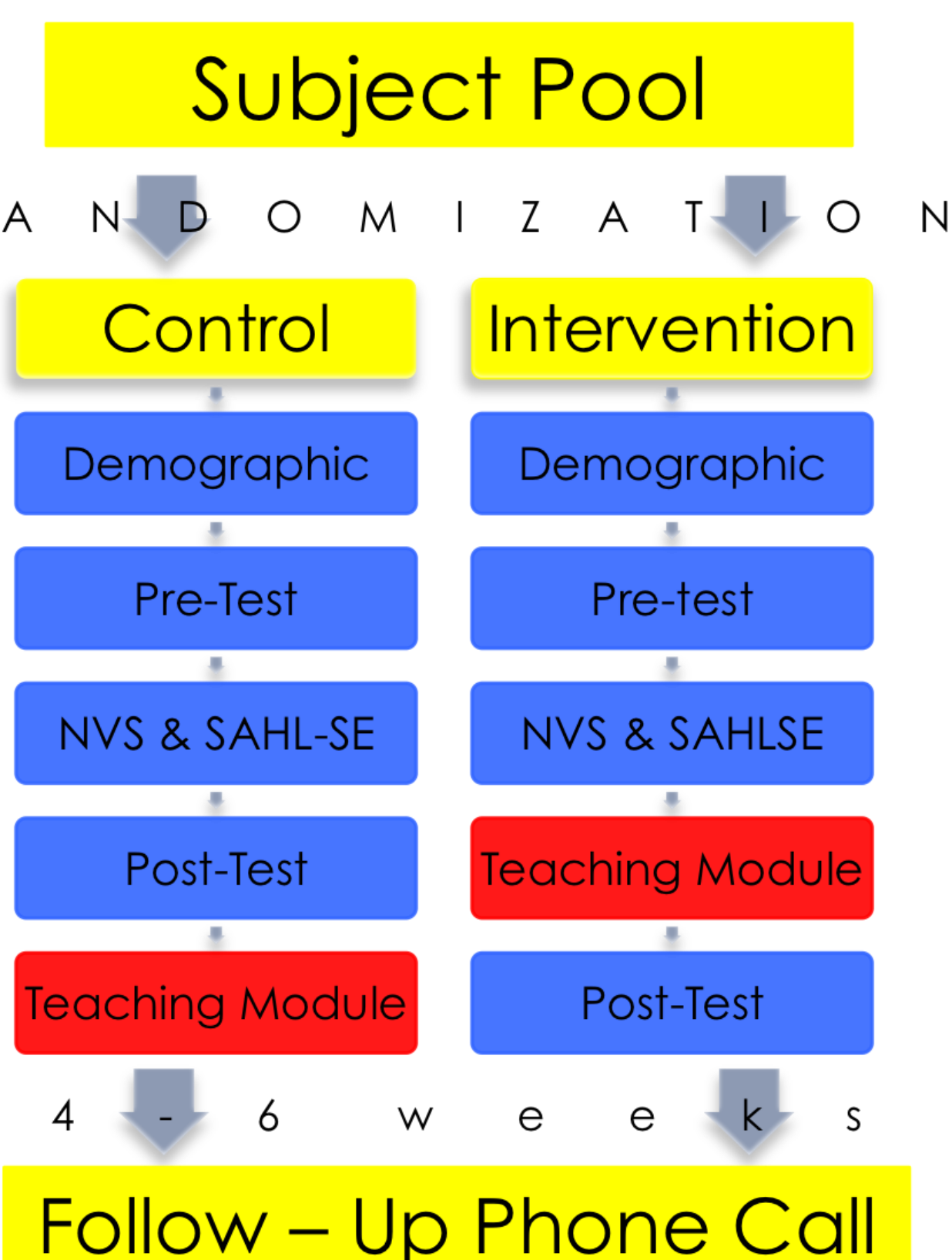
HYPOTHESES

- Repeated exposure to health literacy testing tools alone will not result in improvement in post test score
- Juice intake will be associated with health literacy and use of labels
- 10% of mothers will demonstrate retention of intervention content after 1 month

METHODS



Pre-test: 6 questions of reading a juice label
Health Literacy Measure: Newest Vital Sign (NVS) and Short Assessment of Health Literacy (SAHL)
Teaching intervention: (recorded module) label overview, serving size, calories, Vitamin C
Post-test: same as pre-test
Follow-up calls: Use of labels, juice amount



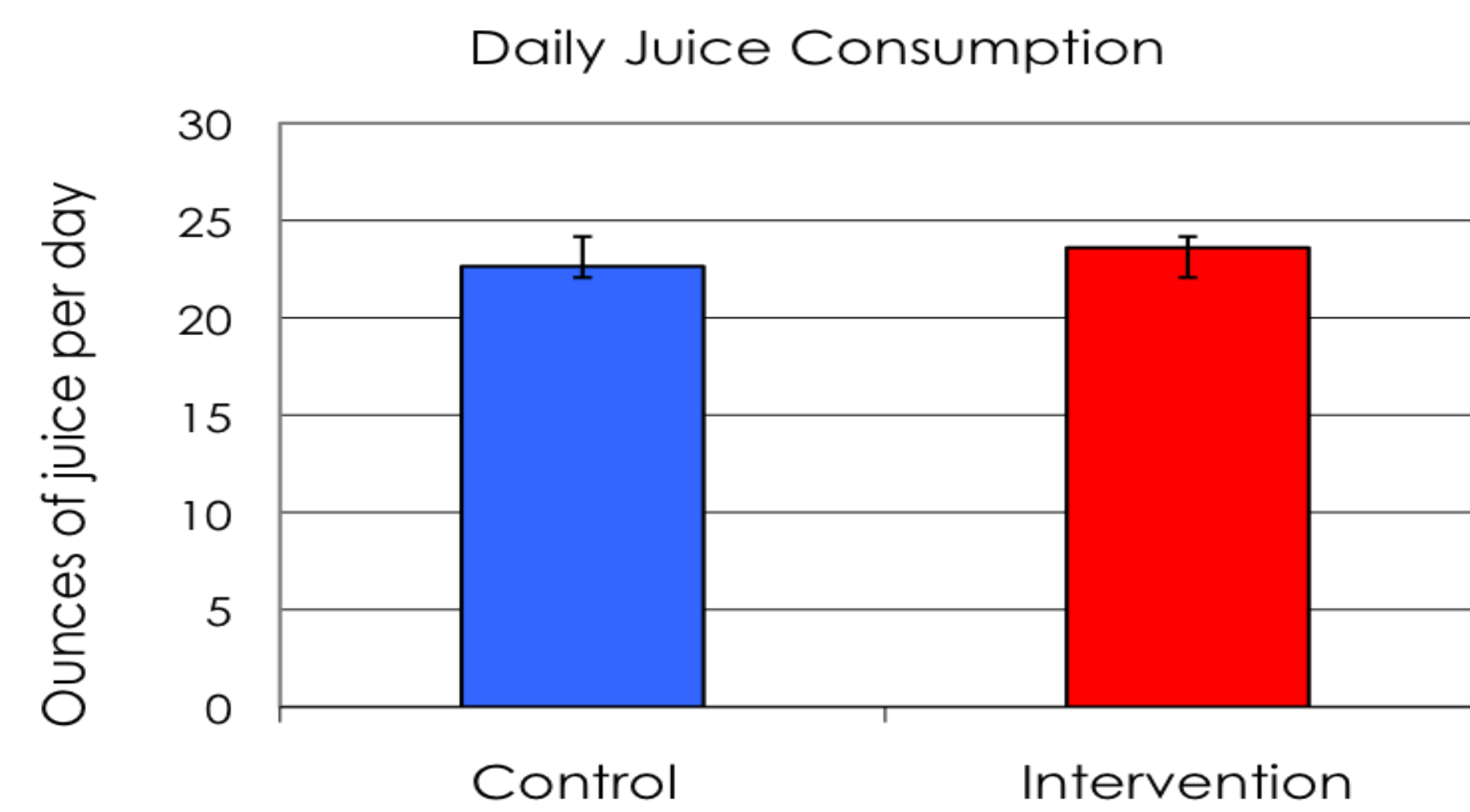
Statistics: analyzed with JMP (SAS, Cary, NC), descriptive statistics and comparison of means with Wilcoxon tests or ANOVA/t-test, $P < .05$

RESULTS

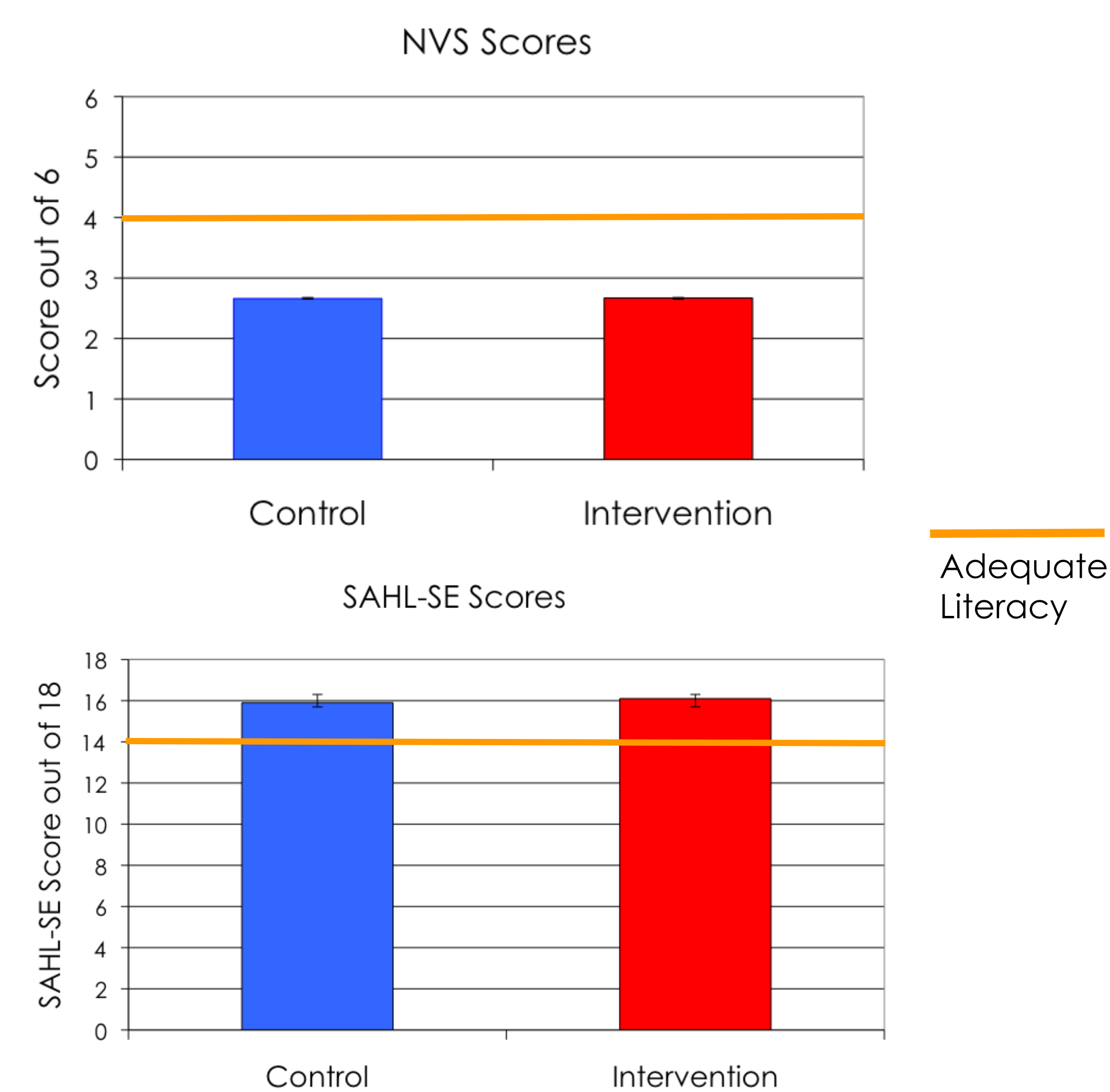
of Subjects in Control & Intervention Groups

N= 135	Control (n=66)	Intervention (n=70)	p value
Medicaid	92%	94%	<0.66
English as 1 st language	44%	56%	<0.31
Spanish as 1 st language	50%	41%	<0.31
Spanish speaking only	9%	9%	<0.89
Hispanic	64%	71%	<0.43
Looks at Labels	50%	64%	<0.20
WIC class	59%	46%	<0.13
Years of Education	11.7	11.6	<0.80

Juice Intake

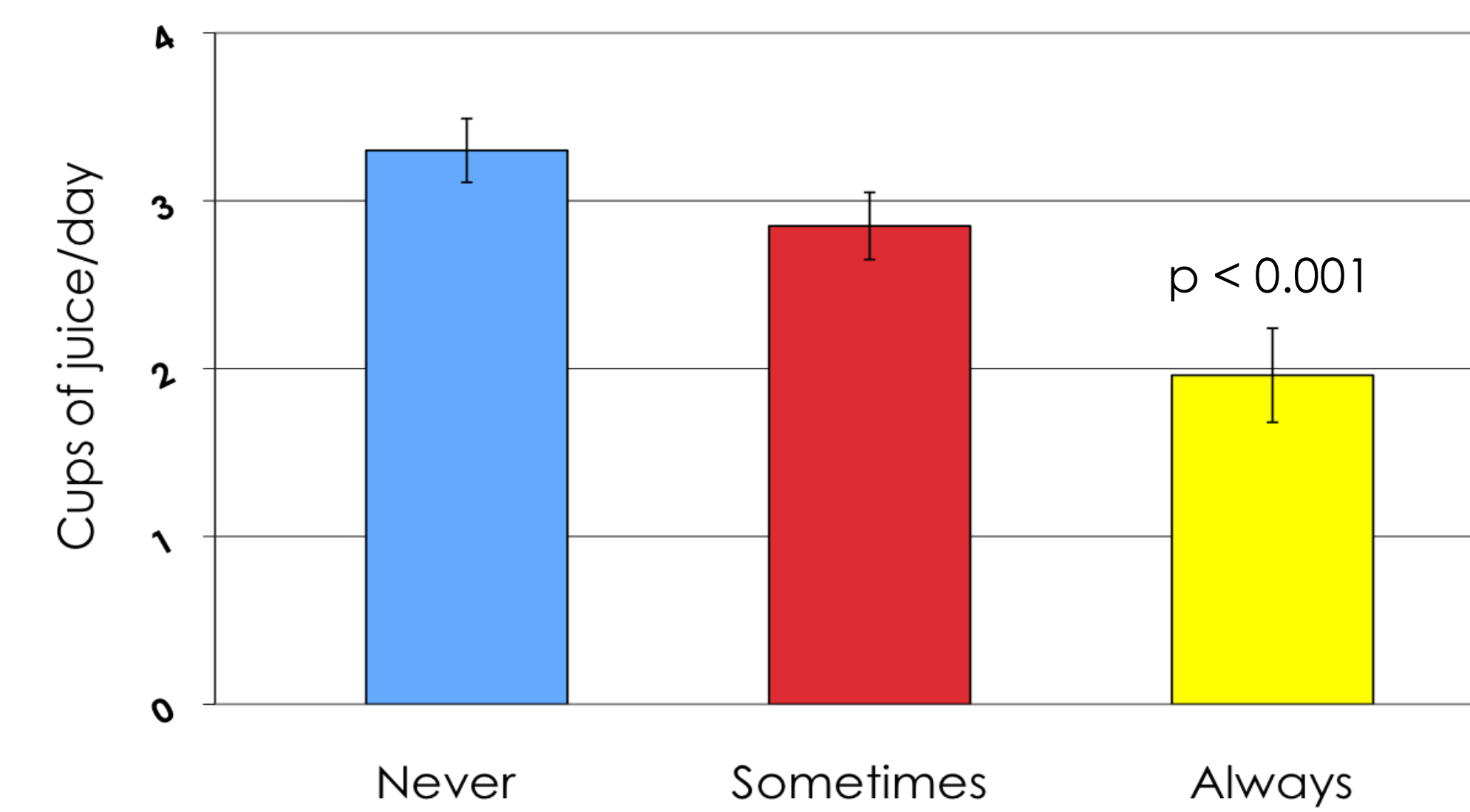


Health Literacy - Control vs. Intervention Groups



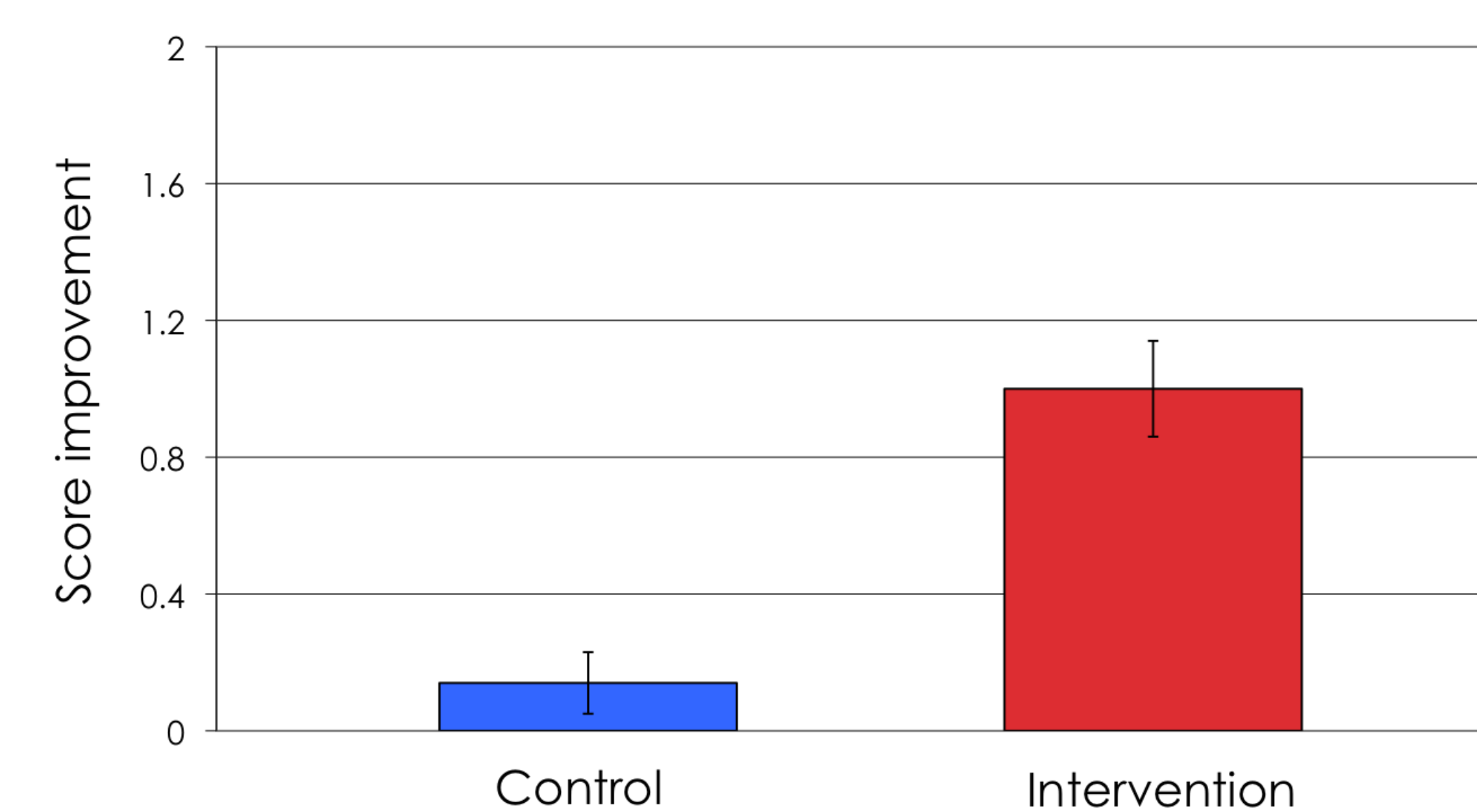
Using labels and juice intake

Association of Juice Intake with Reading Labels



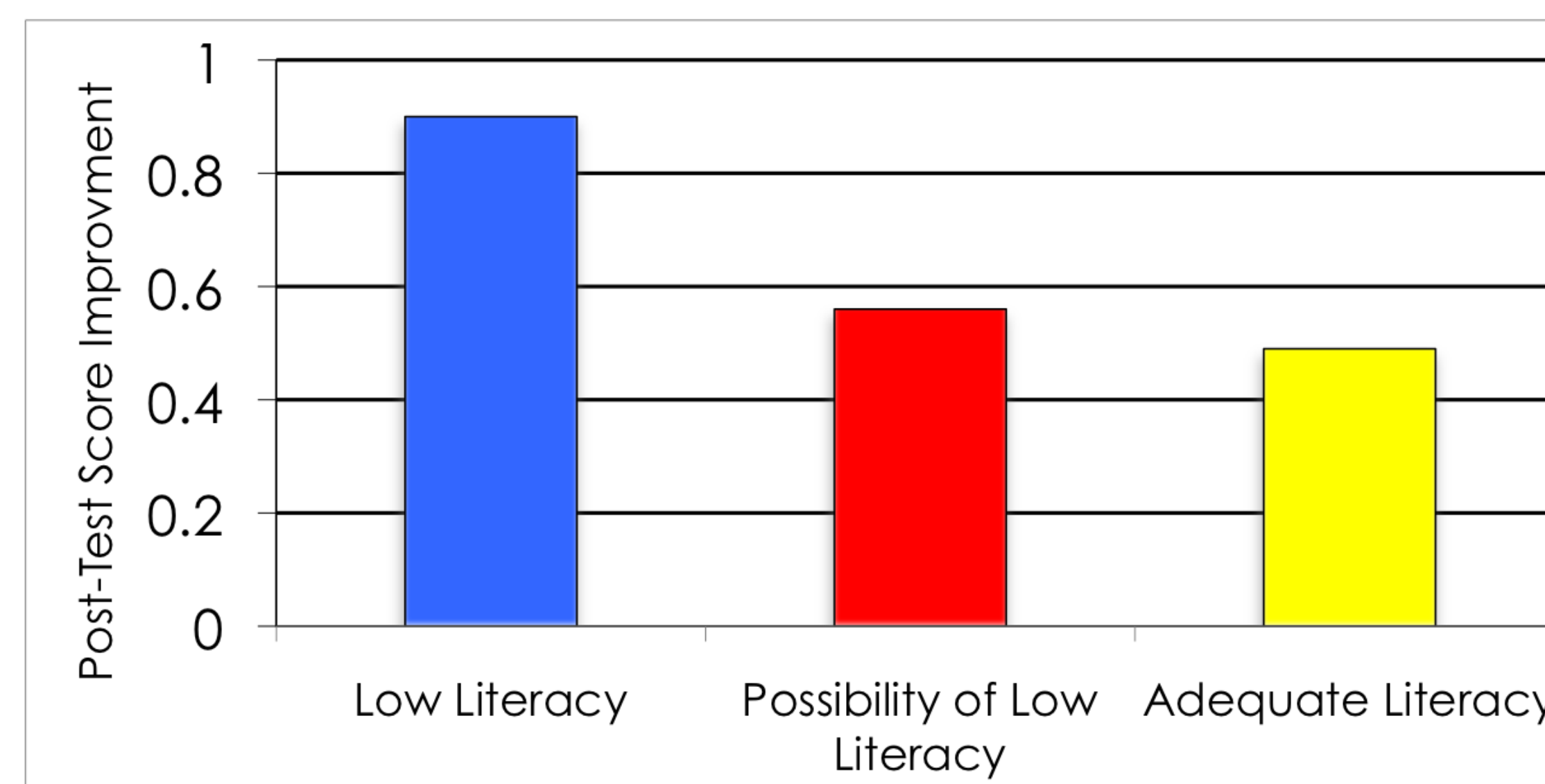
Post-test Performance

Improvement in Post-test Score **



*Mothers in the intervention group improved on average by at least 1 point on the post test ($p < 0.0001$).
**Only 1 in 5 mothers in control group improved by 1 point

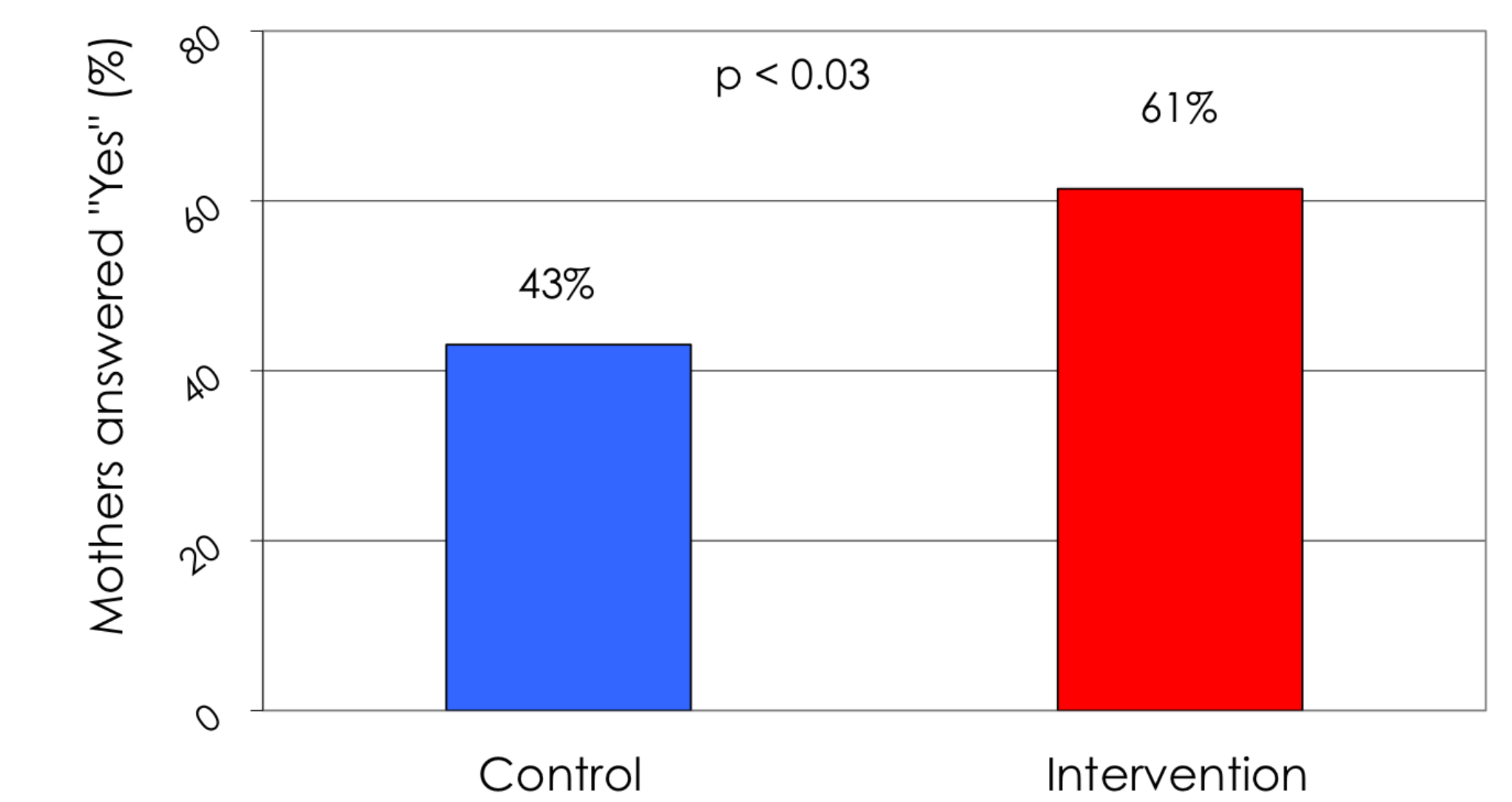
Relationship of NVS Health Literacy to Post-Test Improvement



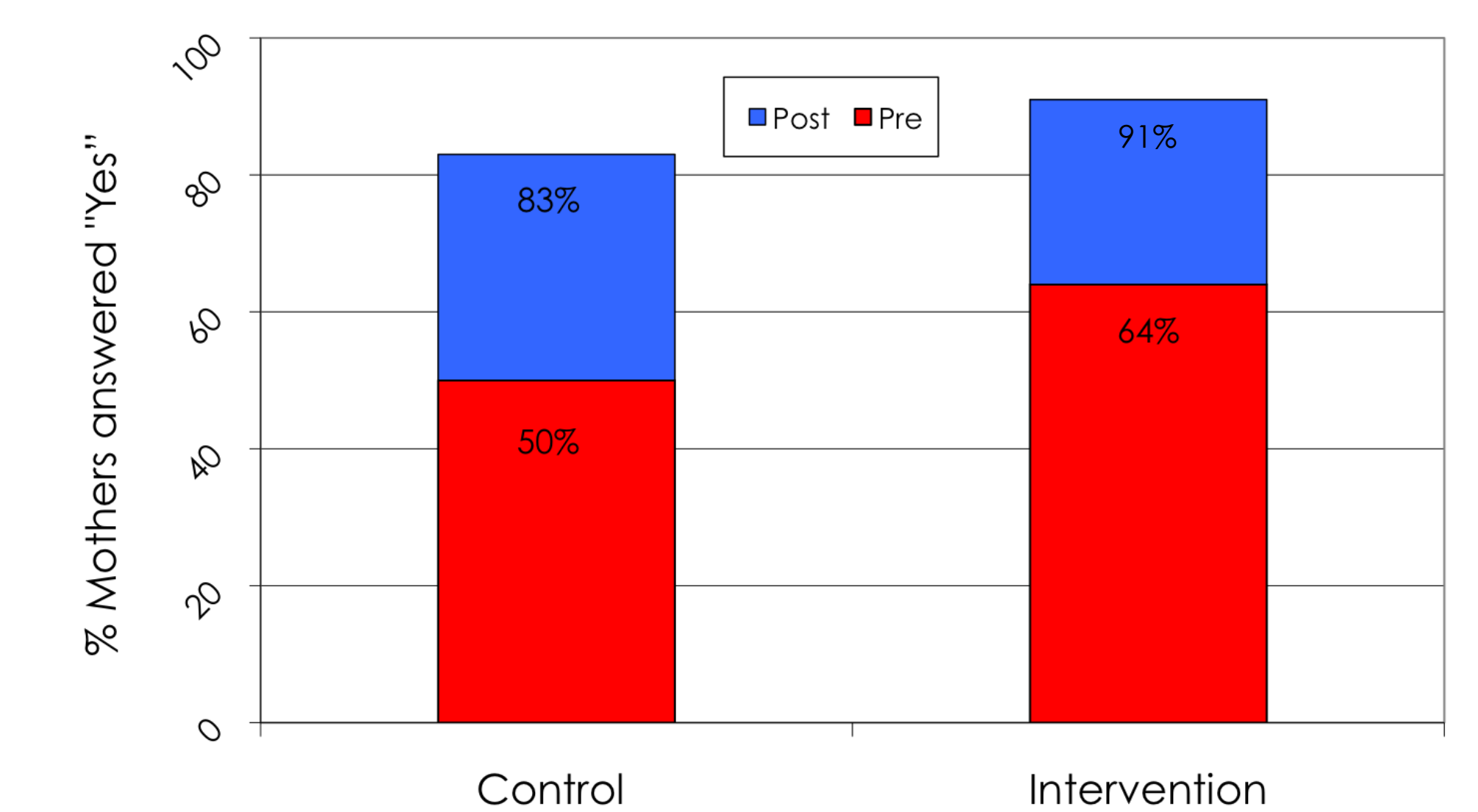
Statistically significant when combined with 2009 Pilot Study Data

Plans to Change in Future

Would you change juice drinking habits in the future?

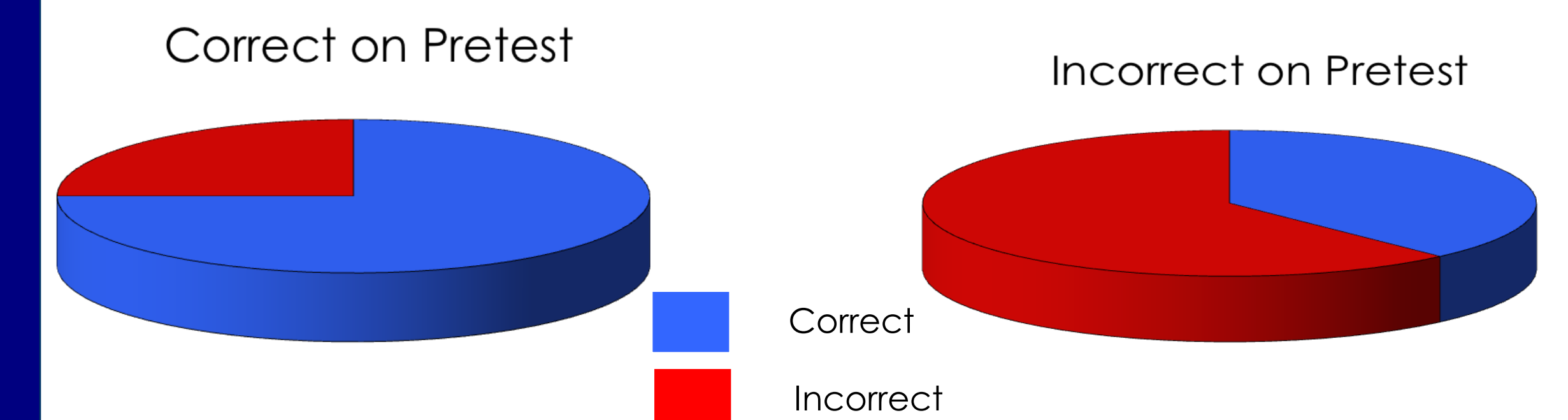


Would you look at labels more in the future?



Follow up phone calls

Recall of AAP recommendation on daily juice intake (6oz) after one month



- Of the mothers who answered the juice question *correctly* on pre-test, 75% answered correctly on follow up call.
- Of those who answered the juice question *incorrectly* on the pre-test, almost 40% answered correctly on follow up phone call

CONCLUSIONS

- Only mothers in the intervention group showed improvement in post-test scores
- Mothers in the intervention group were more likely to report plans to change amount of juice given to child
- Mothers who report reading labels also reported giving their children less juice
- Almost 40% of mothers still recalled the AAP recommendation on juice intake after 1mo