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Evaluation of a
Health Promotion Model
Health Literacy

Intervention



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Agency for Healthcare Research & Quality

NIH Office of Behavioral & Social Science Research

National Institute for Child Health & Human Development



Home Visitors Research Network

Sites

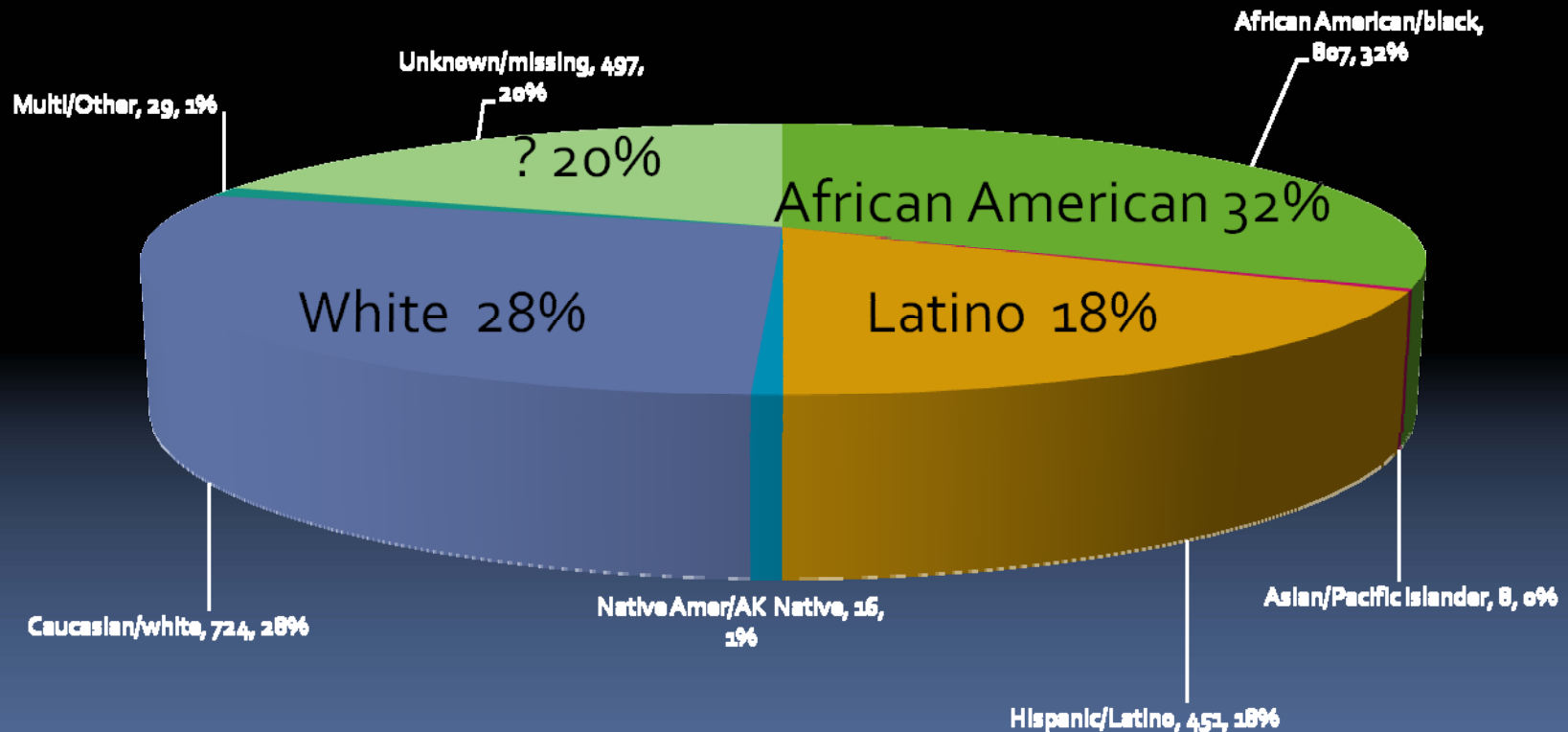
Enterprise Community Healthy Start	GA
Healthy Families IN MOM Program	IN
Healthy Families of Grant Co	IN
CHIP of Roanoke	VA
Partnership for Strengthening Families MT	
Early Head Start Monterey Office of Ed	CA



Racial/Ethnic Distribution

N=2532 Parent/Child Pairs

Ethnic distribution of parents in database





AHRQ Innovations Exchange Quality Tool

Reflection: the 4th R



Functional Literacies

Literacy
used for
practical
purposes



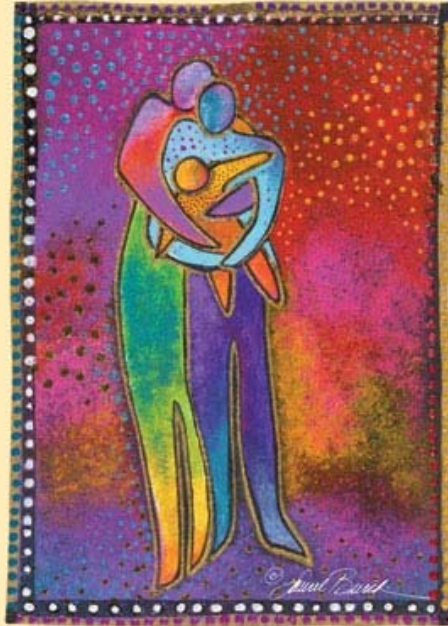


Functional Health Literacy

Use healthcare

Manage personal & family health





Life Skills Progression

An Outcome and Intervention Planning Instrument
for Use with Families at Risk

LINDA WOLLESEN & KAREN PEIFER

Foreword by Deanna Gomby, Ph.D.



<http://www.brookespublishing.com>

LSP Functional *Healthcare* Literacy Scale

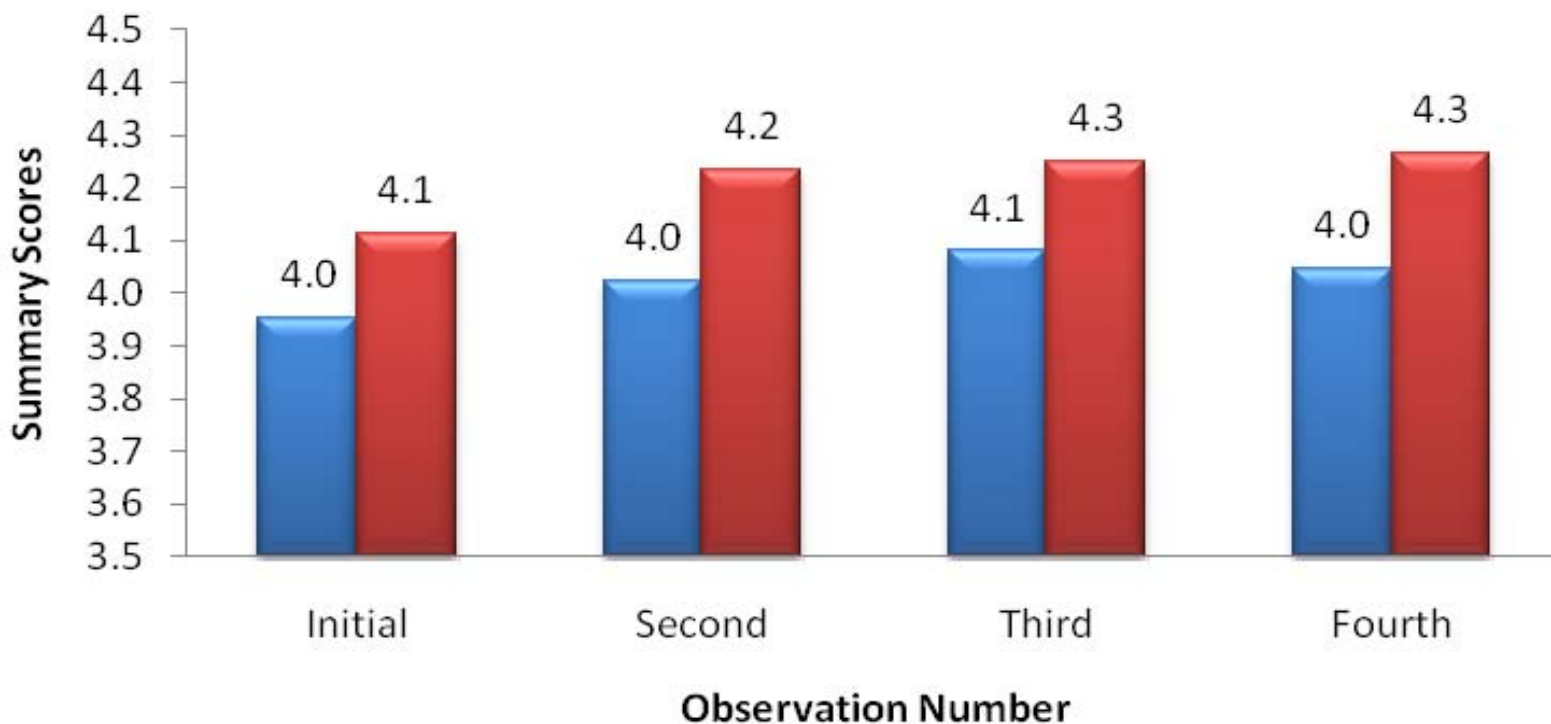
Item	Score	Healthcare Literacy	NA 0	Inadequate ← ————— → Competent											
				1	1.5	2	2.5	3	3.5	4	4.5	5			
10	3	Use of Information		Refuses information from HV or HC	Uses inaccurate information from information sources	Passively accepts some information from HV and HC	Accepts/uses most information from HV or HC	Actively seeks/uses information from HV, HC & other sources							
17	2	Prenatal Care		No prenatal care	Care starts in 2nd-3rd trimester. Keeps some appointments	Care starts 2nd-3rd trimester. Keeps most appointments	Starts care in 1st trimester. Keeps most appointments	Keeps postpartum appointments							
18	3	Parent Sick Care		Acute/chronic conditions go without Dx/Tx. No medical home	Seeks care only when very ill. Uses ER for care. No medical home	Seeks care consistently; inconsistent Tx follow-up. Unstable medical home	Seeks care appropriately. Follows Tx recommended. Has medical home	Seeks care appropriately. Cure or control obtained. Has medical home							
19	3	Family Planning		No FP method used. Lacks information about FP	FP method use is rare. Limited understanding of FP	Occasional use of FP methods. Some understanding of FP	Regular use of FP methods. Good understanding of FP	Regular use of FP methods. Plans/spaces pregnancies							
20	3.5	Child Well Care		None; no medical home	Seldom; no medical home	Occasional appointments. Unstable medical home	Has annual exam only. Has stable medical home	Keeps regular CHDP/well-child appointments with same provider							
21	3	Child Sick Care		Medical neglect. No Dx/Tx for acute or chronic conditions	Has care only when very ill. Uses ER for care	Timely care for minor illness but inconsistent Tx f/u	Timely care of minor illness. Follows Tx recommended	Obtains optimal care for acute or chronic conditions							
22	0	Child Dental Care <i>no teeth</i>	✓	No dental home or care w/ serious ECC. Poor hygiene	No dental home or care with some ECC and inadequate Tx/hygiene	Has dental home and hygiene but late Tx of ECC	Has dental home. Some preventative care/timely Tx	Has dental home. Regular preventative care and timely Tx							
23	2.5	Child Immunizations		None or refused	IZ History uncertain. Records lost	IZ's begun, but no return appointment	IZ delayed, has return appointment	Complete or up-to-date IZ							
33	3	Medical/Health Insurance		None/unable to afford care or coverage	Medicaid for pregnancy or emergency only	Medicaid full-scope benefits with or without Share of Cost	State-subsidized or partial-pay coverage	Private Insurance with or without co-pay for self/ others							
Average	2.9	Healthcare Literacy													

LSP Functional *Selfcare* Literacy Scale

Item	Score	Functional Selfcare Literacy	NA 0	Inadequate ←					→ Competent					
				1	1.5	2	2.5	3	3.5	4	4.5	5		
4	0	Attitudes to Pregnancy	✓	Unplanned and unwanted. Abortion or adoption plan			Unplanned, ambivalent, fearful. Coerced to keep child			Unplanned and accepted		Planned but unprepared		Planned, prepared, welcomed
7	2.5	Support of Development		Poor knowledge of child development. Unrealistic expectations. Ignores or refuses information			Limited knowledge of child development. Limited interest in development. Passive parental role			Open to child development information. Provides some toys, books and play for age		Applies child development ideas. Interested in child's development skills, interests and play		Anticipates child development changes; Uses appropriate toys/books; plays & reads w/child daily
8	3	Safety		Hospitalized for Tx of unintentional injury. Has permanent damage			Outpatient/ER Tx of unintentional injury to child. No permanent damage			No unintentional injury to child. Home/Car unsafe; not childproofed		No unintentional injury to child. Home partially safe. Uses car seat. Uses information		Child protected, no injury. Home/car safe. Teaches safety. Seeks/uses information for age
11	2.5	Use of Resources		Resource needs unrecognized. Community resources not used or refused; hostile			Resource needs unrecognized. Limited use when assisted by others. Misses most appointments			Accepts help to identify needs; uses resources when assisted by others. Keeps some appointments		Identifies needs. Uses resources with little assistance. Keeps most appointments		Identifies needs. Uses resources independently. Keeps or reschedules appointments
24	5	Substance Use or Abuse		Chronic Hx drug and/or alcohol abuse with addiction			Drug/alcohol binge or intermittent use, without apparent addiction			Rare or experimental use of drugs or clean. In recovery group or Tx program		Occasional use of legal substances; stops if pregnant		No Hx or current use/abuse
25	5	Tobacco		Chain smokes; >2 pks/day; uses smokeless; heavy second-hand exposure			Non-chain use or some second-hand exposure			Decreases amount when pregnant. Controls second-hand exposure		No use or second-hand exposure in past six months or current pregnancy		None or never
28	2	Self-Esteem		Poor; self-critical. Anticipates criticism from others. Rarely initiates; avoids trying new skills			Copes sometimes; but w/limited competence and flat affect. Limited initiative for leaning new skills			Irritable/defensive. Makes excuses, blames others. Initiates/starts using new skills but gives up easily		Beginning to actively initiate. Develops skills & recognizes own competence. Emerging confidence visible		Confident in skill & ability to learn. Expresses pride in achievements & successes
Average	3.3	Selfcare Literacy												

Overall FHL

improved over time in home visiting $p < .001$



Functional Healthcare Literacy (n=236)

Time: $F(3,233)=7.5$; $p < .001$

Linear: $F(1,235)=10.2$; $p < .01$

Quadratic: $F(1,235)=9.0$; $p < .01$

Functional Selfcare Literacy (n=241)

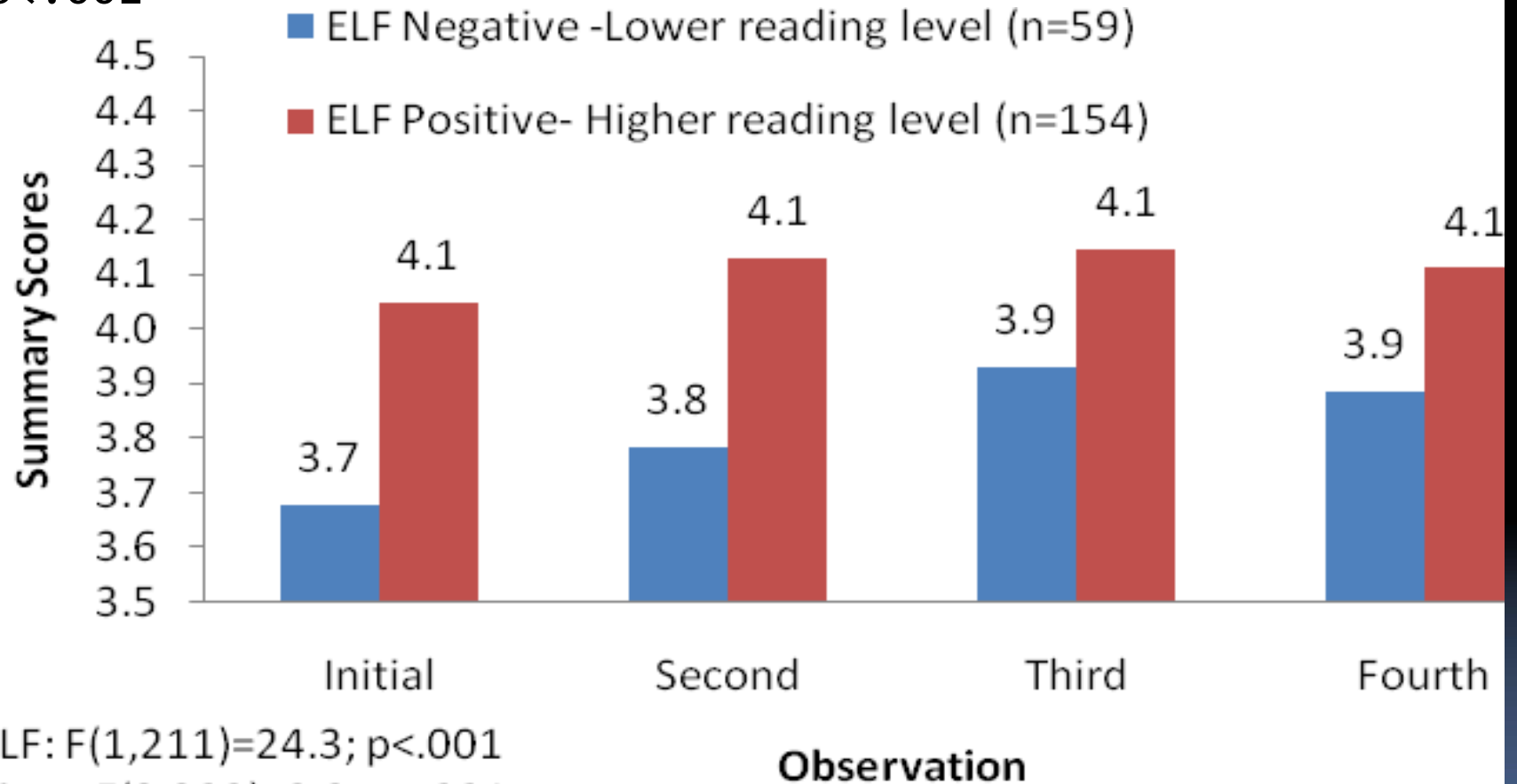
Time: $F(3,238)=12.3$; $p < .001$

Linear: $F(1,240)=23.7$; $p < .001$

Quadratic: $F(1,235)=13.0$; $p < .001$

Poor readers made greatest gains

$p < .001$



ELF: $F(1,211)=24.3$; $p < .001$

Time: $F(3,209)=9.9$; $p < .001$

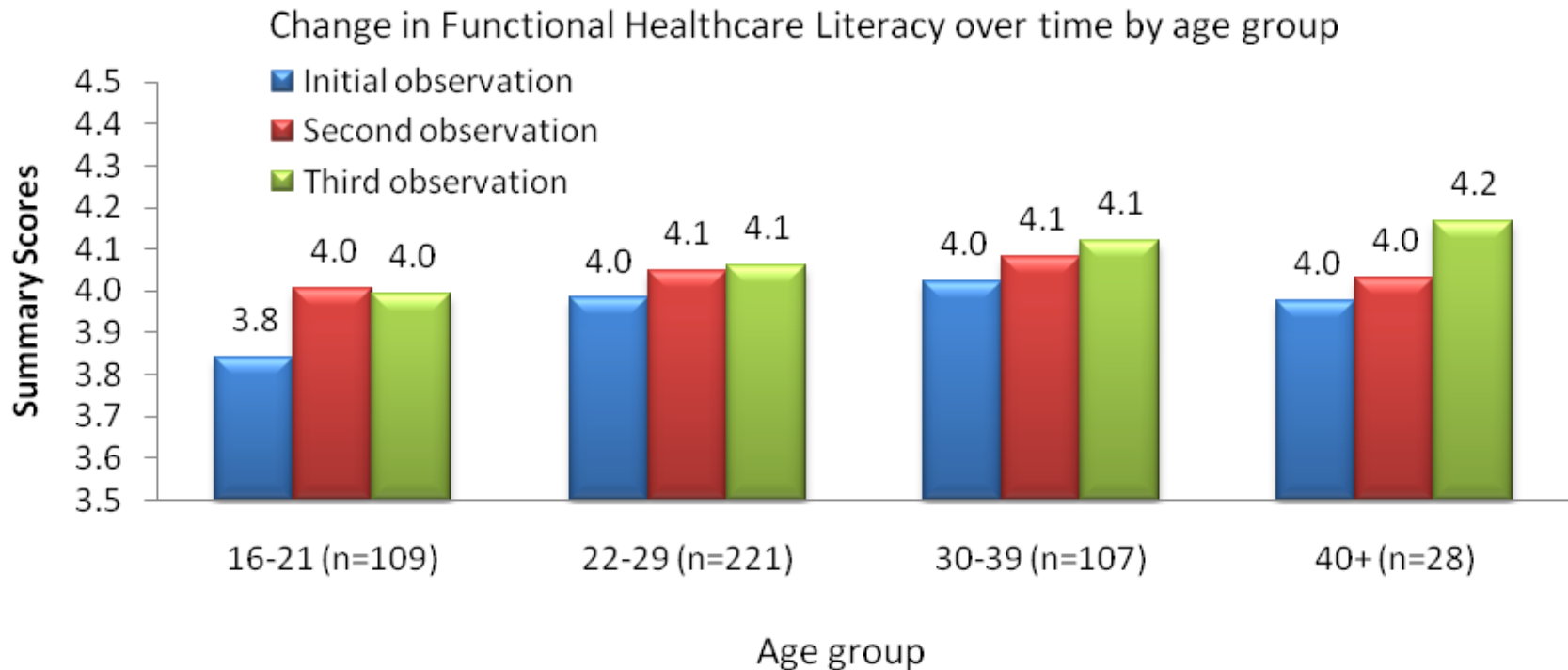
Linear: $F(1,211)=15.4$; $p < .001$

Quadratic: $F(1,211)=10.9$; $p < .01$

Linear*ELF: $F(1,211)=5.2$; $p < .05$

All ages progressed $P < .001$

Teens made greatest gains $p < .05$



Age (1) (G1 vs. others): $F(1,461)=4.2$; $p < .05$

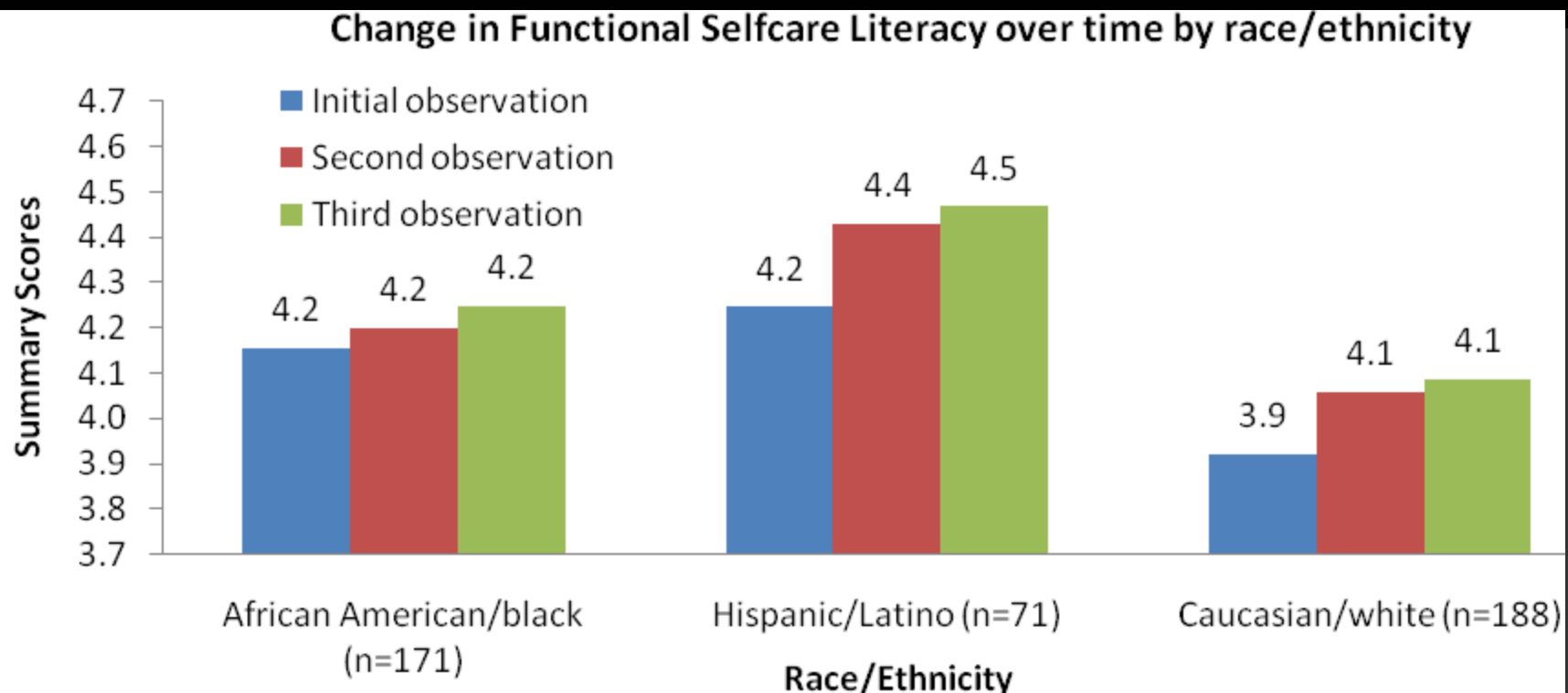
Time: $F(2,460)=11.2$; $p < .001$

Linear: $F(1,461)=22.3$; $p < .001$

Age(1) (G1 vs. others) * time: $F(2,460)=3.3$; $p < .05$

Age(1) (G1 vs. others) * quadratic: $F(1,461)=6.6$; $p < .05$

All races improved. Patterns differ

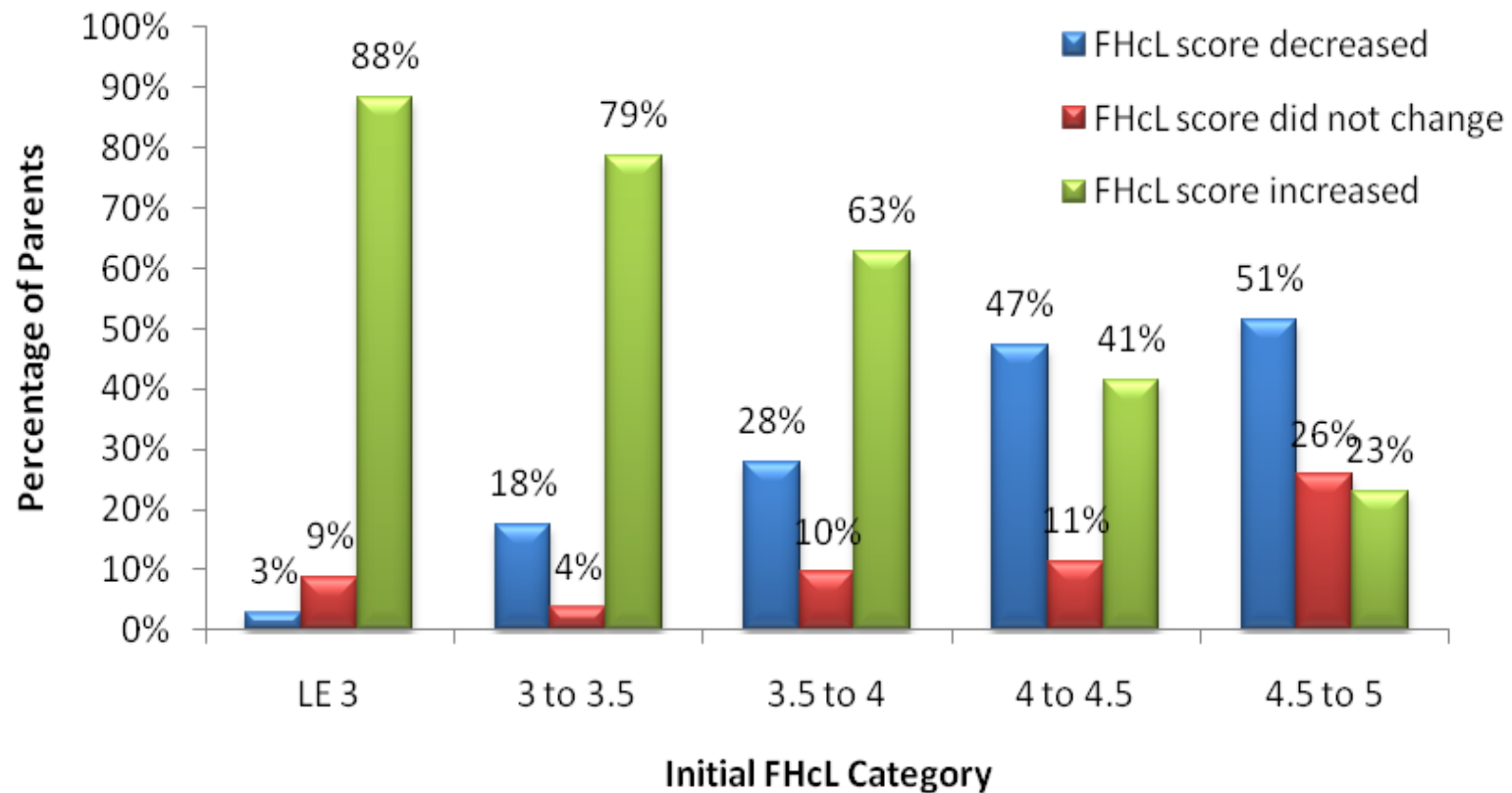


Eth(2) (G2 vs. others): $F(1,427)=18.5$; $p<.001$
 Eth(3) (G3 vs. others): $F(1,427)=30.1$; $p<.001$
 Time: $F(2,426)=23.4$; $p<.001$
 Linear: $F(1,427)=42.6$; $p<.001$
 Quadratic: $F(1,427)=6.7$; $p<.05$

Eth(1) (G1 vs. others) * time: $F(2,426)=4.2$; $p<.05$
 Eth(1) (G1 vs. others) * linear: $F(1,427)=4.5$; $p<.05$
 Eth(1) (G1 vs. others) * quadratic: $F(1,427)=4.5$; $p<.05$

Lower functioning ~ greater gains

Home visitation seems to have greater impact on the FHealthcare Literacy scores of lower functioning parents



Attrition Unrelated to Scores

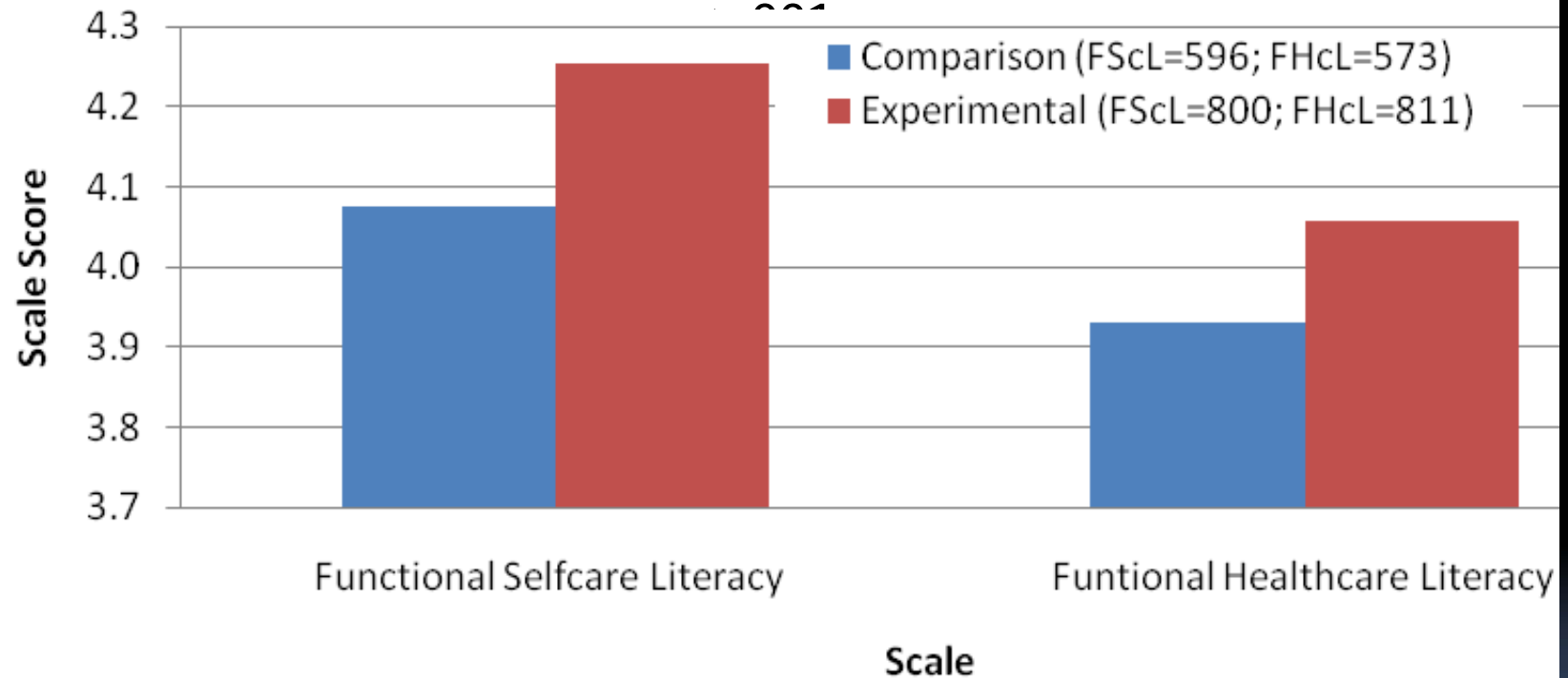
LSP	In		Attrition	
	Score <4	Score ≥4	Score <4	Score ≥4
1, AP	57 82.6%	12 17.4%	$\% = (\text{LSP N Out}) / (\text{LSP N} - 1 \text{ In})$ ↓	
2, PP	28 40.6%	41 59.4%		
3, PP	17 33.3%	34 66.7%	8 28.6%	10 24.4%
4, PP	6 17.6%	28 82.4%	8 47.1%	9 26.5%
5, PP	3 17.6%	14 82.4%	3 50.0%	14 50.0%

Health Care Literacy: NHS Clients with One AP and at Least One PP LSP

Attrition was not related to scores at PP3, 4, or 5 compared to baseline (AP1, PP2), using Fisher's Exact Probability (two-sided) $p < .05$. $n = 69$

Matched Comparison

with & without home visits



* Parents were matched within site by available demographic information, including age at experimental parent's follow up measure, ethnicity, ELF score, and gender.

FScL: $F(1,1394)=38.4; p<.001$

FHcL: $F(1,1382)=19.4; p<.001$

With 480 blocks:

FScL: $F(1,917)=41.1; p<.001$

FHcL: $F(1,907)=16.9; p<.001$

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P Innovation Profile:

Home Visits Using Reflective Approach Improve Functional Health Literacy Among Low-Income Pregnant Women and New Parents

Innovation Profile | Expert Commentary | Your Comments (4)

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SECTIONS: Snapshot | What They Did | Did It Work? | How They Did It | Adoption Considerations

Snapshot

Summary

Back Story:
Home Visitor Empower Mother to Better Man: Child's Health Care
Dora M. McKean watched the 2 year-old, who was gasping for air, hid the she had been playing



Questions? sandras@uw.edu