



# **A Matter of Balance: Volunteer Lay Leader Model**

Kim Johnson  
Piedmont Triad Council of Governments  
Area Agency on Aging  
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# Falls: Epidemiology of the Problem



- Major cause of injury and death for older adults
- 1/3 to 1/2 of older adults acknowledge fear of falls
- Fear of falling is associated with:
  - *depression*
  - *decreased mobility and social activity*
  - *increased frailty*
  - *increased risk for falls as a result of deconditioning*

# Why Falls, Why Now?



## A Growing Public Health Crisis

In the US in 2004:

- 15,000 seniors died from falls. “Every 35 minutes, an older adult dies from a fall” .
- 1.85 million treated in Emergency Departments
- 1.3 million treated & released
- 473,000 hospitalized
  - Admission rates ↑ with age (39% of fall related admissions are 85+)



Between 1993 and 2003 fall death rates increased significantly.



## U.S. Economic Impact

In 2000, total cost of fatal fall injuries among people 65+:

Total: ~ \$19 billion

- Fatal falls: \$0.2 billion
- Nonfatal injuries: \$19 billion





## What do we know about falls?

- 1/2 to 2/3 of falls occur around the home
- A majority of falls occur during routine activities
- Falls usually aren't caused by just one issue. It's a combination of things coming together.
- A large portion of falls are preventable!

# National Estimates of the 10 Leading Causes of Nonfatal Injuries Treated in Hospital Emergency Departments, United States, 2006

Rank	Age Groups										Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Unintentional Fall 124,747	Unintentional Fall 860,281	Unintentional Fall 635,912	Unintentional Struck by/ Against 608,658	Unintentional Struck by/ Against 1,071,586	Unintentional Fall 748,064	Unintentional Fall 784,154	Unintentional Fall 817,043	Unintentional Fall 633,428	Unintentional Fall 1,840,117	Unintentional Fall 7,934,840
2	Unintentional Struck by/ Against 30,872	Unintentional Struck by/ Against 390,563	Unintentional Struck by/ Against 420,693	Unintentional Fall 602,415	Unintentional Fall 888,138	Unintentional Overexertion 726,511	Unintentional Overexertion 656,632	Unintentional Overexertion 466,164	Unintentional Struck by/ Against 223,447	Unintentional Struck by/ Against 225,785	Unintentional Struck by/ Against 4,663,517
3	Unintentional Other Bite/ Sting 12,456	Unintentional Other Bite/ Sting 153,552	Unintentional Cut/Pierce 116,918	Unintentional Overexertion 279,148	Unintentional MV-Occupant 833,189	Unintentional Struck by/ Against 639,006	Unintentional Struck by/ Against 570,882	Unintentional Struck by/ Against 427,588	Unintentional Overexertion 214,793	Unintentional Overexertion 178,808	Unintentional Overexertion 3,474,597
4	Unintentional Foreign Body 10,903	Unintentional Foreign Body 125,543	Unintentional Other Bite/ Sting 99,452	Unintentional Cut/Pierce 144,366	Unintentional Overexertion 782,425	Unintentional MV-Occupant 551,875	Unintentional MV-Occupant 436,807	Unintentional MV-Occupant 338,731	Unintentional MV-Occupant 196,080	Unintentional MV-Occupant 175,219	Unintentional MV-Occupant 2,723,485
5	Unintentional Fire/Burn 10,378	Unintentional Overexertion 81,923	Unintentional Pedal Cyclist 88,734	Unintentional Pedal Cyclist 110,506	Unintentional Cut/Pierce 500,846	Unintentional Cut/Pierce 437,328	Unintentional Cut/Pierce 366,926	Unintentional Cut/Pierce 286,432	Unintentional Cut/Pierce 157,098	Unintentional Cut/Pierce 118,967	Unintentional Cut/Pierce 2,215,211
6	Unintentional Other Specified 7,965	Unintentional Cut/Pierce 79,713	Unintentional Overexertion 78,518	Unintentional Unknown/ Unspecified 108,550	Other Assault* Struck by/ Against 468,309	Other Assault* Struck by/ Against 301,318	Other Assault* Struck by/ Against 218,638	Unintentional Other Specified 155,317	Unintentional Other Bite/ Sting 86,296	Unintentional Other Bite/ Sting 69,703	Other Assault* Struck by/ Against 1,310,697
7	Unintentional Overexertion 7,531	Unintentional Other Specified 55,535	Unintentional MV-Occupant 60,008	Other Assault* Struck by/ Against 93,912	Unintentional Other Specified 198,544	Unintentional Other Specified 166,785	Unintentional Other Specified 184,888	Unintentional Poisoning 137,855	Unintentional Other Specified 81,633	Unintentional Poisoning 65,292	Unintentional Other Bite/ Sting 1,095,521
8	Unintentional MV-Occupant 8,885	Unintentional Fire/Burn 53,359	Unintentional Foreign Body 57,440	Unintentional MV-Occupant 85,151	Unintentional Other Bite/ Sting 190,130	Unintentional Other Bite/ Sting 162,741	Unintentional Other Bite/ Sting 154,357	Other Assault* Struck by/ Against 134,647	Unintentional Poisoning 60,990	Unintentional Other Transport 58,823	Unintentional Other Specified 922,208
9	Unintentional Poisoning 6,877	Unintentional Poisoning 43,206	Unintentional Other Transport 45,981	Unintentional Other Bite/ Sting 86,784	Unintentional Unknown/ Unspecified 155,712	Unintentional Poisoning 104,095	Unintentional Poisoning 146,210	Unintentional Other Bite/Sting 119,980	Unintentional Other Transport 39,316	Unintentional Unknown/ Unspecified 47,405	Unintentional Poisoning 703,702
10	Unintentional Cut/Pierce 6,479	Unintentional Unknown/ Unspecified 41,573	Unintentional Dog Bite 44,239	Unintentional Other Transport 58,433	Unintentional Other Transport 144,488	Unintentional Other Transport 102,180	Unintentional Other Transport 84,513	Unintentional Other Transport 89,723	Other Assault* Struck by/ Against 38,198	Unintentional Other Specified 42,923	Unintentional Unknown/ Unspecified 652,130

\* The "Other Assault" category includes all assaults that are not classified as sexual assault. It represents the majority of assaults.

Source: National Electronic Injury Surveillance System—All Injury Program operated by the U. S. Consumer Product Safety Commission.

Produced by: Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC.

# Common misconceptions about aging



- Physical detriment is inevitable
- Changes are irreversible and beyond one's control
- Motivation for change is low
- Assumed that exercise will do no good and may even be harmful

We now know that even a little bit of exercise is beneficial

BA Harris, 2008

# A Matter of Balance: Managing Concerns About Falls Original Model



- Research by the Roybal Center for Enhancement of Late-Life Function at Boston University.\*
- Designed to reduce the fear of falling and increase the activity levels of older adults who have concerns about falls.

Tennstedt, S., Howland, J., Lachman, M., Peterson, E., Kasten, L. & Jette, A. (1998). A randomized, controlled trial of a group intervention to reduce fear of falling and associated activity restriction in older adults. *Journal of Gerontology, Psychological Sciences*, 54B (6), P384-P392.

# Administration on Aging Grant



- **2003** AoA launched a three year public/private partnership to increase older people's access to programs that have proven to be effective in reducing their risk of disease, disability and injury.
  
- **Grant Goals:**
  - Test whether a volunteer lay leader model is successful when compared with original research
  - Maintain fidelity to the original MOB curriculum
  - Share our approach with others in Maine and around the country

# A Matter of Balance

## Volunteer Lay Leader Model



### **Model Program Adaptations:**

- Classes taught by volunteer lay leaders, called coaches, instead of healthcare professionals
- Participant workbook developed and coach manual modified
- Exercises modified
- Healthcare connection via guest therapist

### **Maintaining Fidelity:**

- Two day coach training based on original MOB leader manual
- Master Trainer observes coaches during training and while leading a MOB/VLL class
- Use of a mentor model - new volunteer is paired with an experienced coach
- Communication, support and sharing outcomes



# A Matter of Balance Class

**During 8 two-hour sessions, participants learn:**

- To view falls and fear of falling as controllable
- To set realistic goals for increasing activity
- To change their environment to reduce fall risk factors
- To promote exercise to increase strength and balance

# Cognitive Restructuring

(Bandura and Lachman, 1997)



- Method of turning negative thoughts into positive thoughts
- Need to define barriers, obstacles when engaging in a new behavior
- Identify strategies for overcoming the barriers
- Plan realistic/feasible experiences so you can experience success



## Focus Interventions on:

- Changing misconceptions
- Teaching skills that promote self-confidence in one's abilities (self-efficacy)
- Instill the belief that one's efforts will make a difference (outcome expectations)
- Encourage positive adaptive responses in the face of difficulties (attributions)



# Who can benefit from A Matter of Balance?

**Designed to benefit community-dwelling older adults who:**

- Are concerned about falls
- Have sustained a fall in the past
- Restrict activities because of concerns about falling
- Are interested in improving flexibility, balance and strength
- Are age 60 or older, ambulatory and able to problem-solve

# A Matter of Balance



## What Happens During Sessions?

- Group discussion
- Problem-solving
- Skill building
- Assertiveness training
- Sharing practical solutions
- Videotapes
- Exercise training

# A Matter of Balance/Volunteer Lay Leader Outcomes



6 weeks	6 months	12 months
<b>Falls Efficacy***</b>	<b>Falls Efficacy***</b>	<b>Falls Efficacy**</b>
<b>Falls Management***</b>	<b>Falls Management***</b>	<b>Falls Management***</b>
<b>Falls Control**</b>	<b>Falls Control*</b>	<b>Falls Control*</b>
<b>Exercise level*** modified PACE</b>	<b>Exercise level* modified PACE</b>	Exercise level NS PACE
<b>Concern about falling interfering with Social Activities**</b>	<b>Concern about falling interfering with Social Activities*</b>	<b>Concern about falling interfering with Social Activities+</b>
Monthly Falls NS	<b>Monthly Falls***</b>	<b>Monthly Falls***</b>
<b>+ Marginal p= .0516 *p&lt;.05 **p&lt;.01 ***p&lt;.001</b>		

Healy, T. C., Peng, C., Haynes, P., McMahon, E., Botler, J. & Gross, L. (2008). The Feasibility and Effectiveness of Translating A Matter of Balance into a Volunteer Lay Leader Model. *Journal of Applied Gerontology*, 27 (1), 34-51.

(Significant Outcomes in Bold)



# Results

## Class Evaluation Results

- 97 % - more comfortable talking about fear of falling
- 97 % - feel comfortable increasing activity
- 99 % - plan to continue exercising
- 98 %- would recommend A Matter of Balance

*"I am already noticing a difference in my physical being. I am sure I am a little more mobile than I had been and plan to continue these exercises. Hopefully I'll be jumping over the moon soon."*

*"I seem to be more aware of every situation for my safety. I now 'stop, look and listen' to my surroundings."*

# Dissemination of A Matter of Balance/Volunteer Lay Leader Model

2009

30 States

➤ 600 Master Trainers

➤ 7000 participants served



# Dissemination through Master Trainer Sites



## Master Trainer Site Responsibilities:

- Sign license agreement with PFHA
- Complete MT Training session
- Recruit volunteers to be coaches
- Teach A Matter of Balance curriculum to the coaches
- Recruit healthcare professionals to provide a visit to the class
- Provide coaches with guidance and support
- Evaluate new coaches using the Coach Observation process
- Schedule classes
- Recruit participants
- Report outcomes

# A Matter of Balance Coach



- A volunteer recruited by MT site
- Completes application and screening
- Completes 8 hour training and earns MOB certification
- Attend 2.5 hours of coach training update annually
- Agree to maintain fidelity
- Facilitate two Matter of Balance classes within one year of certification

## Recommended:

- Observe one MOB class prior to coaching
- Attend team meetings



# The Coach

- Good communication and interpersonal skills
- Enthusiasm
- Dependability
- Willingness to lead a small group
- Interest in working with older adults
- Life experiences valued - with education or health care experience a plus

# PFHA Support for Master Trainer Sites



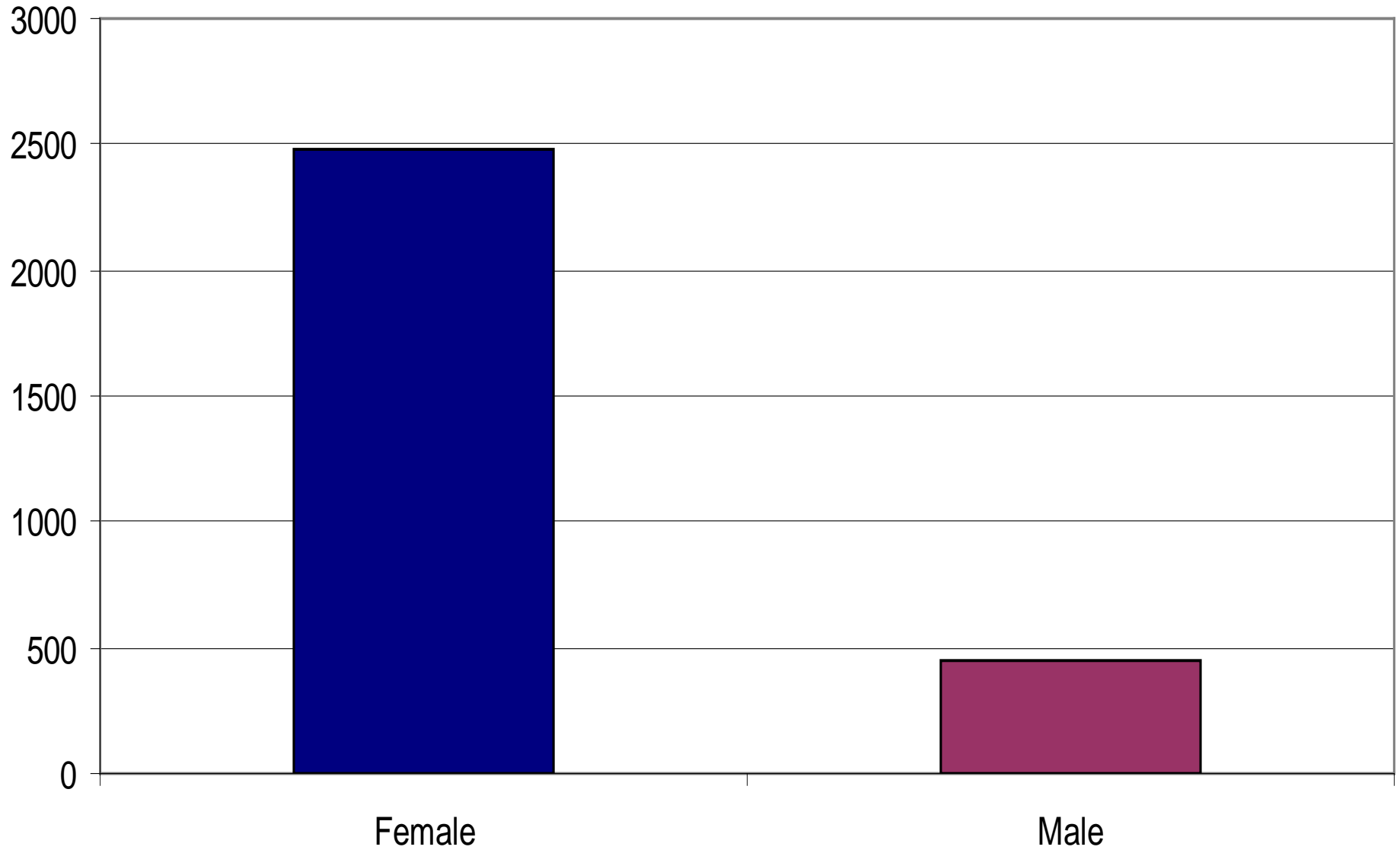
- Networking and sharing of resources
- Conference calls
- E-mails and phone calls
- Assistance with measuring outcomes and participant satisfaction
- Materials needed to implement the program



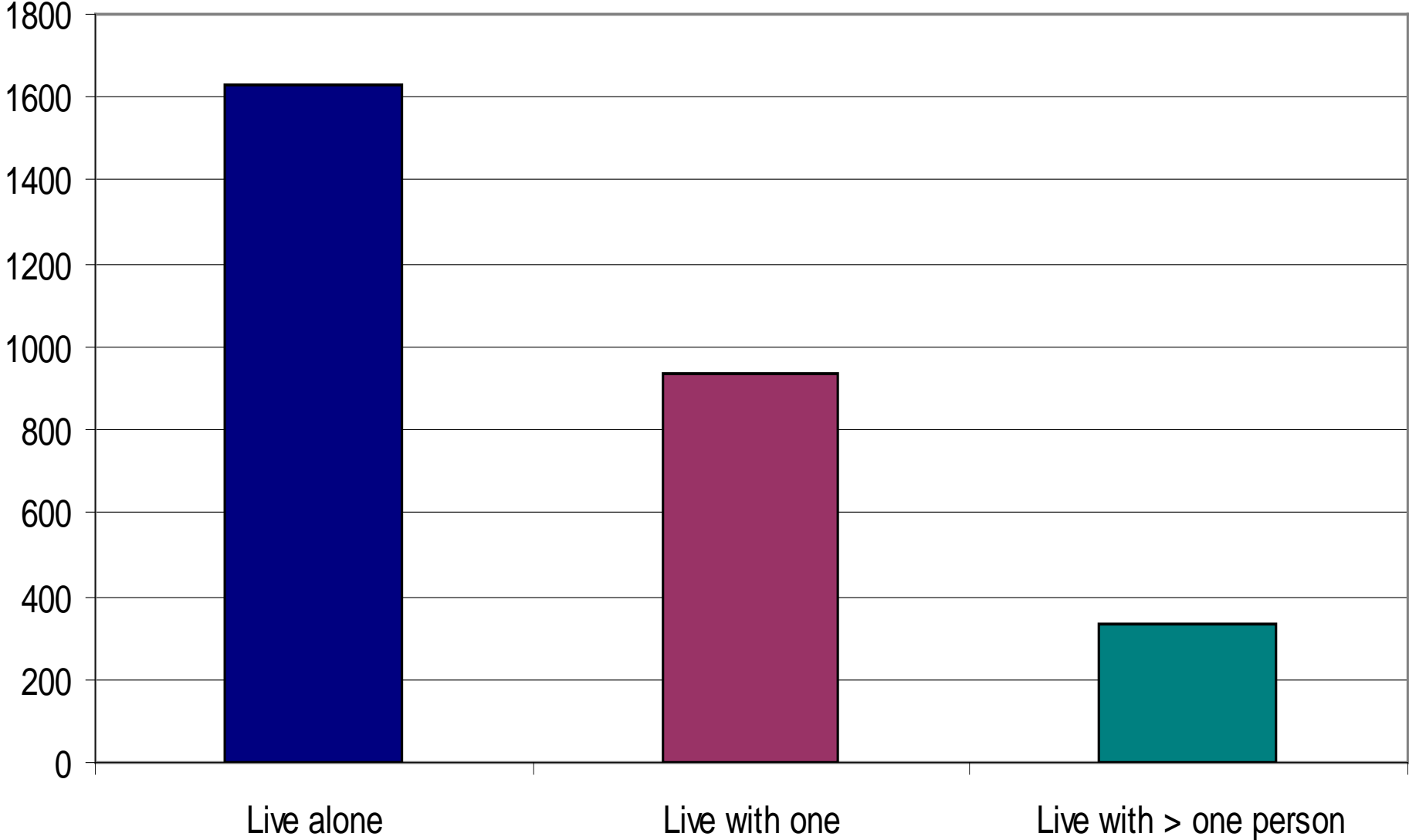
# Outcome Measurement

- Pre and post outcome surveys
- Sent to Senior Services in WA
- Sites receive class outcomes
- Comparison between sites and to national outcomes

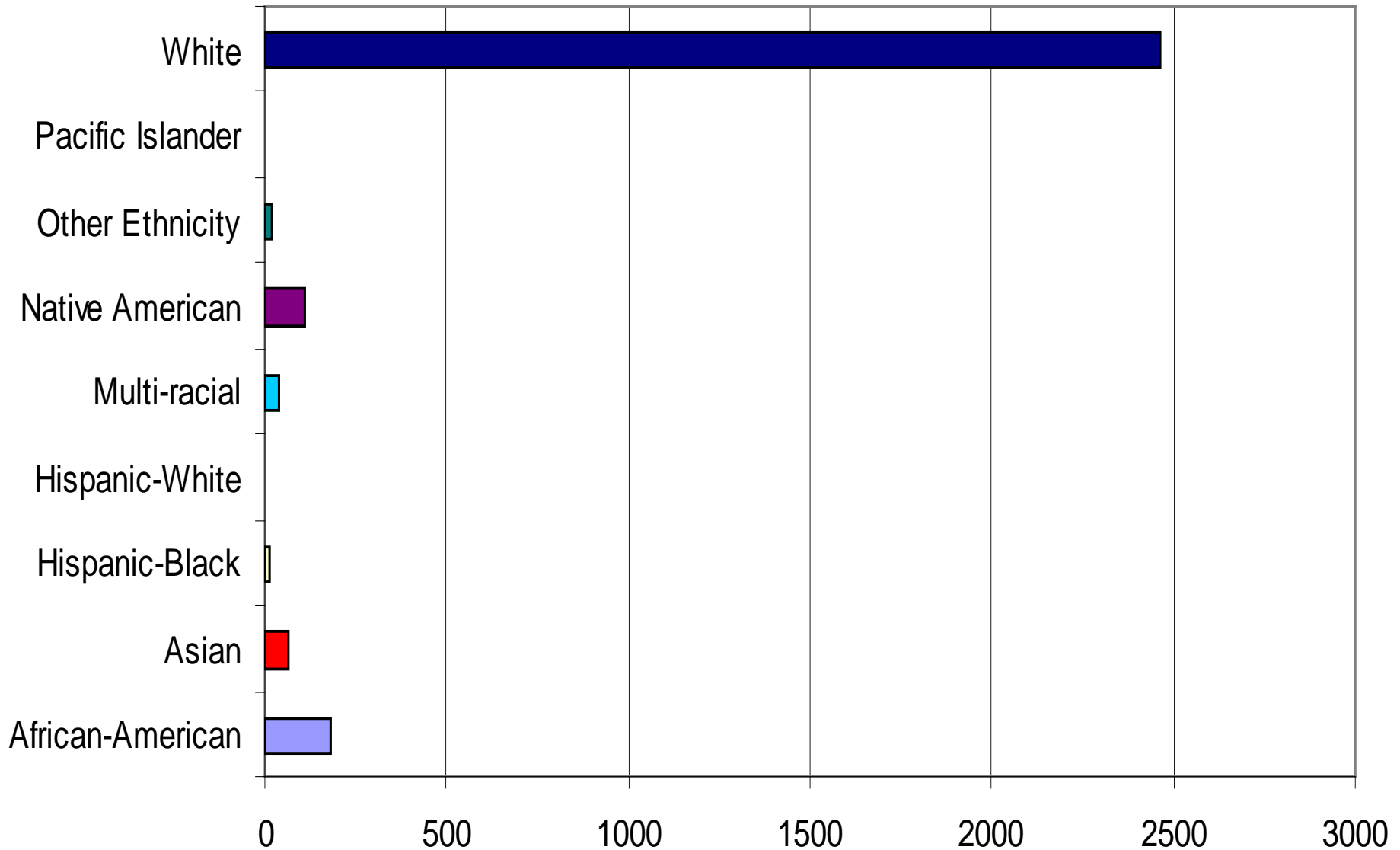
# A Matter of Balance National Sample Demographics: Gender



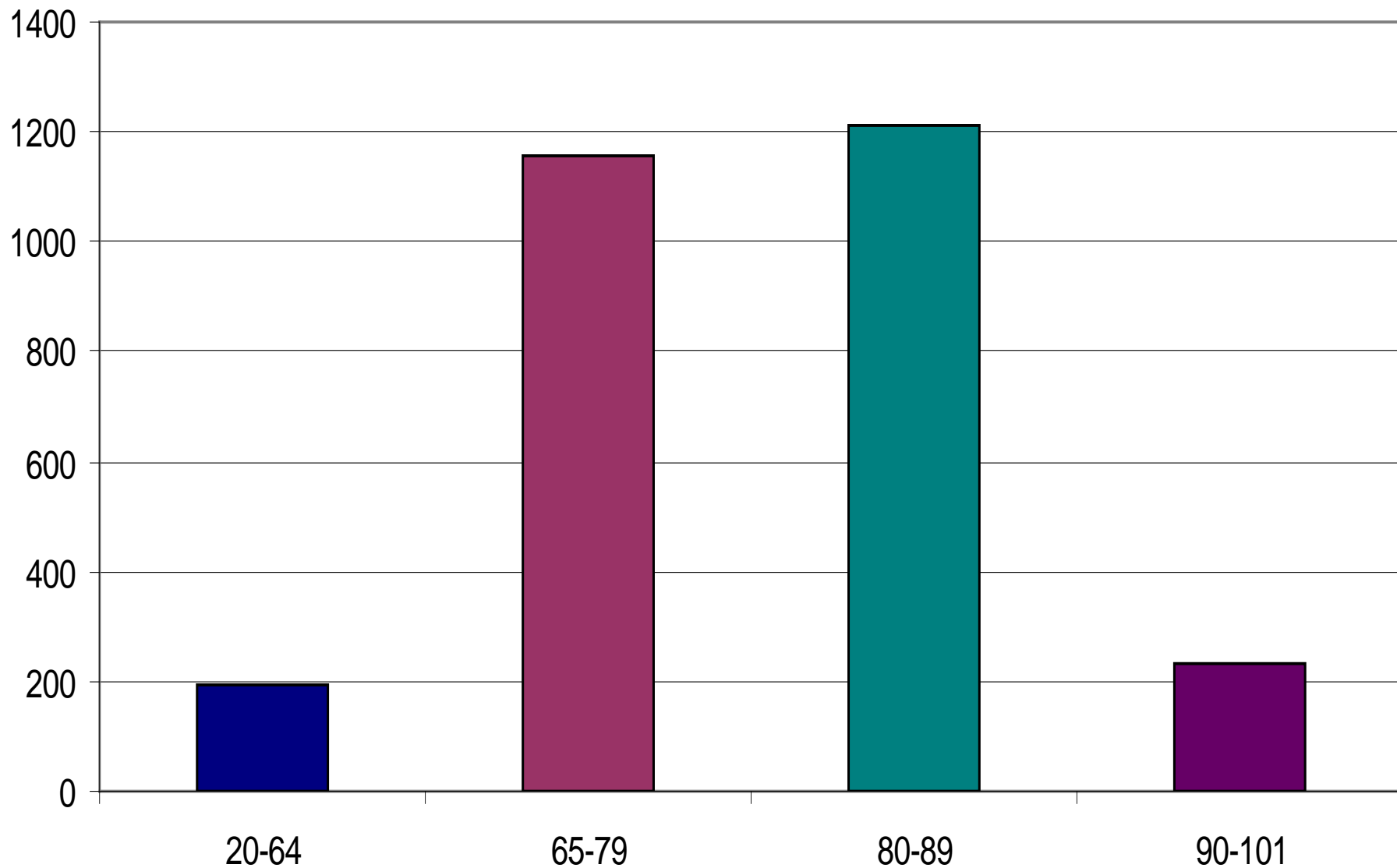
# A Matter of Balance National Sample Demographics: Living Status



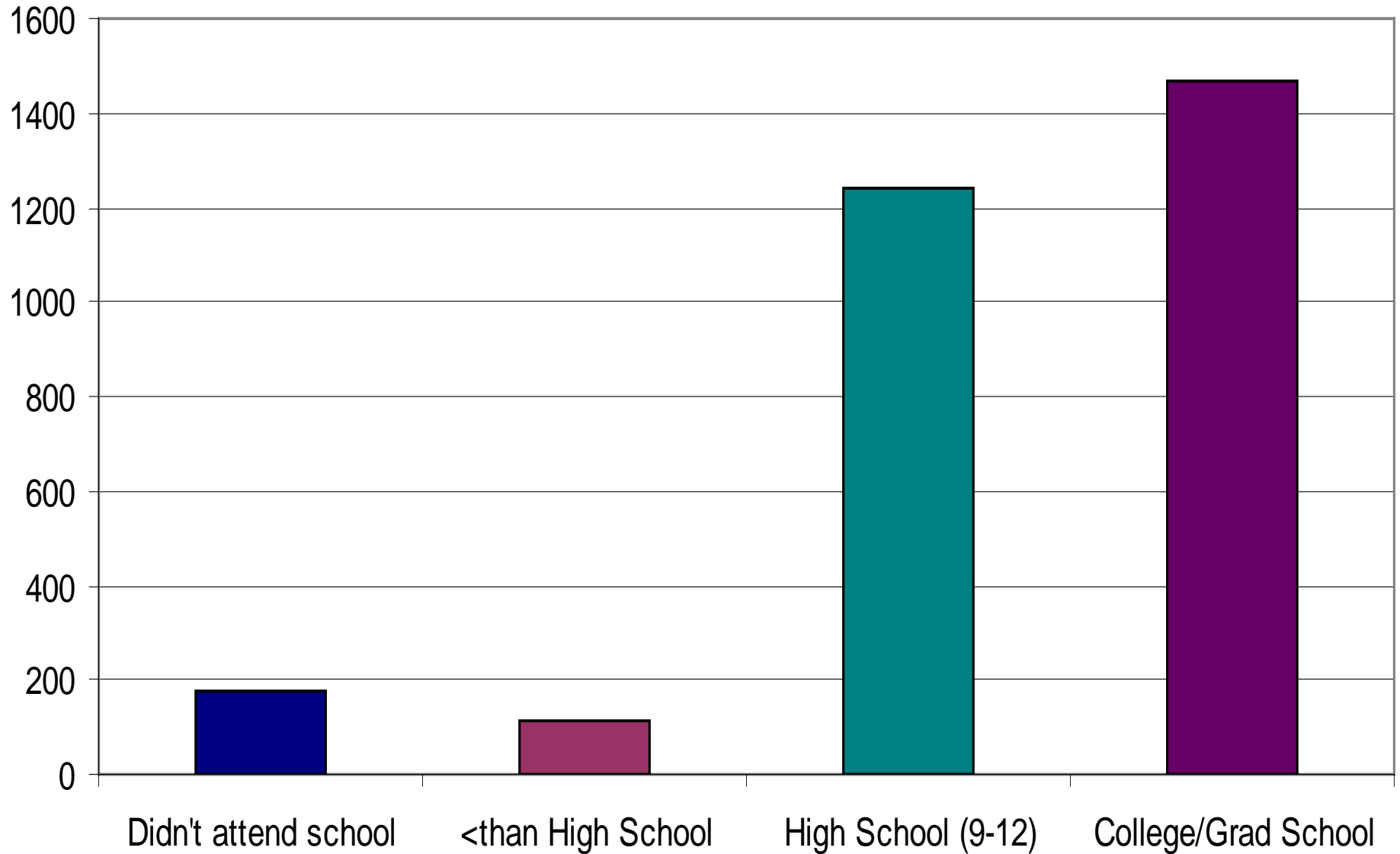
# A Matter of Balance National Sample Demographics: Race/Ethnicity



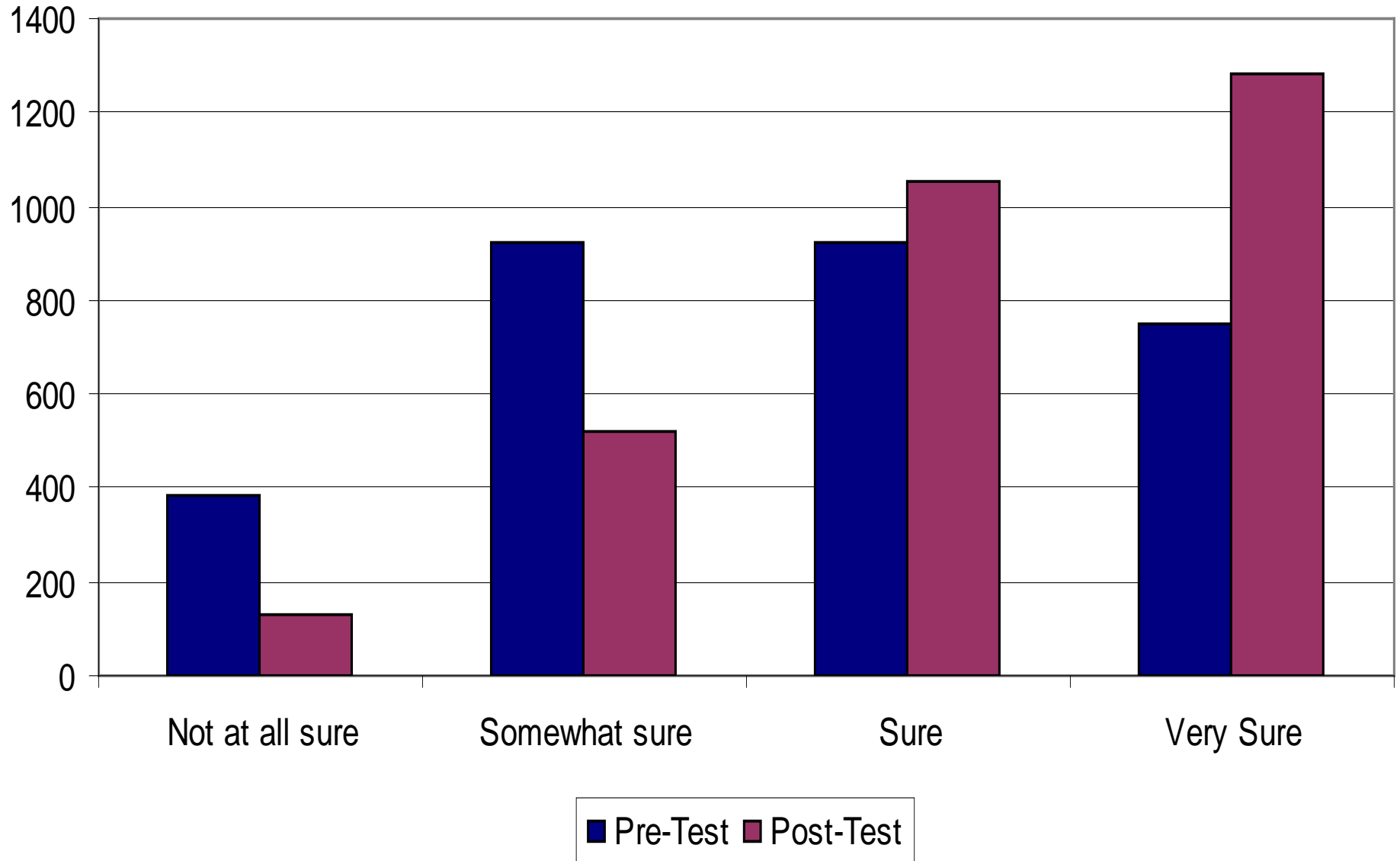
## A Matter of Balance National Sample Demographics: Age



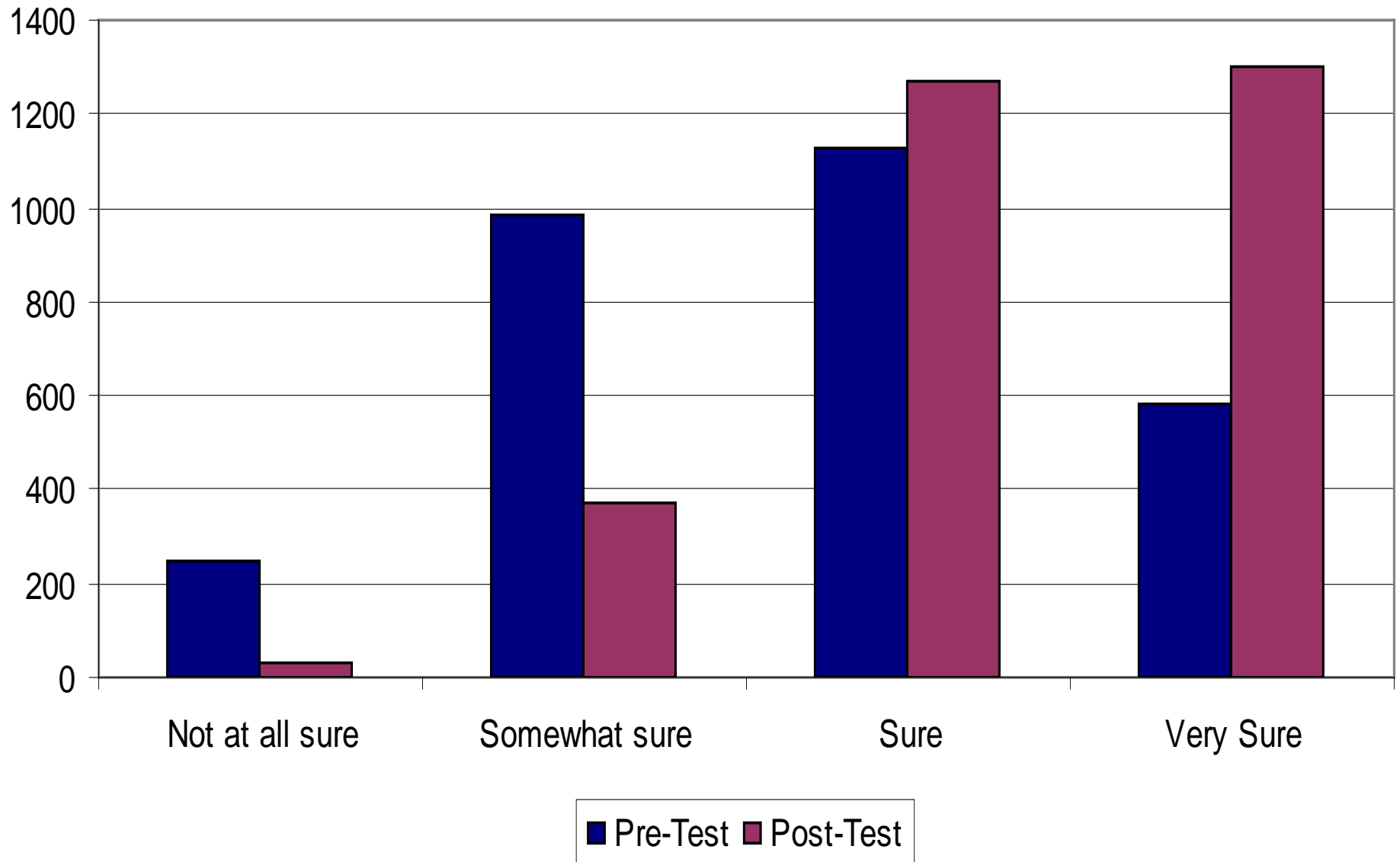
# A Matter of Balance National Sample Demographics: Education



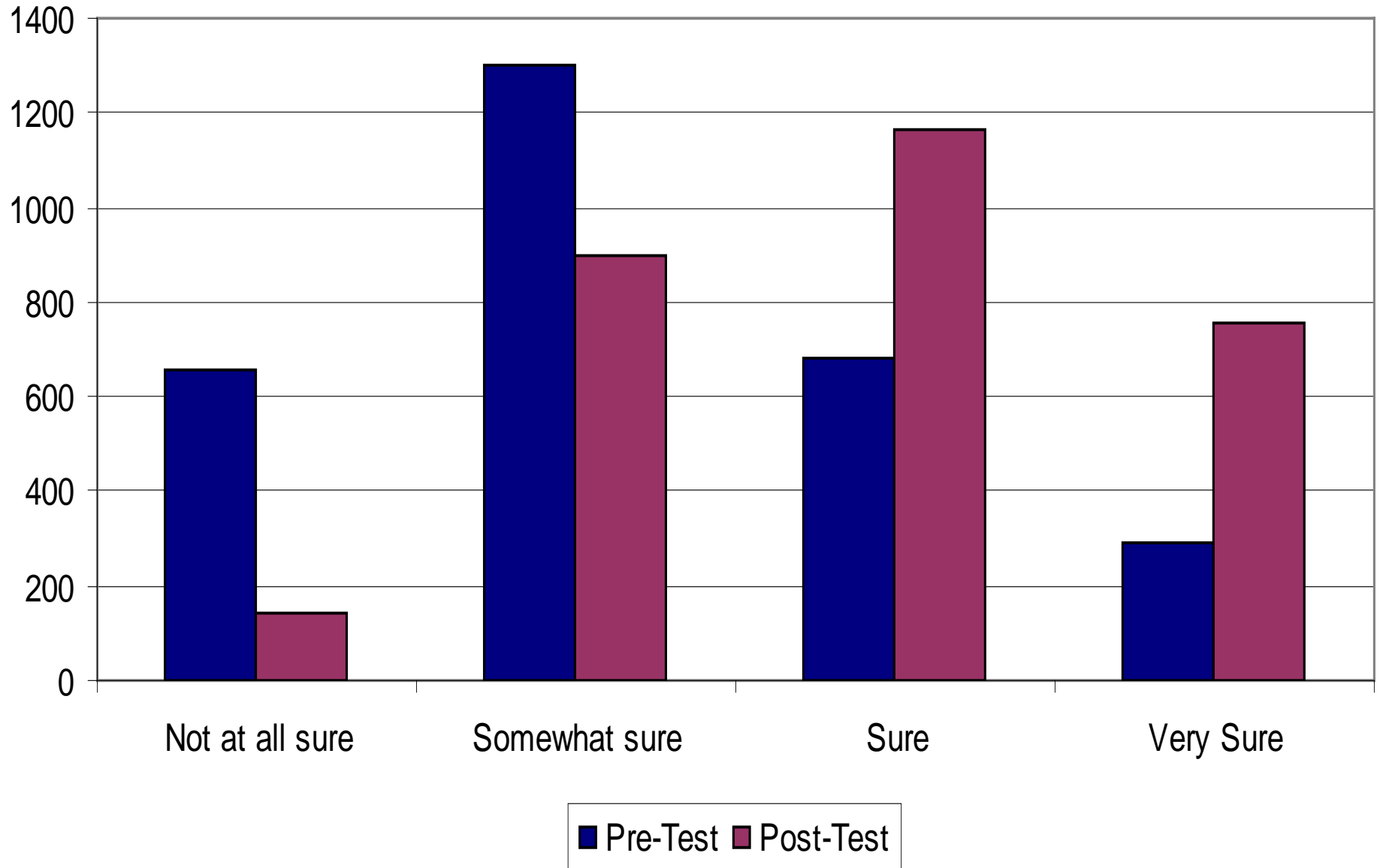
## I can find a way to get up if I fall



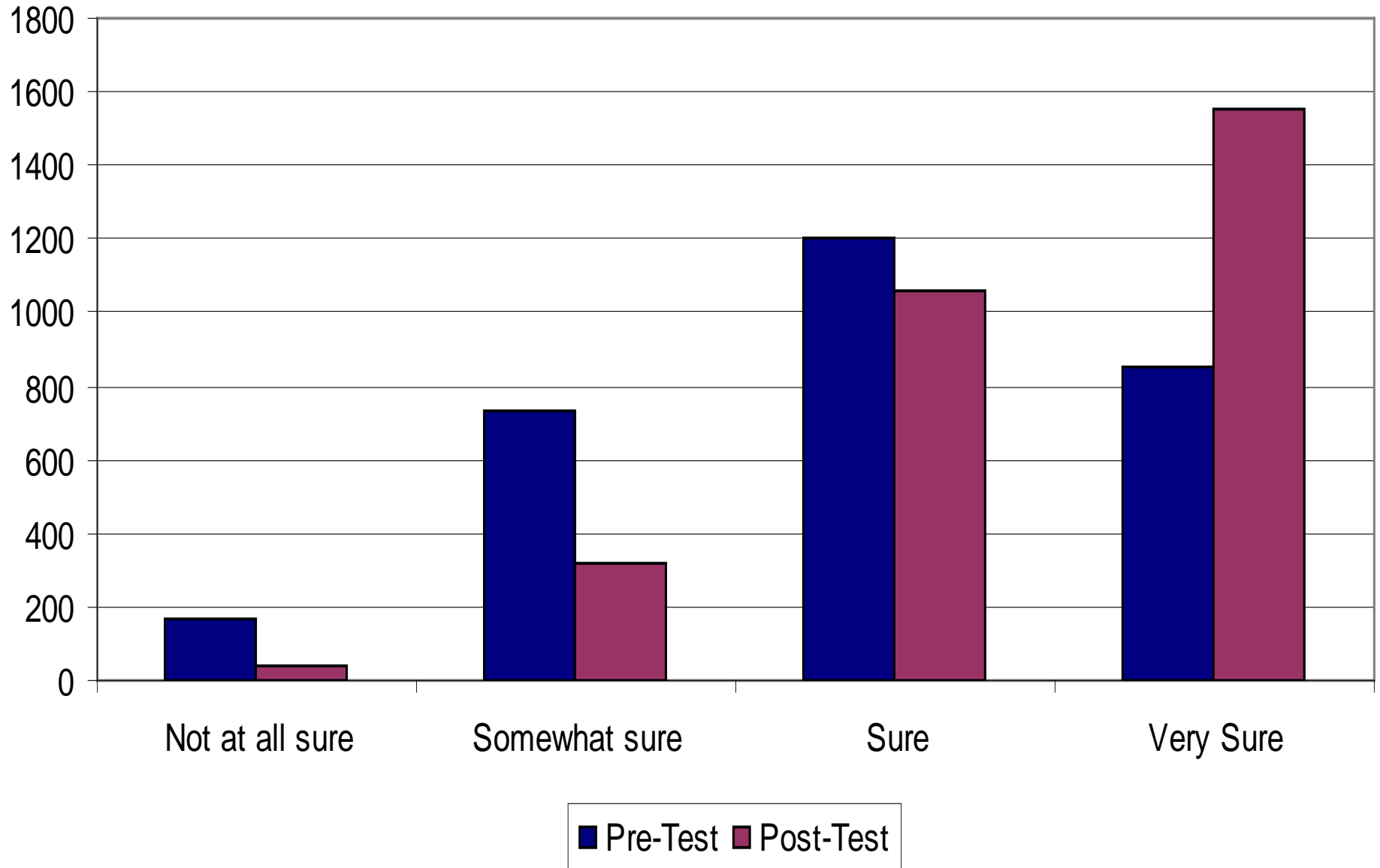
# I can find a way to reduce falls



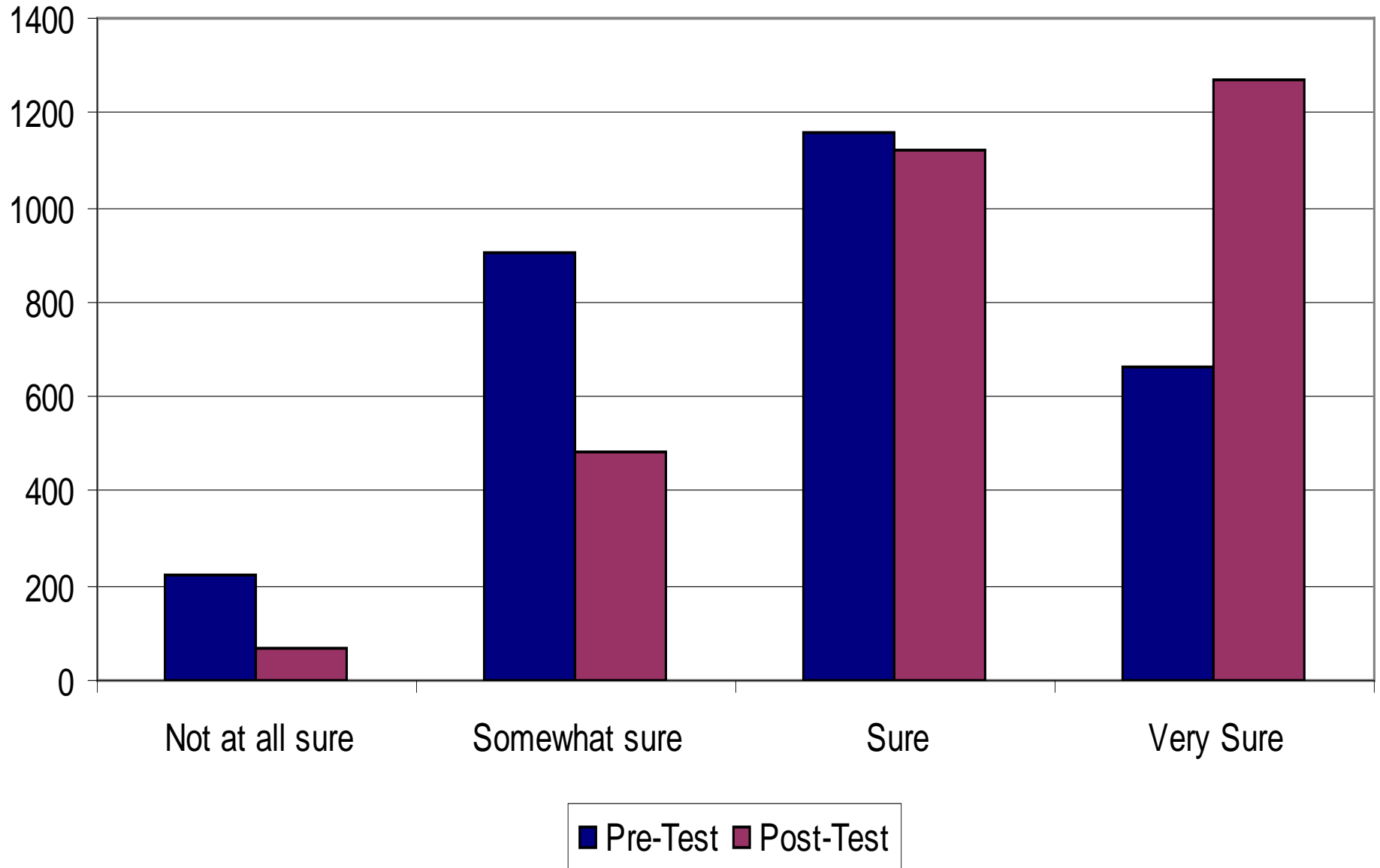
# I can protect myself if I fall



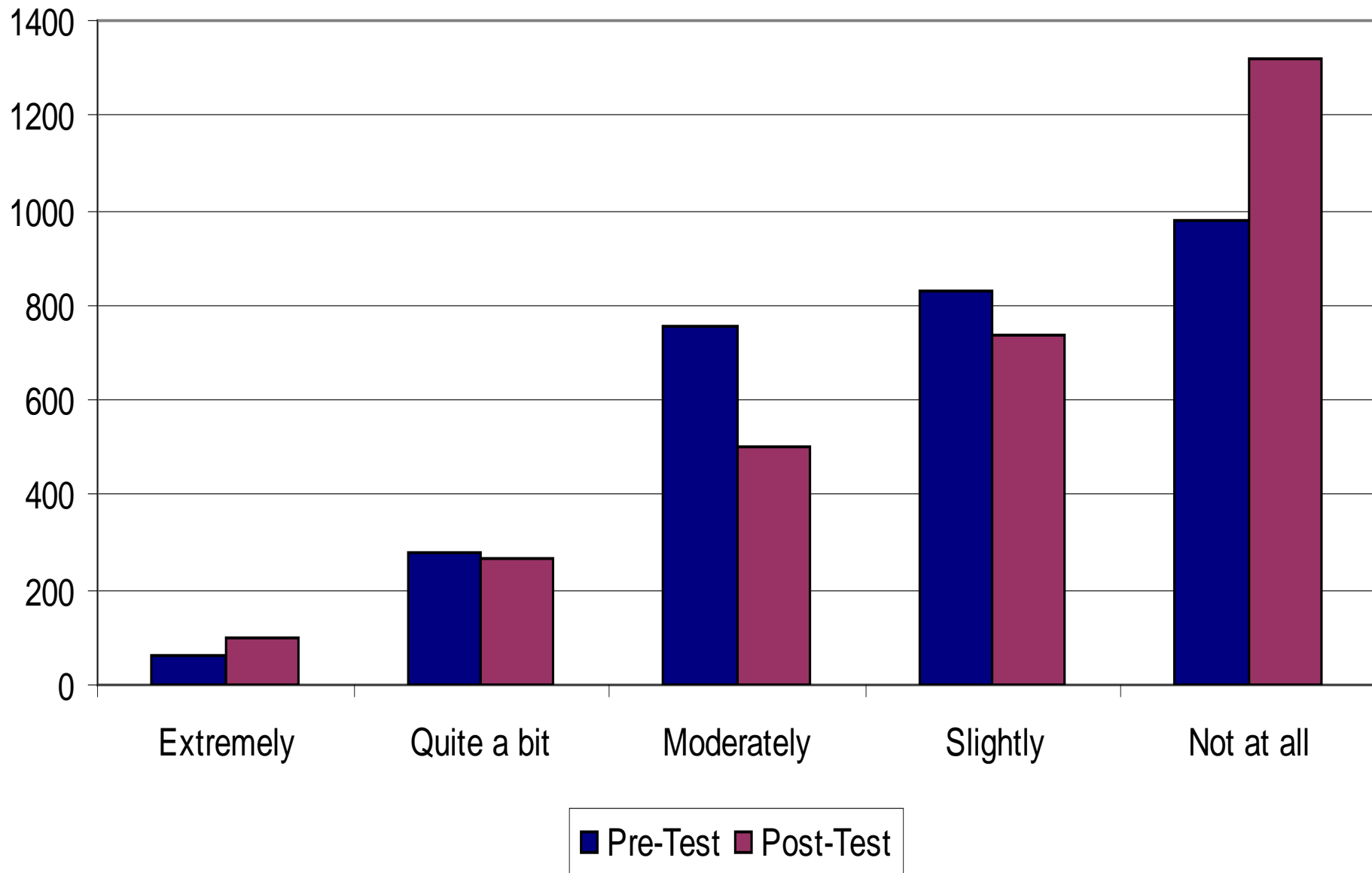
# I can increase my physical strength



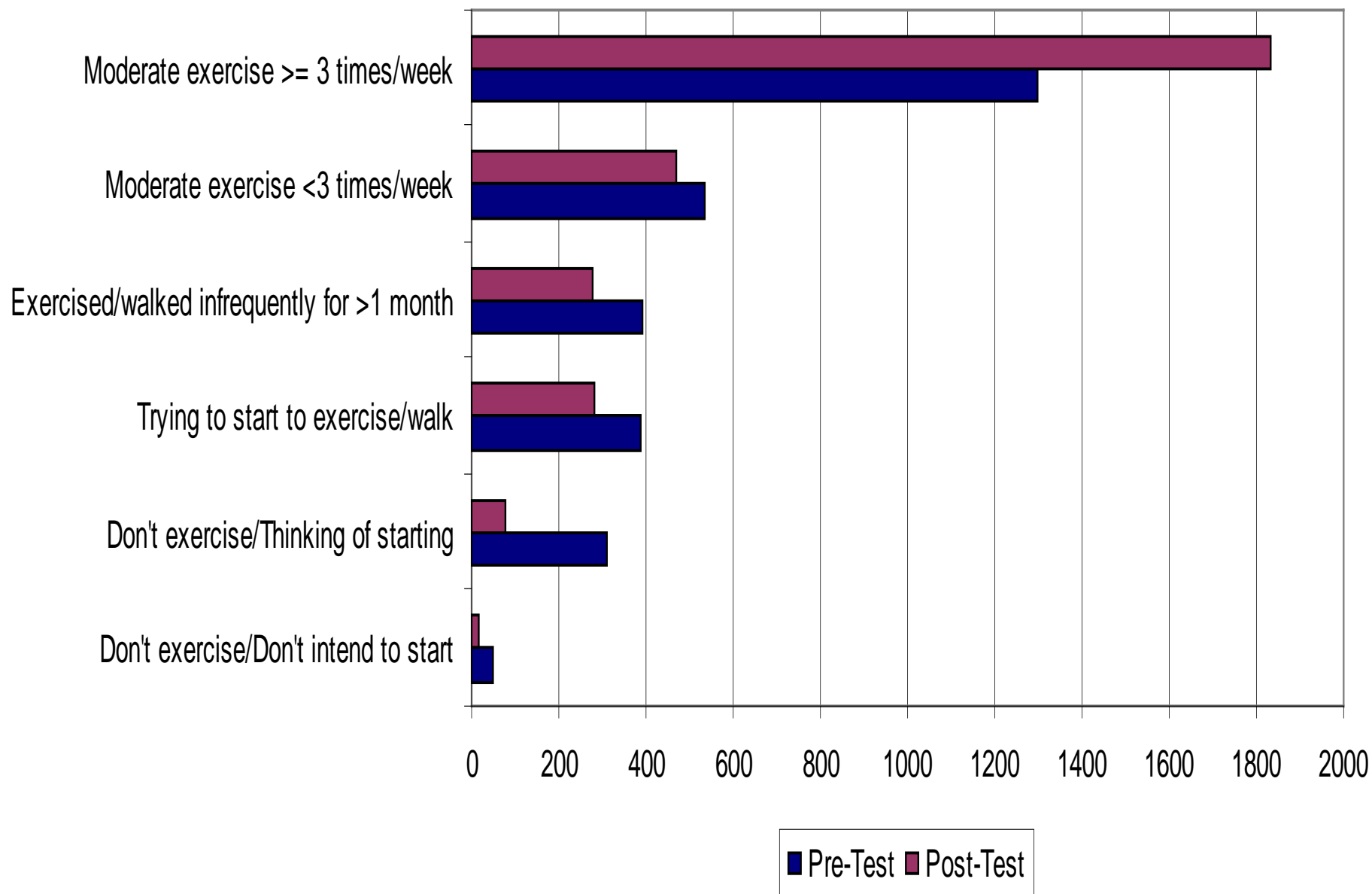
## I can become more steady on my feet



## Last 4 weeks: Impact of fear of falling on normal social activities



## How much are you walking or exercising now?





# **A Matter of Balance: Lay Leader Model Master Trainer Sessions**

A two-day training session will provide you with information and materials to offer A Matter of Balance in your community.

**SAVE THE DATE!  
2009**

October 14 and 15  
South Portland, ME



## Contact Information

Partnership for Healthy Aging  
465 Congress St, Suite 701  
Portland, ME 04101  
207-775-1095  
[pfha@mmc.org](mailto:pfha@mmc.org)  
[www.mainehealth.org/pfha](http://www.mainehealth.org/pfha)

Kim Johnson  
Piedmont Triad Council of Governments  
Area Agency on Aging  
2216 W. Meadowview Road, Suite 201  
Greensboro, NC 27407  
(336) 294-4950  
[kjohnson@ptcog.org](mailto:kjohnson@ptcog.org)



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