

# Assessing the Environment for Fall Prevention



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# Overview of Environmental Assessment

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- Risk factors in the environment
- Person-Environment Interaction
- Types of Assessments
- Sample Tools
- Challenges & Suggestions



# Extrinsic Risk Factors

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- Presence of hazards:
  - Clutter, cords in pathway
  - Loose carpet, slippery surfaces
  - Unstable furniture
  - Pets
- Absence of supports:
  - Lack of places to rest or to support the body (e.g. chairs, handrails, grab bars)
  - Lack of adequate lighting



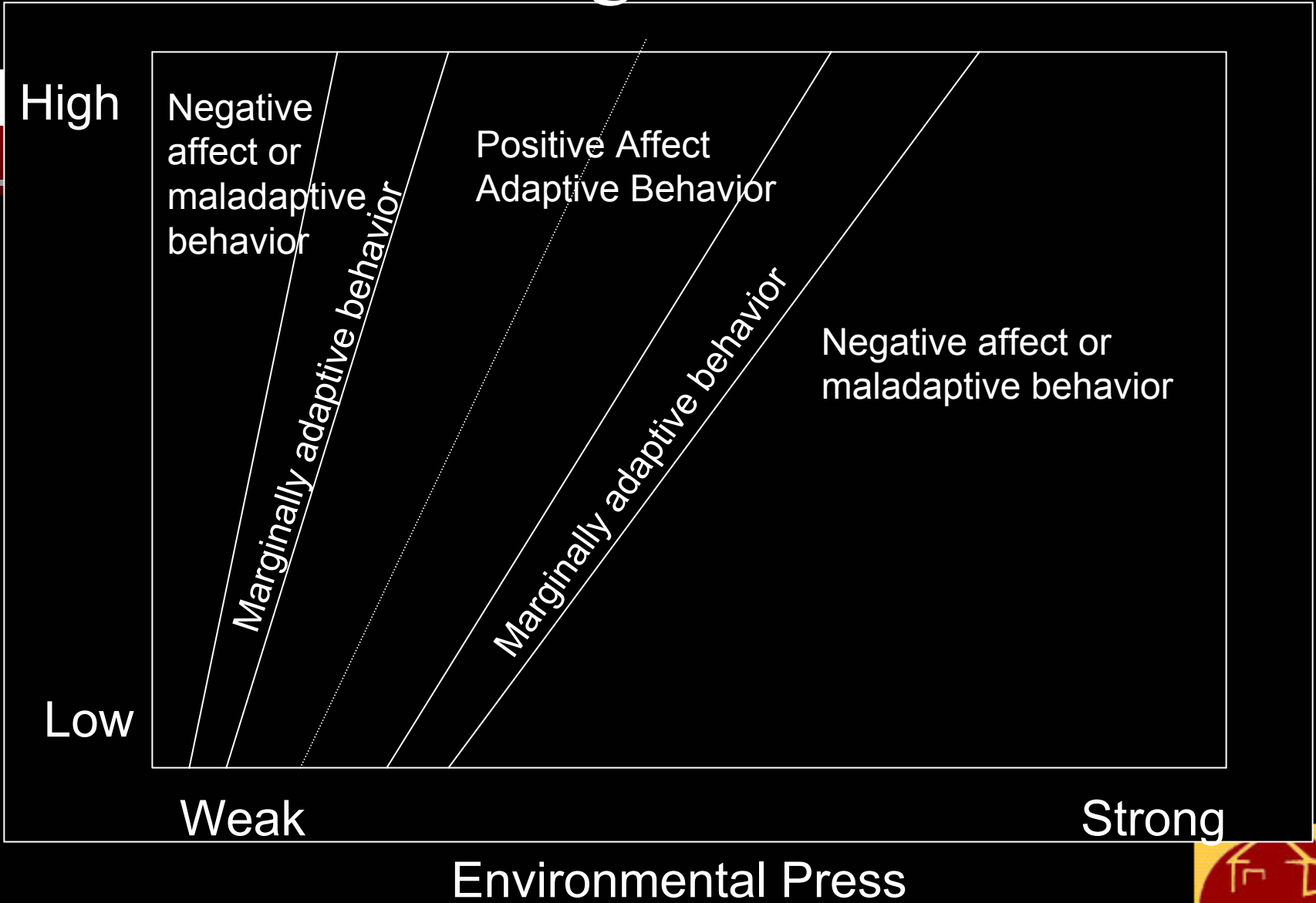
# Other Extrinsic Factors

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- Medication management
- Footwear/hip protectors
- Lighting
- Mobility devices

# Ecological Model

Competency



(Lawton & Nahemow, 1973)



# Types of Assessments

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- Self-report/Checklist of Safety
- Performance
- Skilled Analysis of Supportive Features

(Anemaet et al., 1999)

# Home Safety Checklists-- Examples

- Rebuilding Together --Checklist



- CDC Home Safety Checklist



# Home Safety Checklists -- Advantages

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- Can be self-report
- Often include recommendations
- Offers quick screening of safety hazards



# Home Safety Checklists – Disadvantages

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- Few have demonstrated reliability/validity studies
- Focus on hazards, rather than the use of the environment

# Examples of Performance Measures

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- Get up and Go
  - (Mathias et al., 1986; Podsiadlo D, Richardson S, 1991)
- Tinetti Balance Scale
  - (Tinetti, 2000)

# Performance Measures— Advantages

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- Demonstrate ability to move
- Often have established reliability/validity studies

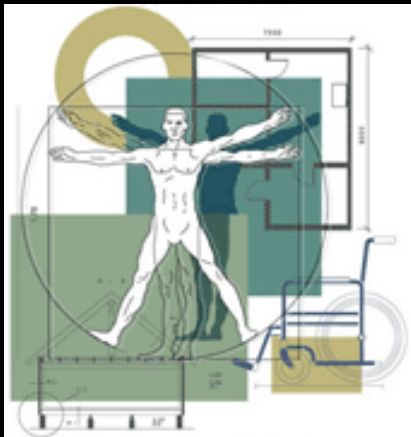
# Performance Measures— Disadvantages

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- May not specifically recognize the environment
- Often requires skilled professionals to administer

# Skilled Analysis

- Skilled interview and observation
- Enabler [www.enabler.nu](http://www.enabler.nu)
  - (Iwarsson & Isacsson, 1996)





# Skilled Analysis—Advantages

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- May address the interaction of performance in the environment
- More comprehensive
- Can lead to tailored environmental interventions to prevent falls



# Disadvantage

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- Often requires skilled professionals to administer
- Can be more time consuming
- May need a team approach with assessment results from a variety of professionals

# Identify Potential Environmental Hazards



- Different height steps
- Walker not opened
- Only one handrail
- Hose in the way
- Dog and leash
- Position of caregiver in relation to older adult
- Secured mats?
- Type of Shoes?





# Challenges to Environmental Assessment in Fall Prevention

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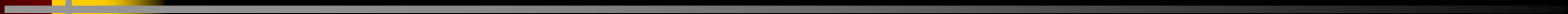
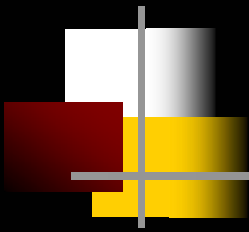
- HM and home hazards are defined broadly
- Environment can be assessed in isolation of how it is used to complete everyday activities
- Need to address the Person-Environment interaction



# Environmental Assessment in Fall Prevention should include:

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- Reliable and Valid Measures
- Comprehensive Assessment
  - Person's abilities and
  - How the person uses the environment to complete activities
- Team Approach to assessment
  - Professional, skilled assessors
  - Client perspective



# Person-Environment Conceptual Model

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# 3 Major Problem Areas of the Home:



- Outside Steps To The Entrance
- Inside Stairs To A Second Floor
- Unsafe Bathrooms

Source: HUD (2001)

