

# “The Relationship of Science and Practice in Occupational Therapy”

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# Occupation – “The ordinary and familiar things that people do every day”

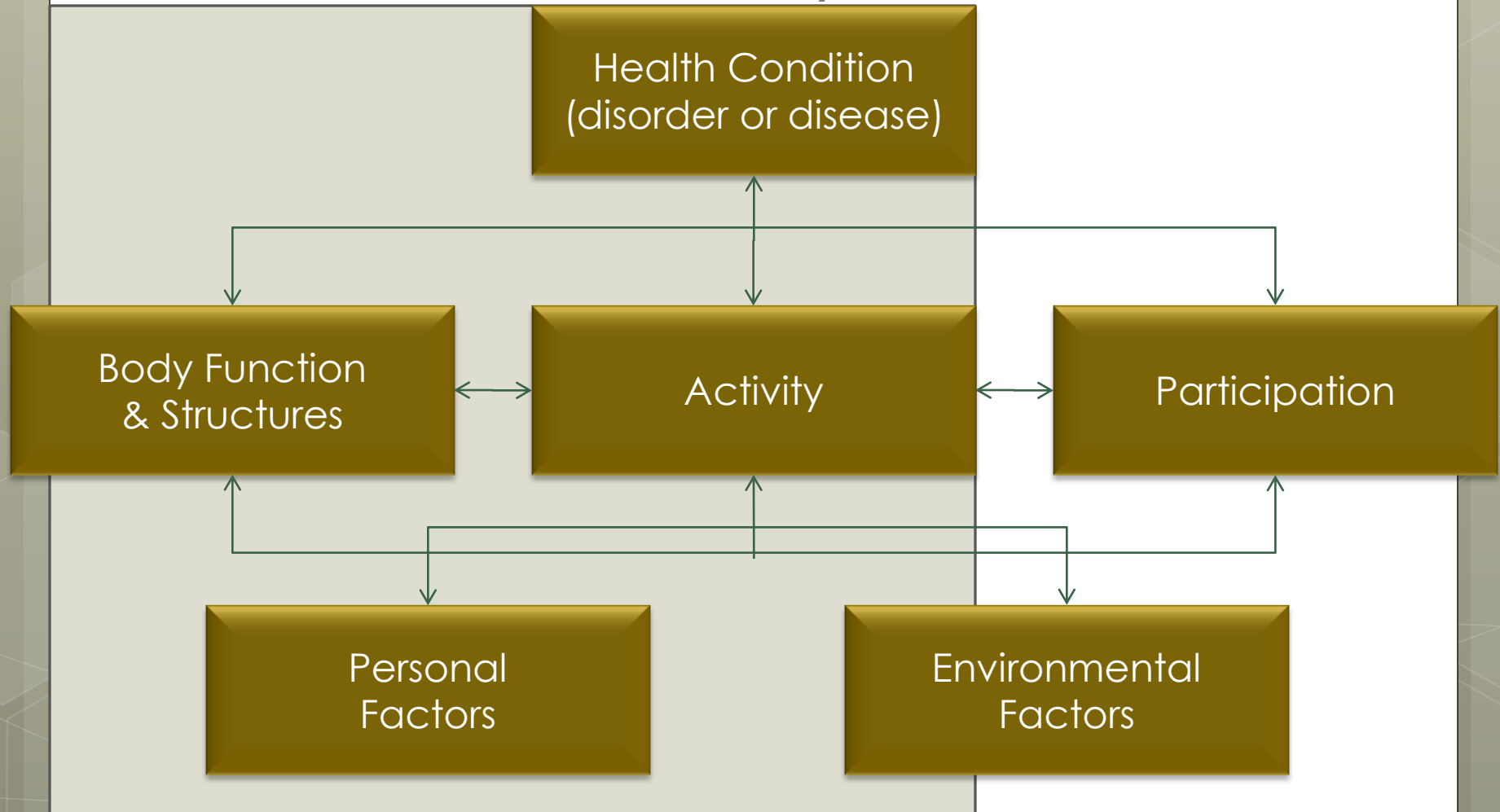


- **Neuroscience** (recovery, repair, rehabilitation)
- **Psychology** (adaptation, selectivity, optimization)
- **Engineering** (built environments, robotics, tool design)
- **Occupational Science** (roles, tasks, actions)
- **Physiology** (health, fitness)

# PARADIGM SHIFT IN "SCIENCE" OF DISABILITY

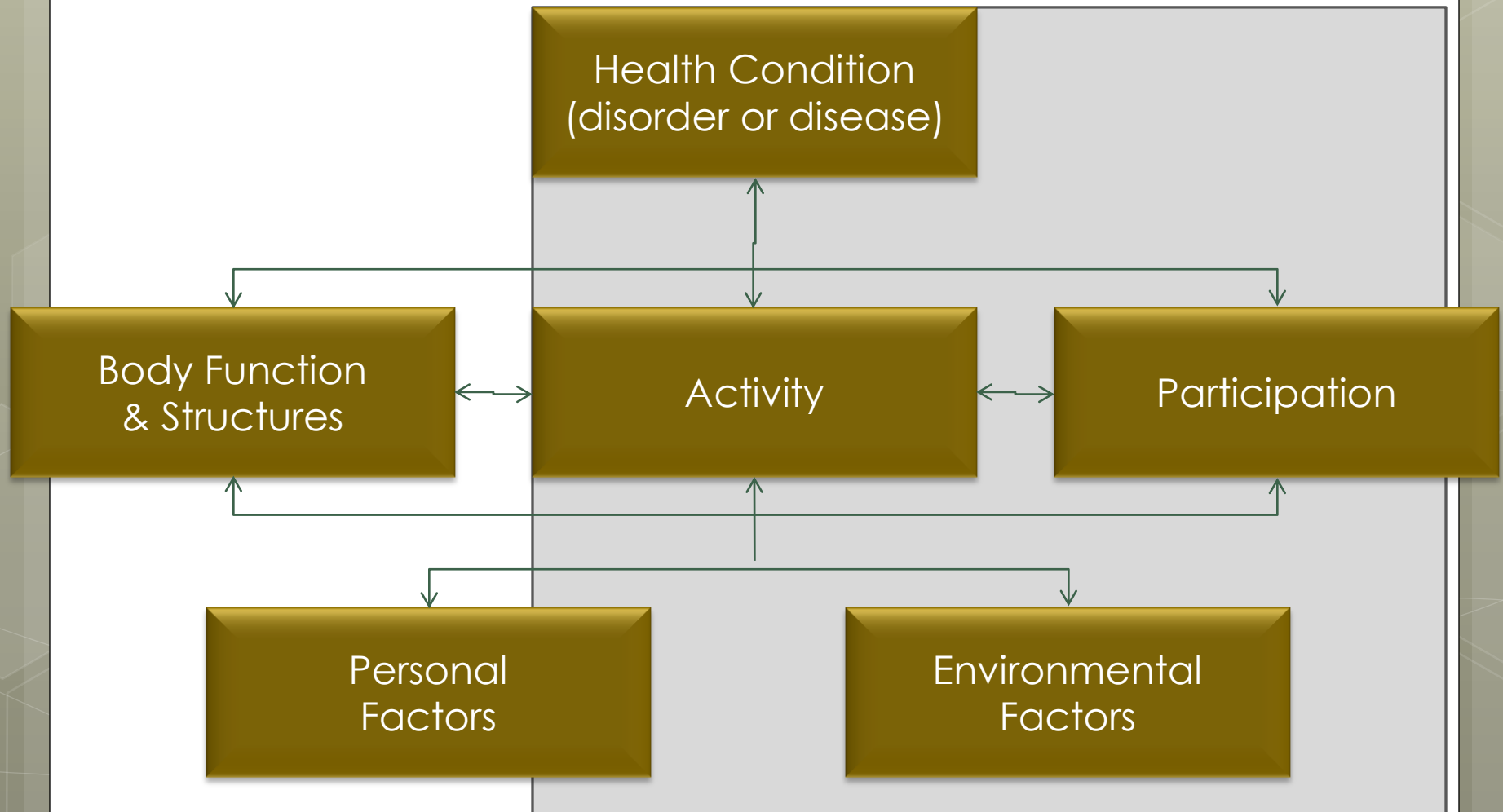
Classification Model	Underlying Cause & Etiology	Limitations at Body Level	Limitations at Person Level	Limitations at Societal Level	Context
<b>1965 Nagi</b>	Pathology	Impairment	Functional Limitations	Disability	
<b>1980 ICIDH</b>	Disease, injury	Impairment	Disability	Handicap	
<b>1993 NCMRR</b>	Pathology	Impairment	Functional Limitations	Disability	Societal Limitations
<b>1997 IOM</b>	Pathology	Impairment	Functional Limitations	Disability	Environment
<b>ICF 2001</b>	Health Conditions	Body Functions & Structures	Activities	Participation	Environment

# International Classification of Function and Disability, WHO 2001

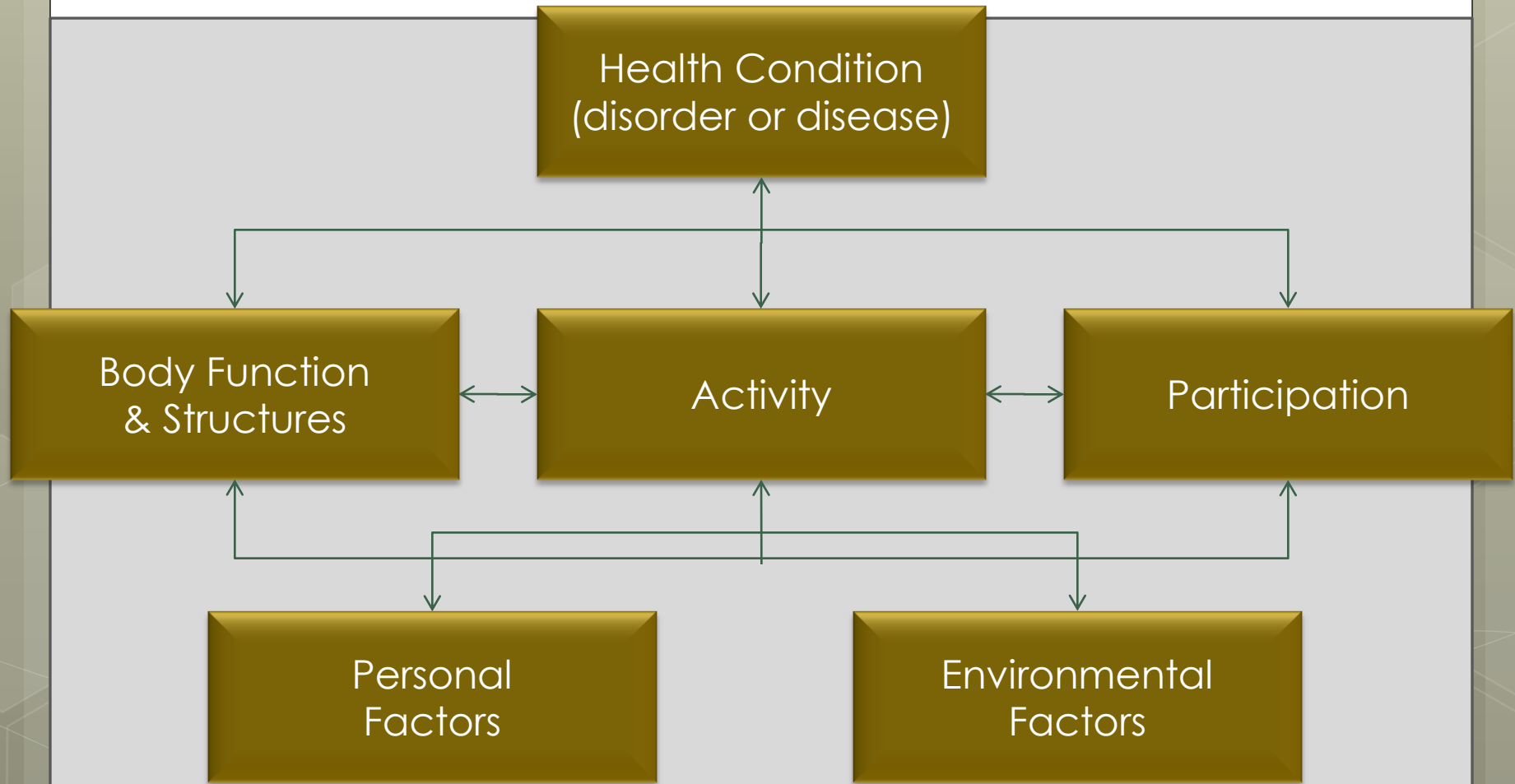


Current Medical System

# International Classification of Function and Disability, WHO 2001



# International Classification of Function and Disability, WHO 2001



Happening Now: A Blended Medical and Community Health System

# WHAT SUPPORTS PARTICIPATION IN DAILY LIFE?

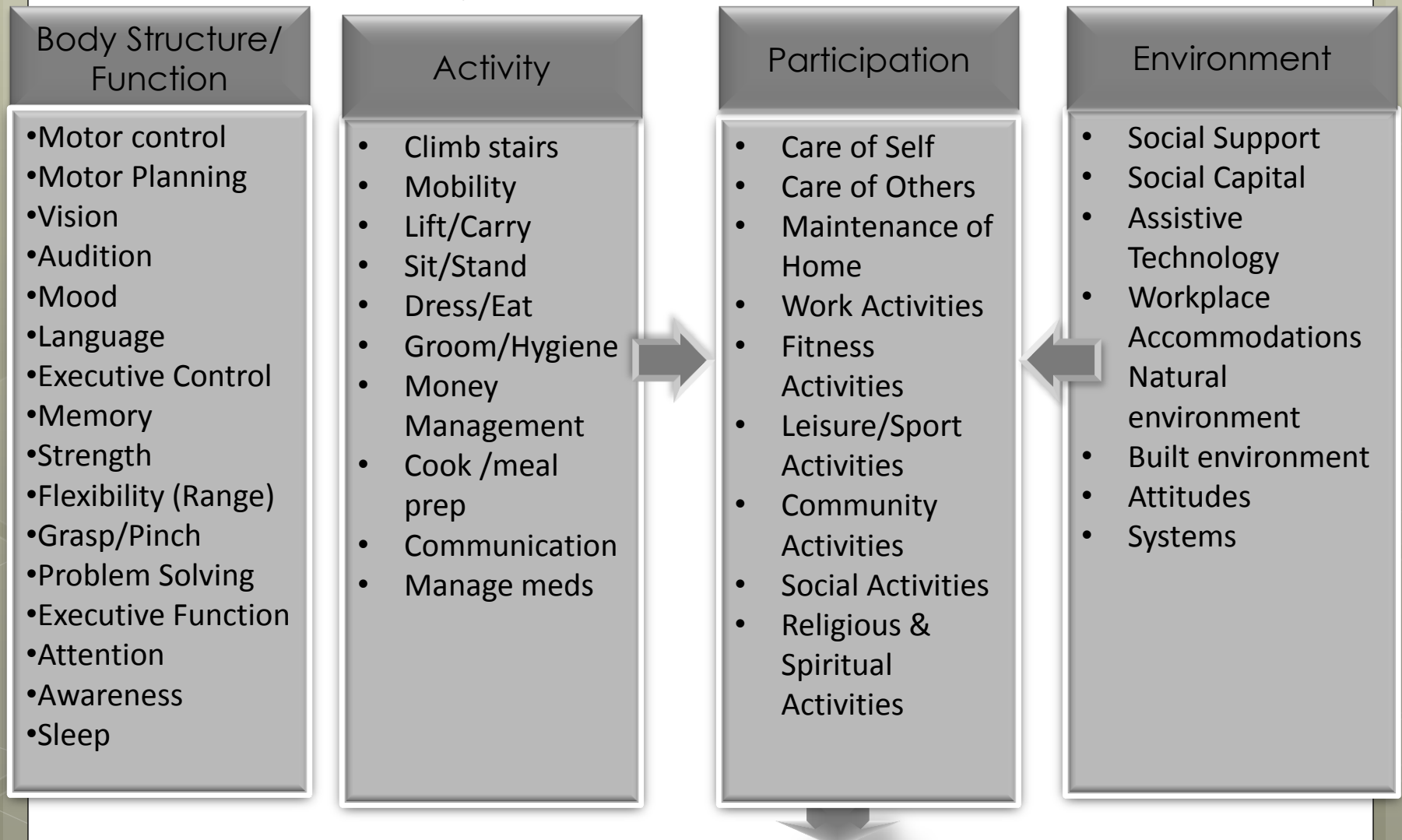
## WHAT IS THE SCIENCE OCCUPATIONAL THERAPISTS USE?



# EXAMPLE OF ICF CONSTRUCTS THAT REQUIRE OUR UNDERSTANDING


Medical Care ( Recovery)

Socio-cultural Care ( Compensation)



## Quality of Life

\*Physical\* Psychological\*Social\* Spiritual\*Role  
Functioning \* General Well-being



# How Occupational Therapy Practitioners and Scientists Contribute to the Scholarship of Participation

What are people's needs?

How do person and environmental factors support  
participation in everyday life?

# What is Participation? An Insider Perspective



From: Hammel et al (2008). What does Participation Mean? An Insider Perspective from People with Disabilities. *Disability and Rehabilitation*

Activity Card Sort, 2nd Edition  
Recovering Version Form B

Name John  
 Date Of Birth 7/10/67  
 Tester Maria

Date of Onset 10/29/12  
 Date 12/12/12

This slide shows you a sample of ACS data to give you an idea of the kind of activity data you can use to guide your intervention.

Number	Activity	Not Done Before Current Illness or Injury	Continued to Do During Illness or Injury	Doing Less Since Illness or Injury	Given Up Due to Illness or Injury	Done Previously	New Activity Since Illness or Injury	Score
	<b>Instrumental</b>							12.5
1	Shopping in a Store		1	0.5	0	1	1	
2	Shopping for Groceries		1	0.5	0	1	1	
3	Dishes		1	0.5	0	1	1	
4	Laundry		1	0.5	0	1	1	
5	Yard Maintenance		1	0.5	0	1	1	
6	Taking Out the Trash		1	0.5	0	1	1	
7	Cooking Dinner		1	0.5	0	1	1	
8	Household Maintenance		1	0.5	0	1	1	
9	Fixing Things Around the House		1	0.5	0	1	1	
10	Driving		1	0.5	0	1	1	
11	Getting Gas		1	0.5	0	1	1	
12	Car Maintenance		1	0.5	0	1	1	
13	Going to Doctor or Therapy		1	0.5	0	1	1	
14	Taking Care of a Pet		1	0.5	0	1	1	
15	Paying Bills		1	0.5	0	1	1	
16	Managing Investments		1	0.5	0	1	1	
17	Resting		1	0.5	0	1	1	
18	Beauty/Barbershop		1	0.5	0	1	1	
19	Child Care		1	0.5	0	1	1	
20	Work (paid)		1	0.5	0	1	1	
	<b>Total Instrumental</b>							Current 12.5 Previous 20 % Retained 62.5%
	<b>Low-Demand Leisure</b>							
21	Spectator Sports		1	0.5	1	1	1	
22	Recreational Shopping		1	0.5	1	1	1	
23	Cooking as a Hobby		1	0.5	1	1	1	
24	Sewing (clothing or household, including mending)	///	1	0.5	1	1	1	
25	Needle Crafts (knitting, needlepoint, quilting)	///	1	0.5	1	1	1	
26	Hand Crafts	///	1	0.5	1	1	1	
27	Table Games (checkers)	///	1	0.5	1	1	1	
28	Computer (e-mail, paying bills, shopping)	///	1	0.5	1	1	1	
29	Computer Games	///	1	0.5	1	1	1	
30	Collecting		1	0.5	1	1	1	
31	Playing Cards (solitaire, poker, bridge)		1	0.5	1	1	1	
32	Putting Together Puzzles		1	0.5	1	1	1	
33	Crossword or Sudoku Puzzles		1	0.5	1	1	1	
34	Photography	1	1	0.5	1	1	1	
35	Drawing/Painting	1	1	0.5	1	1	1	
36	Interior Decorating	1	1	0.5	1	1	1	
37	Playing a Musical Instrument		1	0.5	1	1	1	
38	Reading Magazine/Books		1	0.5	1	1	1	
39	Reading Newspaper		1	0.5	1	1	1	
40	Reading the Bible/Religious Materials		1	0.5	1	1	1	
41	Singing in Choir or Group		1	0.5	1	1	1	
42	Creative Writing/Journal	///	1	0.5	1	1	1	
43	Letter Writing	///	1	0.5	1	1	1	
44	Bird Watching	///	1	0.5	1	1	1	
45	Going to the Museum		1	0.5	1	1	1	
46	Going to Garden or Park		1	0.5	1	1	1	
47	Attending Concerts		1	0.5	1	1	1	
48	Going to Casino		1	0.5	1	1	1	
49	Bingo/Lottery	///	1	0.5	1	1	1	
50	Going to the Theater	///	1	0.5	1	1	1	
51	Watching Movies		1	0.5	1	1	1	
52	Watching Television		1	0.5	1	1	1	
53	Listening to Music		1	0.5	1	1	1	
54	Listening to Radio		1	0.5	1	1	1	
55	Sitting and Thinking		1	0.5	1	1	1	
	<b>Total Low-Demand-Leisure Activities</b>							Current 13 Previous 22 % Retained 59%
	<b>High-Demand Leisure</b>							
56	Swimming	1	1	0.5	1	1	1	
57	Playing Team Sports		1	0.5	1	1	1	

# Community Participation Indicators

Shade circles like this: ●  
Not like this: ○

Please mark the choice that most closely reflects your opinion:

1. I live my life the way that I want.....
2. People try to put limits on me.....
3. I participate in a variety of activities.....
4. I am uncomfortable participating in community activities.....
5. I spend time doing things that improve my community.....
6. I participate in activities that I choose.....
7. I spend time helping others.....
8. I count as a person in society.....
9. I have the freedom to make my own decisions.....
10. I live my life fully.....
11. I regularly seek out new challenges.....
12. I have reliable access to a telephone.....
13. I have a say on decisions in my community.....
14. I have choices about the activities I do.....
15. I actively pursue my dreams and desires.....
16. I do things that are important to me.....
17. People have high expectations of me.....
18. I am able to go out and have fun.....
19. I contribute to society.....
20. I have opportunities to make new friends.....
21. I speak up for myself.....
22. People speak to me disrespectfully.....
23. I take responsibility for my own life.....
24. I have good job opportunities.....
25. People underestimate me.....

All the time  
Frequently  
Sometimes  
Seldom  
Almost never

# Community Participation Indicators

Shade circles like this: ●  
Not like this: ○

Please mark the choice that most closely reflects your opinion:

26. I assume leadership roles in organizations.....
27. I am welcome in my community.....
28. I am treated equally.....
29. I have reliable access to community services.....
30. I do important things with my life.....
31. My community respects me the way that I am.....
32. I have influence in my community.....
33. I am in control of my own life.....
34. I am ignored.....
35. I feel safe participating in community activities.....
36. I am treated as a valued member of society.....
37. People see my potential.....
38. I have access to reliable transportation.....
39. I have reliable access to the Internet.....
40. I have control over how I spend my time.....
41. People listen to what I say.....
42. I participate in activities when I want.....
43. I am uncomfortable participating in public meetings.....
44. I am treated like a human being.....
45. People count on me.....
46. I contribute to the well-being of my community.....
47. I am actively involved in my community.....
48. It is hard for me to get information about community services.....

All the time  
Frequently  
Sometimes  
Seldom  
Almost never

CaseId #

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# CPI data-1 (engagement, social sample)

## Community Participation Indicators

This survey is voluntary. If you choose to participate, your information will be kept private. Your name will never be linked to any of the information you share.

Shade circles like this: ☒

Not like this: ☐ ☐

The statements below describe many of the ways that people participate in society. For each item, tell us:

- 1) How often you do the activity,
- 2) If the activity is important to you, and
- 3) If you feel you are doing the activity enough, too much, or not enough.

1. How often? --> 2. Important? --> 3. Doing enough?

In a typical week, how many days do you:	1. How often?					2. Important?		3. Doing enough?		
	None	1-2 Days	3-4 Days	5-6 Days	7 Days	No	Yes	Enough	Not Enough	Too Much
Get out and about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Spend time with family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Keep in touch with family by phone or Internet	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Spend time with friends	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Keep in touch with friends by phone or Internet	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to parties, out to dinner, or other social activities	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Spend time with a significant other or intimate partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

# CPI data-2 (participation)

## Community Participation Indicators

Shade circles like this: ●  
Not like this: ☒ ☑

Please mark the choice that most closely reflects your opinion:

	All the time	Frequently	Sometimes	Seldom	Almost never
1. I live my life the way that I want.....	○	●	○	○	○
2. People try to put limits on me.....	○	○	○	○	○
3. I participate in a variety of activities.....	○	○	○	○	○
4. I am uncomfortable participating in community activities.....	○	○	○	○	○
5. I spend time doing things that improve my community.....	○	○	○	○	○
6. I participate in activities that I choose.....	○	○	○	○	○
7. I spend time helping others.....	○	○	○	○	○
8. I count as a person in society.....	○	○	○	○	○
9. I have the freedom to make my own decisions.....	○	○	○	○	○
10. I live my life fully.....	○	○	○	○	○
11. I regularly seek out new challenges.....	○	○	○	○	○
12. I have reliable access to a telephone.....	○	○	○	○	○
13. I have a say on decisions in my community.....	○	○	○	○	○
14. I have choices about the activities I do.....	○	○	○	○	○
15. I actively pursue my dreams and desires.....	○	○	○	○	○
16. I do things that are important to me.....	○	○	○	○	○
17. People have high expectations of me.....	○	○	○	○	○
18. I am able to go out and have fun.....	○	○	○	○	○
19. I contribute to society.....	○	○	○	○	○
20. I have opportunities to make new friends.....	○	○	○	○	○
21. I speak up for myself.....	○	○	○	○	○
22. People speak to me disrespectfully.....	○	○	○	○	○
23. I take responsibility for my own life.....	○	○	○	○	○
24. I have good job opportunities.....	○	○	○	○	○
25. People underestimate me.....	○	○	○	○	○

## Community Participation Indicators

Shade circles like this: ●  
Not like this: ☒ ☑

Please mark the choice that most closely reflects your opinion:

	All the time	Frequently	Sometimes	Seldom	Almost never
26. I assume leadership roles in organizations.....	○	○	○	○	○
27. I am welcome in my community.....	○	○	○	○	○
28. I am treated equally.....	○	○	○	○	○
29. I have reliable access to community services.....	○	○	○	○	○
30. I do important things with my life.....	○	○	○	○	○
31. My community respects me the way that I am.....	○	○	○	○	○
32. I have influence in my community.....	○	○	○	○	○
33. I am in control of my own life.....	○	○	○	○	○
34. I am ignored.....	○	○	○	○	○
35. I feel safe participating in community activities.....	○	○	○	○	○
36. I am treated as a valued member of society.....	○	○	○	○	○
37. People see my potential.....	○	○	○	○	○
38. I have access to reliable transportation.....	○	○	○	○	○
39. I have reliable access to the Internet.....	○	○	○	○	○
40. I have control over how I spend my time.....	○	○	○	○	○
41. People listen to what I say.....	○	○	○	○	○
42. I participate in activities when I want.....	○	○	○	○	○
43. I am uncomfortable participating in public meetings.....	○	○	○	○	○
44. I am treated like a human being.....	○	○	○	○	○
45. People count on me.....	○	○	○	○	○
46. I contribute to the well-being of my community.....	○	○	○	○	○
47. I am actively involved in my community.....	○	○	○	○	○
48. It is hard for me to get information about community services.....	○	○	○	○	○

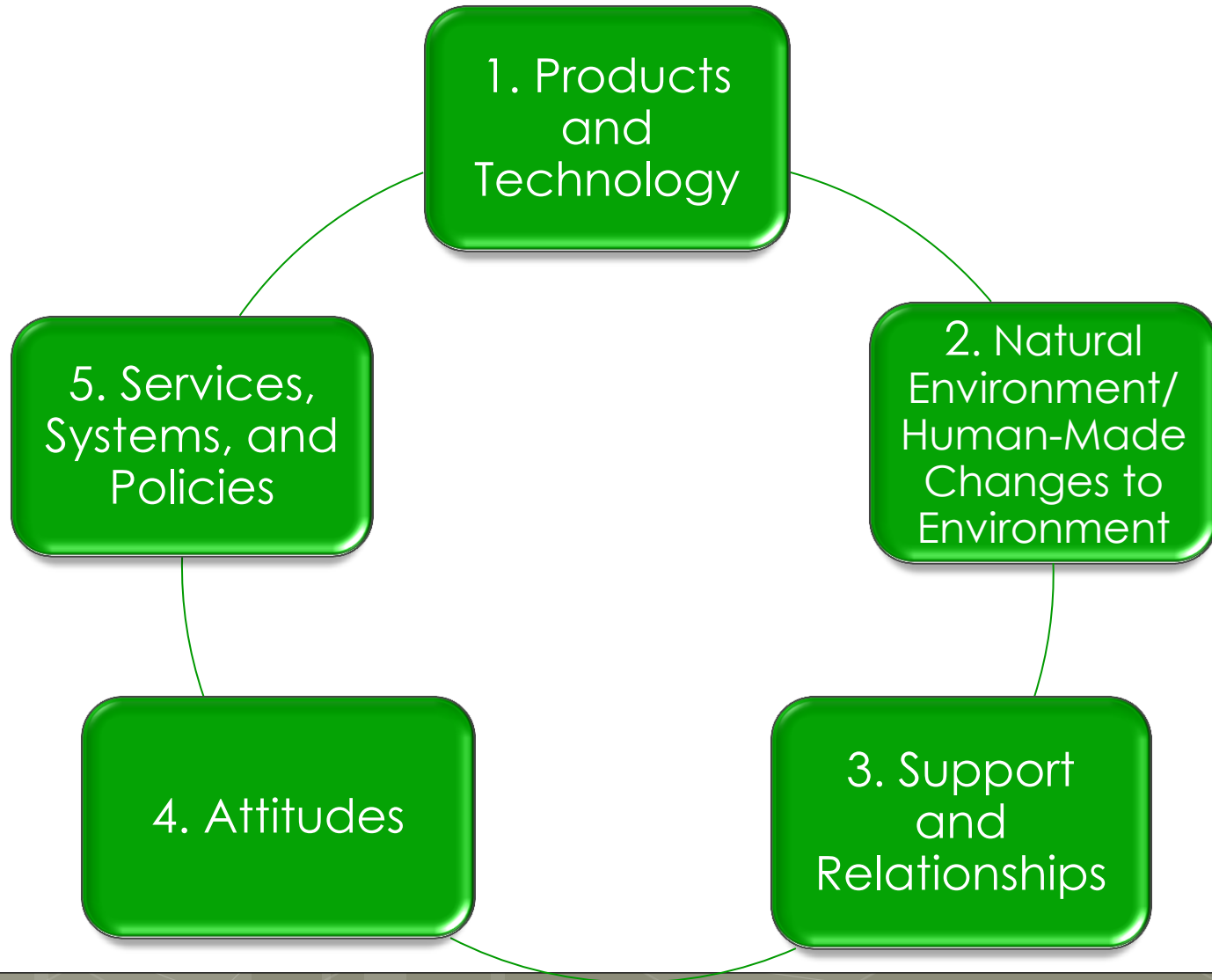


# Environment as driver of participation

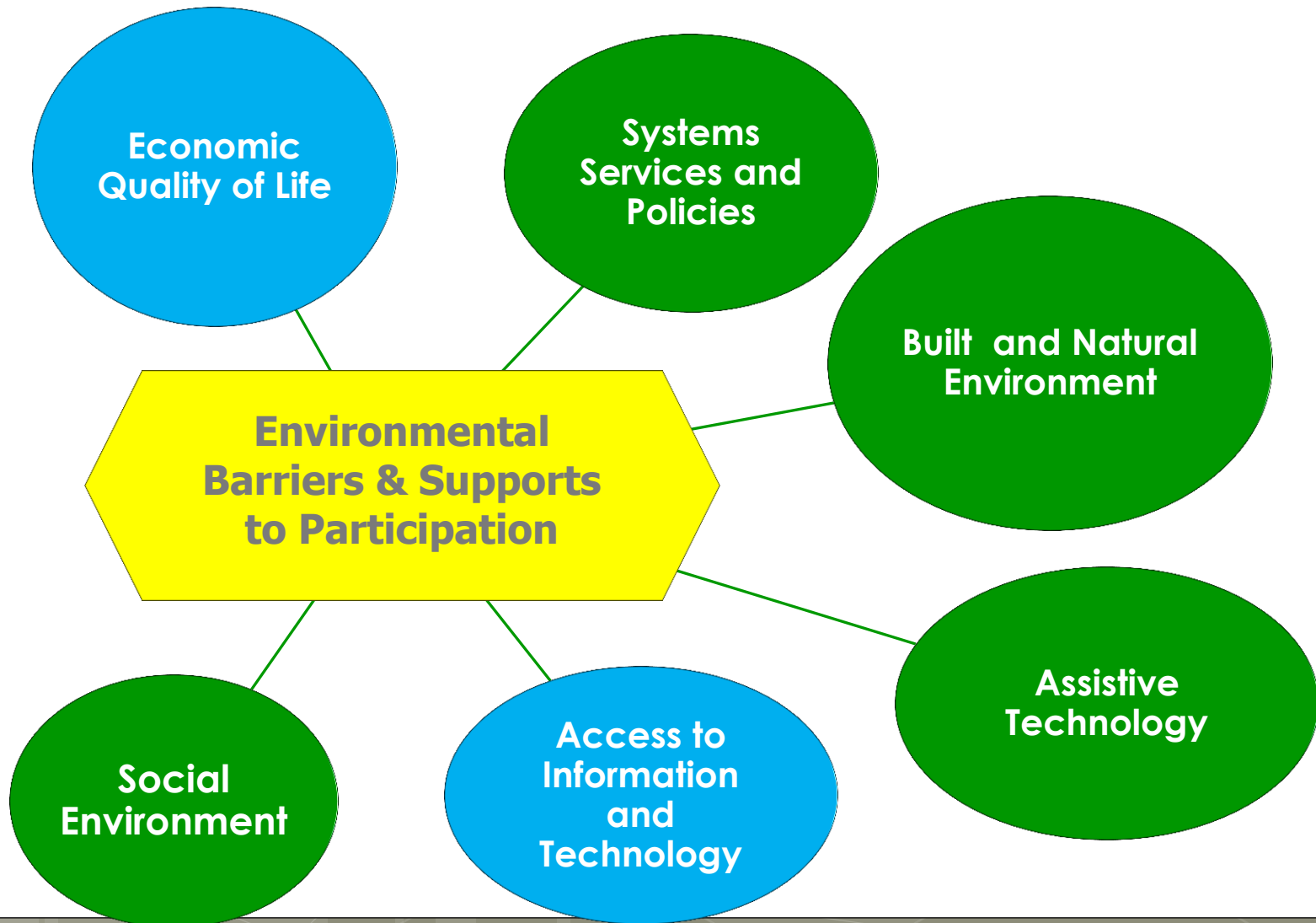
# Background

- Physical, cultural, and economic aspects of the environment profoundly affects the social health and participation of people with disabilities
- Measuring participation is complicated by multiple environmental factors
- A critical step in this process is operationalizing environmental factors that create barriers or facilitate participation

# ICF Taxonomy



# Revised Framework

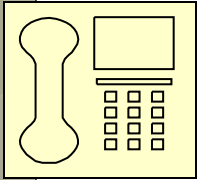


○	○	○	○	○
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[illegible]

# Domain 1: Access to Information and Technology

- Includes devices and technology to transmit and receive information



- cell phone
- land lines
- computer
- email
- internet services

- Usability of information



- ability to access
- understand
- information literacy
- transparency
- information finding.



## **Sample Items:**

*I have easy access to the internet if I want to use it.*

*Health information is easily available to me if I need it.*

*Websites are available in a format I can use easily if I need them.*

*My telephone is easy to use.*

*Information about community resources is easily available to me if I need it.*

*My doctors, nurses and other health care professionals give me written information in ways I can understand.*

*In case of a health emergency I can get the information I need easily.*



# Domain 2: Assistive Technology

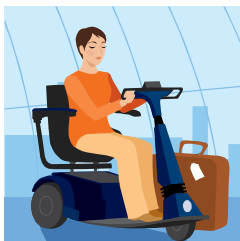
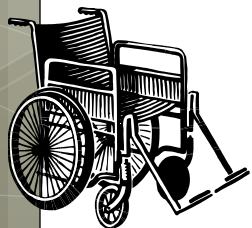
Four sub-sets:

Mobility  
Personal care  
Vision/Hearing  
Communication



Includes:

Availability  
Quality  
Impact



## Quality Sample Items:

*My device is easy to use.*

*My device is reliable.*

*My device is can be easily repaired.*

*My device gives me more control over my daily activities.*

*My device helps me be more independent.*

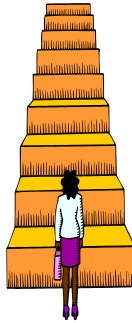
*My device allows me to participate in activities that I enjoy.*



# Domain 3: Built and Natural Environment

Features of:

Home  
Buildings  
Outdoors



How much difficulty do YOU have...?



Environmental ?

Non-environmental ?



## Sample Items:

*How much difficulty do you have moving around your home?*

*How much difficulty would you have feeling safe in your home during an emergency?*

*The difficulty I have feeling safe is due to problems getting out or getting help in an emergency. (yes – no)*

*How much difficulty do you have hearing sounds such as voices and music in buildings in your community?*

*The difficulty I have hearing sounds is due to background noise. (yes – no)*

*How much difficulty do you have feeling safe due to crime in your community?*

## Domain 4: Systems, Services and Policies

Affect on participation:



Home  
Community  
Work

Four sub-sets:

Managing health



Living situation

Community participation

Work

Transportation



### Sample Items:

*Rehabilitation services and therapies are available when I need them.*

*Affordable housing is available in my community if I need it.*

*Assistance to pay for utilities is available if I need it.*

*My community offers support groups I can use.*



*My community offers information on low or no cost activities and things to do.*

*Disability accommodation services and supports are available at my work or school.*

*Public transportation in my area is reliable.*



*Overall, I have access to reliable transportation when I need it.*

# Domain 5: Social Environment

Social networks:

Family/Friends  
Public  
Community  
Society



Positive and Negative Attitudes

Disability-related behaviors

Acceptance  
Stigma  
Marginalization



## **Sample Items:**

*The people in my life are willing to accommodate my disability.*

*People are patient when I take extra time to do things because of my disability.*

*Criminals see people with disabilities as easy targets.*

*Because of my disability, my family complains that I am too needy.*

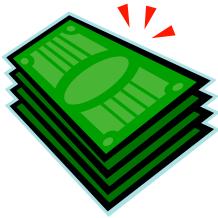
*Society respects the need for disability accommodations.*

*Society limits my opportunities because of my disability.*

*People with disabilities are encouraged to participate in my community.*



# Domain 6: Economic Quality of Life



## **Sample Items:**

*I can afford to eat out when I want.*

*I can afford to pay my bills.*

*I have delayed getting health care because I couldn't pay for it.*

*I can afford internet service.*

*I have skipped taking my medication(s) because I couldn't pay for them.*

*I have had services cut because I couldn't pay my bills.*

*I have access to extra money in case of an emergency.*

*I am satisfied with the control I have over spending my money.*

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- Midwest Regional Traumatic Brain Injury Model System (MRTBIMS)

## Contact CROR

Director:

Allen Heinemann, Ph.D.

a-heinemann@northwestern.edu

## Center for Rehabilitation Outcomes Research (CROR)

The Rehabilitation Institute of Chicago (RIC) has gained widespread recognition for its research in outcome studies related to measuring the impact of medical rehabilitation over the long term in patients with disabilities. The importance placed on outcome studies in medical rehabilitation has grown dramatically in recent years as clinicians and researchers have been required to find cost-effective means of providing patient care. At RIC, the Center for Rehabilitation Outcomes Research (CROR) is responsible for conducting outcomes research.

## What's new in CROR?

- Visit CROR's own Rehabilitation Measures Database [here](#). The Rehabilitation Measures Database was developed to help clinicians and researchers identify reliable and valid instruments used to assess patient outcomes during all phases of rehabilitation. The database provides evidence-based summaries that include concise descriptions of each instrument's psychometric properties, instructions for administering and scoring each assessment as well as a representative bibliography with citations linked to PubMed abstracts. Whenever possible, we have also included a copy of the instrument for the users to download or information about obtaining the instrument. New instruments are added weekly so check back often!
- Check out and share an \*amazing\* new website ([www.facingdisability.com](http://www.facingdisability.com)) which aims to help families facing spinal cord injuries. CROR's own Dr. Allen Heinemann discusses substance abuse and spinal cord injuries.

## CROR Outcomes Summer Newsletter 2011

CROR Outcomes

**Summer 2011: Measuring Function and Quality of Life**

This summer, we give an update to a study that we first wrote about in Fall 2007. (Read the original article [here](#).) Dr. Tracy Middleton talks about preliminary results from the study, Equating Outcomes across Post-Acute Rehabilitation Settings, and their implications for policy and practice. We also describe a series of projects aiming to measure quality of life issues that impact patients with a spinal cord injury, stroke, or traumatic brain injury.

Inside you'll find a profile of our collaborator from Indiana University, Dr. Marieke Van Puymbroeck, and her work in therapeutic recreation. We also profile one of our own clinical research coordinators, Hsiang-Yi Tsung, an occupational therapist.

In addition, we highlight a pre-conference symposium on Quality Measures at the American Congress of Rehabilitation Medicine - American Society of Neurorehabilitation Annual Conference in Atlanta on October 12, 2011. Registration is still available!

For more information about our projects and educational opportunities, please visit our page at [www.ric.org/home](http://www.ric.org/home). And don't forget to "like" us on Facebook!

Allen Heinemann, Director

**Dr. Marieke Van Puymbroeck,**

Researcher in Therapeutic Recreation

**Measuring Quality of Life after a Stroke, Brain Injury, or Spinal Cord Injury**



# Implementing Science To Guide Practice

# OT Questions: What Influences Every-day Life

## *Basic Questions:*

- Understand the role of sensory, motor, cognitive, psychological, physiological mechanisms on that support daily life and how these mechanisms change with conditions, injury, maturation and/or aging.
- Determine the impact of biological and environmental factors, on activity performance and participation in daily life.

## OT Questions: What Influences Every-day Life


### *Measurement Questions:*

- Develop means of measuring cognitive, physiological, neuro-behavioral and psychological capacities of individuals as they engage in tasks necessary to support daily life.
- Develop measures that are sensitive to learning, behavioral or compensatory strategies which support recovery, adaptation and environmental interactions.

## OT Questions: What Influences Every-day Life

### Intervention Questions

- Develop, apply and evaluate personal, environmental and activity-specific interventions to promote health, rehabilitate function, and prevent secondary conditions that threaten an individual's independence and quality of life.
- Determine the efficacy of interventions that contribute to optimal development, recovery, prevention, and compensatory strategies for children, adolescents, adults and older adults.



# Descriptions of Laboratories that are answering OT questions

At Washington University in St. Louis

# Occupational Therapy NICU Laboratory

## Bobbi Pineda, PhD, OTR/L

- Studies developmental changes in children born prematurely and how early behaviors are predictive of later functional outcomes.
- Designs interventions to capture plasticity and to help children and families manage their daily lives.



Pediatrics-Radiology- Neurology-Psychiatry  
Neuroanatomy-Psychology-Neurosurgery

# Child Health and Education Laboratory

Allison King, MD

- Early intervention, educational attainment and the relationship between maternal mental health and child development in sickle cell disease.
- Late effects of brain tumors on cognitive and social/emotional development and educational attainment in children.



Occupational Therapy- Public Health- Pediatrics-Siteman Cancer Center

# Human Performance Laboratory

## Jack R. Engsberg, PhD

- Investigate the underlying mechanisms in neurological conditions that support movement necessary for participation in daily life
- Design and employ Virtual Reality intervention to be used by people at home to support motor recovery augmenting rehabilitation strategies.

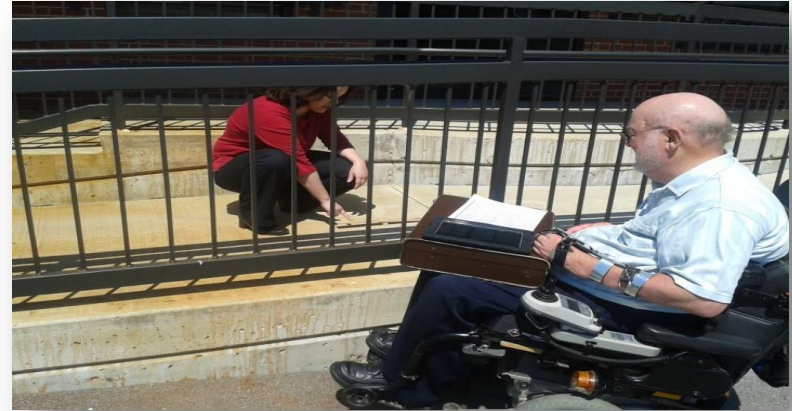


Occupational Therapy- Neurosurgery-Orthopedic Surgery-Engineering

# Disability & Community Participation

## David B. Gray, PhD

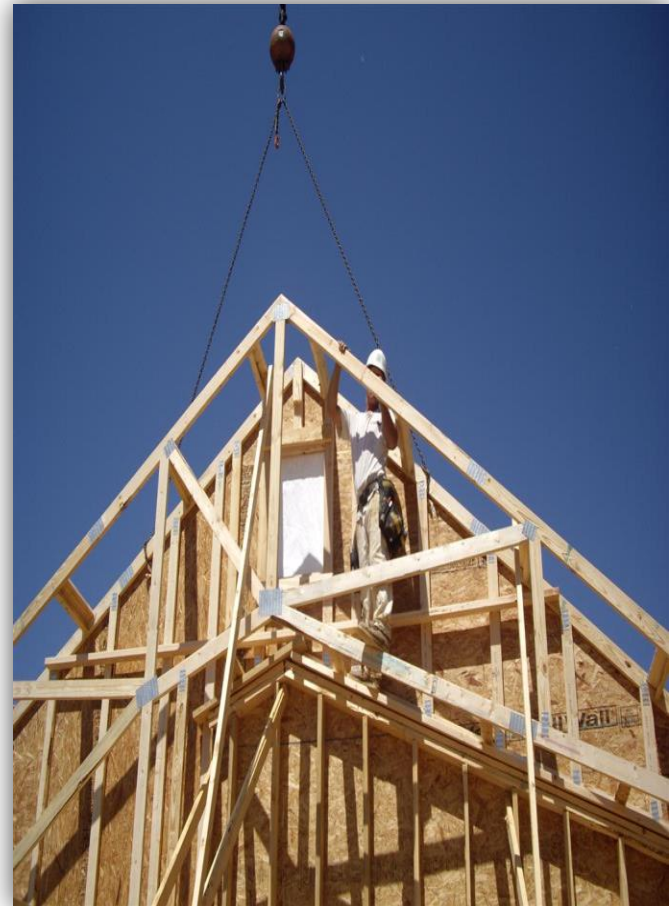
- Develops and tests measures of participation with mobility limitations including the environmental receptivity for people with disabilities.
- Studies people with disabilities who work to determine strategies to build interventions for successful work participation.



Occupational Therapy- Paraquad- City Office of Disabilities

Vicki Kaskutas, MHS, OTD, OTR/L  
Occupational Health & Safety Laboratory

- Work injury prevention, assessment development, and interventions to improve work performance and worker/work match



Occupational Therapy- Occupational Health (Medicine)

# Performance, Participation, and Neurorehabilitation Laboratory

Timothy J. Wolf, OTD, MSCI, OTR/L

- Generates knowledge to guide intervention aimed at improving participation in work and community activities for people with executive dysfunction (mild stroke and breast cancer)
- CO-OP
- Self-Management



Occupational Therapy- Neurology- Otolaryngology-Radiology  
Medical Oncology-Psychology-Physical Therapy

# Cognitive & Occupational Performance Laboratory

Erin Foster, OTD, MSCI, OTR/L

- Understanding everyday cognitive functioning and its relevance to occupational performance, participation, and well-being among individuals with chronic neurological conditions.
- Develops more effective and comprehensive rehabilitation programs for individuals with neurological disorders and cognitive dysfunction.

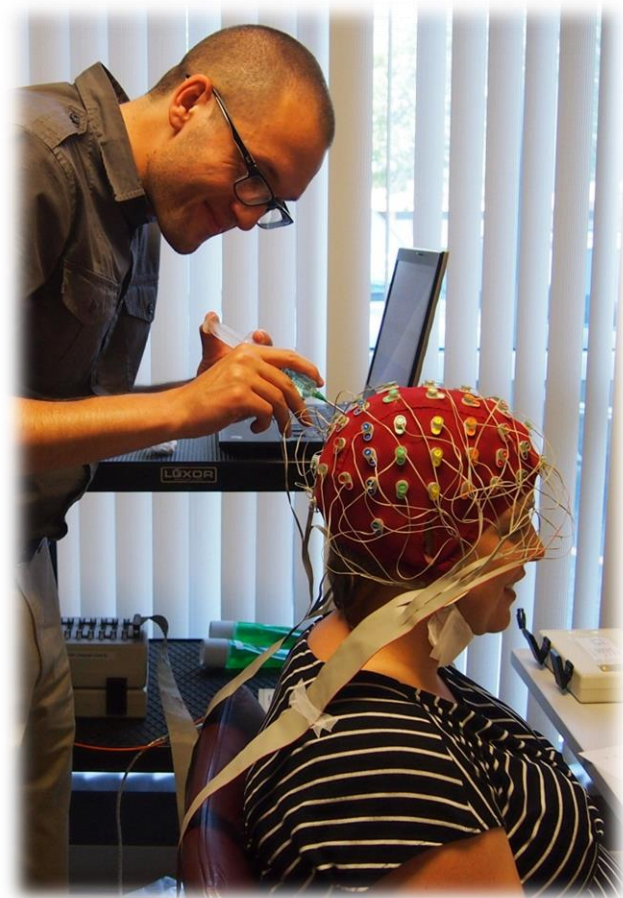


Occupational Therapy-Neurology-Psychiatry-Psychology

# Lisa Tabor Connor, PhD (OTS)

## Stroke and Aphasia Recovery Laboratory

- The laboratory examines cognitive, psychosocial, and neurobiological mechanisms of recovery and participation following stroke, particularly factors contributing to successful community reintegration for people with aphasia.



Occupational Therapy- Neurology- Psychology-Radiology

# Participation, Environment & Performance Laboratory

Susy Stark, PhD, OTR/L, FAOTA

Clinical, translational research on efficacy of home modifications to foster community participation, physical activity, engagement in everyday activities & fall prevention



Occupational Therapy-Neurology- Emergency Medicine- Social Work

# Fostering Engagement in Daily Life

## Carolyn Baum, PhD, OTR, FAOTA

- Seeks to understand the factors that support the daily occupations of older adults as they seek to live as independently as possible.
- Assessment methods include performance-based and behavioral measures of activity, executive function, social support and quality of life.
- Interventions use engagement to foster participation.



Occupational Therapy -Neurology-Psychology-Physical Therapy  
Social Work- Psychiatry



# Empowering Lives Through Occupation-Based Practice

At Washington University in St. Louis

# Children, Youth, & Families

- Supporting development and daily life performance in children with behavioral, sensory, and neurological Impairments
  - Assessment and Care Planning
  - Child-Centered Interventions
  - Family Education
  - Referral to Community Resources
- First Steps Provider
- Central Institute for the Deaf



# Mobility Program

- Mobility/Seating Clinic
- Selection of Chair for general use and for sports
- Wheelchair and Mobility Training
- Wheelchair Repair
- Environmental Assessment

Partner with Paraquad on a fitness and exercise program for people with disabilities



# Return to Work

- Assessment
- Cognitive Skills Training
- Work with Employers
- Consulting on work accommodations



# Aging in Place

- Home Modification
- Home Safety
- Fall Prevention
- Community Engagement



# Low Vision

- Assess impact of Vision on Daily Activities
- Environmental Assessment
  - Lighting
  - Safety
- Skills for Managing Visual Impairments
- Activity Engagement



# Driving Program

- Determining Driving Capacity
- Driving Skills Development
- Person/Car Fit
- Driving Retirement Planning



# Community Neurorehabilitation

- Cognitive Behavioral Strategies
- Self Management
- Community Re-integration (family, work and community roles)



# Services to Families

- Caregiving/parenting skills
- Understanding the behavioral/functional consequences of their loved one's condition
- Health education
- Identifying environmental barriers and facilitators
- Guidance to resources



# Occupational Therapy

## HELPING PEOPLE ACHIEVE AND MAINTAIN HEALTH

### Institutional Services

#### TRIAGE TREATMENT

A  
C  
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Home Health

Rehabilitation

Skilled Nursing

Out Patient

### Community Resources

#### Physical Activity

- Fitness Center
- Therapeutic Pool
- Exercise Classes
- Post Rehab Fitness
- 
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#### Social/Peer Support

- Religious Activities
- Family Activities
- Community Activities
- Hobbies
- Sports
- Clubs
- Friendship Activities
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#### Productivity

- School
- Work
- Volunteer Work
- Homemaking
- Parenting
- 
- 

Life Skills Training  
Opportunity for Motor Training  
Self Management Skills  
Home Assessment/Management

Family Training  
Cognitive Strategies to Support Performance  
Driving Assessment and Training  
Return to Work Training and Accommodations

# What Can You do to Build Your Future

- Form collaborations
- Choose common measures to collect data across populations
- Integrate students into your work
- Become a resource to solving society's problems
  - Aging in place- home and community
  - Transition in adolescents
  - Skill development for living in communities
  - Preparing people for work
  - Reduce re-hospitalization
  - Help those delivering care gain the skill to do it.
  - Build Self-management approaches- People need to have the knowledge and skills to fulfill their roles and do what they want and need to do.