Policy, practice and play- an occupational therapists perspective on Early Intervention context in Ireland 2014

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Early Intervention in Ireland - Where do we go from here?: National and International Perspectives
Trinity College Dublin November 2014

Overview

1. Occupational Therapy in Ireland
2. Policy, practice & play- evidence-based practice:
   - Natural learning environments
   - Importance of HOME learning environment
   - Play-based therapy approaches-sensory integration
3. Implications for therapy practice:
   - Education in children’s Occupational Therapy
   - Integrated ECCE
Nature of Early Childhood sector:

1. Crosses boundaries between child-care, child development, child education, health promotion and services for children who are not developing typically

2. 11 national bodies/departments involved in childcare sector (2000)

3. In health and health-care in Ireland:
   - Occupational Therapy traditionally related to special services- children with developmental conditions (often of a severe nature)
   - Primary care-traditionally related to screening and health checks; now moving into the realm of ‘well-being and participation’
Coming together: policy in relation to children in Ireland?

Traditionally- Care and Education have been separate for children under 6
Call for integrating both for many years: (Hayes 1995, 2001, 2002; DES 1999; NCCA 2004; OECD 2004)

Key documents and developments- last 10 years

- Early Childhood Care and Education Report (2005)
- Siolta (CECDE, 2006)
- Aistear (NCCA, 2009)
Proposed model for Progressing Children’s services 2009:

Model of Proposed Structure

WHERE IS EARLY CHILDHOOD INTERVENTION EDUCATORS IN THIS?

Using the ICF model:
International Classification of Functioning
Disability and Health

Body Functions & Structures | Activities & Participation | Environmental Factors
---|---|---
Functions Structures | Capacity Performance | Barriers Facilitators

Bio....psycho..... social model
Focus of OT in Early Intervention, Ireland

• Assessment of need
• Activities of daily living/accessibility
  – Equipment/ access in home for children with physical disabilities
  – Feeding
• Parent Work: Education (consultation)/ specific programmes
  – Parent-plus
  – Early bird
  – Floor time
• Transitioning: child-care; pre-school; school
• Sensorimotor development:
  – sensory processing/Ayres Sensory Integration
  – Movement/play skills

Examples from research and practice

1. Physical-social home environments in Ireland:
   – Home learning environments (HLE)
2. Play-based approach in therapy: e.g.
   – Sensory integration and sensory based interventions: neuroscience-development: brain-enriched environments
3. How do we work with families?
   – Consultancy
4. Play and Children with disabilities Europe
PHYSICAL-SOCIAL HOME ENVIRONMENTS IN IRELAND

RESEARCHING FAMILIES

Trends in Ireland

• Ireland has highest proportion of children in the EU: 24.8% of population

• Of these, 6% have a disability
  • Approx. 8,000 registered on physical and sensory disability database
  • Approx. 8,000 registered on Intellectual disability database

• Preschool children: 11% attend formal early childhood settings- majority of Irish children (0-6) are cared for in homes (parents or relatives)
PhD study:

**Infant places, spaces and objects: exploring the physical in learning environments for infants under two**

Commissioned by CECDE, 2008

Helen Lynch, PhD, Dept of Occupational Science & Occupational Therapy, UCC, Cork
Dr. Noirin Hayes, PhD supervisor, Dublin Institute of Technology

Findings

1. **Sociocultural influences**
   - Work places
   - Community and extended family places
   - Childcare places
   - Social capital

2. **Family influences**
   - Orchestration of temporal, social & physical environment
   - Play characteristics of family
   - Sociocultural licences for play

3. **Parenting influences**
   - Parent values and attitudes
   - Parent play styles
CHARACTERISTICS OF INFANT SPACE PLAY

Places and spaces that include:
VARIETY, AVAILABILITY, COMPLEXITY

A Just-right Environment:
a transactional view

1. environmental affordances
2. Parental reasoning,
3. child’s characteristics
Home as learning environment

- In early **childhood education**, Home Learning Environments (HLE) has been identified as significant
- In early **childhood intervention**, importance of environment is being noted - e.g. and Natural Learning Environments (NLE)
- NLE: research based on legislation in the USA- Part C of IDEA legislation
- In recent years, changing the way practitioners work in early childhood intervention
What is the evidence for NLE?

Does working with infants and toddlers in natural learning environments result in better developmental outcomes?

- Research review of 150 abstracts
- Young children learn best through naturalistic learning opportunities
- Authentic activities that are meaningful and appropriate for the child was the most important issue
- Children developed skills specifically in relation to self-help (independent living skills) and social development

(research review: Stewart, 2009)
Play-based approaches in Occupational Therapy

e.g. SENSORY INTEGRATION

What is sensory integration?

• SIT: is a child-directed, interactive, playful intervention characterized by activities to provide enhanced sensation (Ayres, 1972; Bundy, Lane & Murray, 2002)
• Based on combining theories from NEUROSCIENCE and CHILD DEVELOPMENT
• Provided by therapists (usually Occupational Therapists) who have been certified in postgraduate training in SI
• Therapy in special clinic spaces: sensory-rich environments
Ayres Sensory Integration in Ireland?

• One of most common approaches used in OT for children and most commonly requested post-graduate training (paediatric advisory group survey 2014)

• OT research:
  – intervention study- for children with DCD, 2013 to date (Trinity College MSc/PhD student)
  – Cochrane review- title registration: team from UCC and US

BASED ON NEUROSCIENCE:
Sensory input- CNS integration-motor output
Fidelity Measure – SI

1. Provide sensory opportunities
2. Provide just-right challenge
3. Collaborate on activity choice
4. Guide self-organisation
5. Support optimal arousal
6. Create play context
7. Maximise child’s success
8. Ensure physical safety
9. Arrange room to engage child
10. Foster therapeutic alliance

An Intervention for Sensory Difficulties in Children with Autism: A Randomized Trial

Roseann C. Schaaf · Teal Benevides · Zoe Mailloux · Patricia Falla · Joanne Hunt · Elke van Hooydonk · Regina Freeman · Benjamin Leiby · Jocelyn Sendekl · Donna Kelly

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Abstract This study evaluated a manualized intervention for sensory difficulties for children with autism, ages of caregiver assistance in self-care ($p = 0.008$ $d = 0.9$) and socialization ($p = 0.04$, $d = 0.7$) than the Usual Care
Findings from systematic reviews:

• Therapy most effective: 2-3 times a week for 6 months (varies depending on outcome being measured)

• Findings suggest:
  ✓ Positive effect for SI intervention compared to no treatment
  ✓ Comparing SI to tutoring and perceptual-motor, SI is only one to have sustained outcomes
  ✓ Strongest significant effect sizes: for motor skills and goal attainment scaling

BUT.....SI & Ireland??..

More often: Sensory Based Interventions (SBI)

- Ayres SI
- Clinic/therapy room
- Fidelity to treatment

- School or home based
- Sensory diets
3 Tiered model: Irish Context

Tier 3:
Individual Intervention
(CO-OP/ SI/Functional)
(individual/family)

Tier 2: Individualised
Home/school
Programmes/indirect therapy:
Sensory Motor approach
(classroom/group approach)

Tier 1: General advice and monitoring
(whole school approach)

Most OT’s only get to work on tiers 1 and 2

Key article:

How do we work with families?

CONSULTANCY MODEL OF PRACTICE

So how do we use an evidence-base in working with families and in schools?

Sensory-based interventions + consultancy = Occupational Therapy in family-centered practice?

Also note::
'consultancy should be the primary type of service delivery used by practitioners working in schools'(Bundy, 2002, p. 310).
DEFINITION:

Consultation Process:
A type of intervention in which practitioners use their knowledge and expertise to collaborate with the client. The collaborative process involves identifying the problem, creating possible solutions, trying solutions and altering them as necessary for greater effectiveness.’


How you consult:

1. Integrate strategies in schools/home
   – work with team members to provide intervention within naturally occurring contexts

2. Monitor and manage
   – Provide ongoing supervision to team members who carry out agreed strategies in the home/school environment

3. Consult with other team members
   – Recommend teaching strategies, equipment adaptation or modifications to environment
What does the evidence show?

Table 1: research comparing direct and consultancy approaches

<table>
<thead>
<tr>
<th>Study</th>
<th>Description</th>
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<tr>
<td>Dunn W (1990).</td>
<td>A comparison of service provision models in school based occupational therapy services. A pilot study. <em>The Occupational Therapy Journal of Research</em>, 10(5), 300-320. 1 year study with 14 children age 35 mths. to 79 mths, with a delayed development of more than 1 year (using direct therapy vs consultation). Both groups achieved nearly 75% of their goals (from their IEP).</td>
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<td>Kemmis B &amp; Dunn W (1996).</td>
<td>Collaborative consultation: the efficacy of remedial and compensatory interventions in school contexts. <em>American Journal of Occupational Therapy</em>, 50(9), 709-717. 10 therapy-teacher pairs consulted for 1 hour a week over the school year, about students identified as having a sensory integrative disorder. Remedial and compensatory interventions were equally successful.</td>
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<td>King et al (1999).</td>
<td>An evaluation of functional school-based therapy services for children with special needs. <em>Physical and Occupational Therapy in Pediatrics</em>, 19(2), 5-29. Data was collected before therapy and 5-6 months after therapy, on 50 children age 5 to 12 years, with a variety of special needs (including CP, fine motor difficulties, DCD, spina bifida, speech and language delay). Direct, indirect and consultation methods were studied. 98% of children made progress (over and above what would be expected due to maturation alone). Results supported the use of models combining collaborative consultation and direct intervention.</td>
</tr>
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<td>Dreiling D &amp; Bundy A (2003).</td>
<td>A comparison of consultative model and direct-indirect intervention with preschoolers. <em>American Journal of Occupational Therapy</em>, 57, 5, 566-569. For 40 weeks 22 children age between 3 and 5 years were provided with intervention. The children had gross and fine motor difficulties measured as 1 standard deviation below the norm, but with no medical diagnosis, nor any cognitive delays. One group received direct intervention and the other consultancy. Results indicated that both models were equally effective for addressing goals related to improved motor functioning for preschoolers.</td>
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Models of practice in schools-consultancy (coaching)

- **Partnering for Change Model** Missuna et al., 2012- Tiered Approach: drawing heavily on coaching
- **Occupational Therapy in Schools (OTiS)**- Hutton, **2009**- Provide OT within a whole school in contrast to providing targeted intervention
- **School-based OT**- Bazyk & Case-Smith (2010) OT for Children text book- a tiered approach
BUT!!!....issue of play....

Current ground-swell to look at PLAY AND CHILDREN WITH DISABILITIES..
Heritage Council: Outdoor play and nature

Children with disabilities

Finally...how the Irish Context has informed OT education in UCC

- Highest % of children under 18 in Europe-24% of population
- Focus on children’s Occupational Therapy practice in undergraduate programme in UCC;
  - Family-centred practice
  - Team working- Belbin team roles/IEPs
  - play occupations, assessment and intervention- early childhood
  - Consultancy model of practice
  - Outcome measurement and collaborative goals setting
  - Children’s clinic on site- all students spend sessions in clinic
  - Sensory integration/neuroscience- related to sensorimotor development
IMPLICATIONS FOR IRISH PRACTICE?

1. Focus on EVIDENCE-INFORMED practice:
   – working with families - what is common rather than what is different: CONSULTANCY
   – Central role of PLAY in learning
   – Natural learning environments – NLE
2. How to provide BEST PRACTICE OT services in resource limited settings
3. Development of an INTEGRATED PROGRAMME of education of early interventionists - combining education, health and care of our children – from policy to practice

Thank You!

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Some references:


