Mastery Motivation

Premature (>32 weeks) vs Term toddlers (12-24 months)

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"The body is the home of the soul"
Mastery Motivation: Definition

Mastery Motivation an internal psychological force driving the individual to achieve Tasks which are challenging. It's the force behind exploring and deal with a Task.

White, 1959
Mastery Motivation: 2 main aspects

Barrette & Morgan (1995)

The instrumental Aspect: examines the power that drive the individual to try in a focused and ongoing of a challenging skill or task.

The expressive Aspect: Refers to the emotional responses associated during and after the task is completed.
Do Maternal Interactive Behaviors Correlate With Developmental Outcomes and Mastery Motivation in Toddlers With and Without Motor Delay?

Pei-jung Wang, George A. Morgan, Al-Wen Hwang, Li-Chiou Chen, Hua-Fang Liao

Background. Maternal interactive behaviors theoretically affect developmental outcomes and mastery motivation in young children. However, these associations are inconsistent in the literature.

Objective. The purposes of this study were: (1) to examine the differences in maternal behaviors between toddlers with motor delay (MD) and those with typical development (TD), (2) to investigate the correlation of maternal behaviors and developmental quotients (DQs) in toddlers with MD and TD, and (3) to examine the correlation of maternal behaviors and mastery motivation in toddlers with MD and TD.

Design. This was a sex- and mental age-match study.

Methods. The participants included toddlers with and without MD.
The purpose of the study:

Characteristic Mastery Motivation of the premature group in compare to the full-term toddlers.

This work is a base of a research to my PHD work to be continued: an intervention program.
Method

All the toddlers were evaluated according to Griffith Test (developmental test from birth to age 3 years) at the “Low-weight premature clinic” at Admond Safra Children’s Hospital, Tel Hashomer, Tel Aviv University, Israel.

The 30 premature toddlers arrived as part of premature follow-up and the assessment was on the correct age.

All toddlers were 12-24 month of age.
Researchers Questionnaires.

DMQ: Diminutions of Mastery Questionnaire

- Observed by the researcher
- Parental Questionnaire.
- Temperament Questionnaire: Bates, Bennett, Freeland & lounsburg (1979)
- ICQ: Infant Characteristics Questionnaire.
- Sensory Process- The short Questionnaire (Winnie Dunn).
- Demographic questionnaire was especially adapted for this research.
### Researchers Questionnaires

<table>
<thead>
<tr>
<th>Mediation</th>
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<td>1.1 Repeat until success the mission</td>
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<td>2.2 Stop if it's hard for him</td>
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<td>2.3 Persistence in challenging game</td>
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<td>4.4 Trying to finish the game</td>
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<td>5.5 Explore the Game</td>
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**General Score for Object Oriented Goal**

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Researchers Questionnaires.

The assessment was done according to 9 metrics (5 main metrics and 4 intermediate metrics).

➢ According to expected age - Easy
➢ Coated - Medium
➢ Over age-expected - Challenging.
4 components:

- Oriented component cognitive persistence
- Mastery Pleasure- expressive component
- Self Controll – Social Oriented
- General Competence
Mastery Motivation / parental questionnaire

7 Components:

- Object Oriented – Cognitive Oriented
- Mastery Pleasure - expressive component
- General Competence
- Gross Motor Persistence
- Social Persistence with adults
- Negative Reaction of Failure
- Social Persistence with children.
<table>
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<th>Parental Questionnaire / An Example</th>
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<tbody>
<tr>
<td>1 Retries until he succeeds</td>
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<td>2 Smiles broadly as you dissolve some or all of the task</td>
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<td>3 Leaves and shows no interest in continuing when he has difficulty</td>
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<td>4 Quickly learns new things and applies them</td>
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<td>5 Losing interest when having difficulty</td>
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<td>6 Learning slowly - needs more explanation</td>
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<td>7 Demonstrates a preference to perform challenging tasks</td>
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<td>8 Looking for approval from a familiar adult who is around</td>
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<td>9 If the task is not understood or challenging, stops immediately.</td>
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<td>10 Capable Executive</td>
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<td>11 Respond to the task according to what is expected of his age</td>
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<td>12 Shows consistency and determination in the performance of the assignments (even if it takes time).</td>
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<td>13 Desire for adults involvement, intentional play</td>
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<td>14 Explore the tasks &amp; the components before approaching</td>
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<td>15 Shows enthusiasm when successful</td>
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<td>16 Contact with adult when demo</td>
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<td>17 Shows performance beyond expected age</td>
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<td>18 Throughout the competence showing enthusiasm and curiosity</td>
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<td>19 Seek more than once adult involvement or response</td>
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Components of Mastery Motivation

The significance of competing is in the Medium & Challenging Tasks

Which can be assessed:
❖ Persistence
❖ Pleasure

What is goal oriented behavior?
❖ Purposeful experience of exploration in order to succeed, even if the Task is not complete.
❖ Unreasonable or inconstant behavior - is not Goal oriented.
Persistence
will be measure by continuity

❖ Search for the next Goal.
❖ Attempt to solve the problem over Time.
❖ Persist even not finish - will get high score in persistence.

Ability

❖ Did not complete the task successfully: low Ability score.
❖ If smile over doing / dealing with the mission will get high score in Mastery Pleasure. (Expressive component).
first assumption
There will be a difference in the 'Mastery Motivation' assessment between the researcher (while observed M.M. in clinic) and the parents (through parent's Questionnaire).

Second assumption
There will be a positive correlation between Temperament and 'Mastery Motivation': children with low difficulty will show higher abilities in M.M., in Instrumentals and expressive (by the researcher view).
Population:

- Term (20)
- Pre-term (30)

Girls:
- 8 Term
- 11 Pre-term

Boys:
- 12 Term
- 19 Pre-term
Results: First Assumption

- Term (20)
- Pre-term (30)
Researchers Questionnaires.

- Ability
- Self control
- Mastery Pleasure
- Task Oriented

- Easy
- Medium
- Challenging

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Task Oriented Instrumental comp.

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3. General Competence

![Graph showing the comparison between Researchers and Parents in General Competence. The graph indicates a trend where Researcher scores decrease as the scale increases, while Parent scores generally stay above the researcher scores.]
Temperament

Term (20)  
Pre-term (30)  

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Summary

There is a difference in how the parent evaluates his child to how the researcher observed a child performance.

Premature parents value their children in MM questionnaires higher score compared to toddler’s parents evaluate them.

Whereas, in my (researcher) observation, the toddler assessment at a time was higher in MM components.
Summary (2)

- The Temperament does influence the way a child shows interest and deals with challenge and medium tasks, which effect ‘Mastery Motivation’.

- In my research, there was a correlation between low difficulties and inactivity (Temperament’s comp) and high score in Task Oriented and General Ability (M.M. comp).

Only in the mature group.
How can we apply this consequences to the clinic?

In an article that was published September 2012 and I hope in many more:

Grounding Early Intervention:
Physical Therapy Cannot just be About Motor Skills Anymore.
PT has much influence in abilities and competence skills.