

Challenging the assumption of motivational deficits for children with Down syndrome

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Motivation and ID

- General assumptions about motivational deficits
- Limited empirical evidence
- Research with young children
- Research in middle childhood and adolescence

Motivation and ID: Children and Adolescents

Harter and Zigler (1974)

Participants:

- TD (mean CA 7 years)
- ID non-institutionalised (mean CA 11 years)
- ID institutionalised (mean CA 13 years)

Findings:

- TD were more motivated than both ID groups
- ID institutionalised were less motivated than those not institutionalised

Participants

| | Down syndrome n = 33 (16 girls) | | | Typically developing n = 33 (21 girls) | | |
|-------------|------------------------------------|-----------------------|---------------------------------------|---|-----------------------|-----------------------------------|
| | <i>Mean</i> | <i>SD</i> | <i>Range</i> | <i>Mean</i> | <i>SD</i> | <i>Range</i> |
| CA | 157.06 mths | 18.36 mths | 124-184 mths (10–15 years) | 60.18 mths | 16.01 mths | 36-95 mths (3-8 years) |
| MA | 54.58 mths | 13.50 mths | 40-94 mths | | | |
| PPVT | 56.93 mths | 18.26 mths | 31-119 mths | 61.76 mths | 19.60 mths | 28-116 mths |

Tasks

- Curiosity
- Preference for challenge
- Persistence

Curiosity

(Harter & Zigler, 1974)



Curiosity

(Harter & Zigler, 1974)



Preference for Challenge

(Harter & Zigler, 1974)



Persistence

(Gilmore & Cuskelly, 2009)

- Picture Search



- Fishing



Questionnaires

- Dimensions of Mastery Questionnaire (DMQ-17)

(Morgan et al., 2002)

- EZ-Personality Questionnaire

(Zigler et al., 2002)

Curiosity

Mean number of blank
doors opened:

DS 4.91 (3.30)

TD 5.45 (3.61)



Preference for Challenge

Mean scores:
(possible range 3 to 9)

DS 5.45 (1.97)

TD 5.54 (2.08)



DMQ sub-scale means

| | DS | TD |
|----------------------|----------------|----------------|
| Object *** | 2.62 (0.92) | 3.49 (0.46) |
| Social- Adult * | 3.80 (0.69) | 4.16 (0.53) |
| Social- Child *** | 3.42 (0.92) | 4.30 (0.64) |
| Motor ** | 3.02 (0.98) | 3.75 (0.80) |
| Pleasure | 4.33 (0.63) | 4.47 (0.48) |

$F(5,60) = 6.64, p < .001$

Do children and adolescents with Down syndrome have deficits in motivation?

EZ-Personality sub-scale means

| | DS | TD |
|------------------------------|-----------------|-----------------|
| Effectance Motivation *** | 21.25 (4.37) | 26.84 (2.85) |
| Obedience ** | 13.34 (3.48) | 15.59 (2.71) |
| Negative Reaction ** | 14.59 (4.32) | 11.22 (4.08) |
| Curiosity Creativity *** | 10.09 (2.49) | 12.88 (1.95) |
| Expectancy Success *** | 14.88 (3.54) | 18.63 (2.60) |

$F(5,58) = 9.52, p < .001$

Do children and adolescents with Down syndrome have deficits in motivation?

Correlations

Picture Search and Fishing Persistence

DS $r = .38$ ($p = .03$) TD $r = .42$ ($p = .014$)

Preference for Challenge and Curiosity were unrelated to other task measures.

DMQ Object Persistence & EZ Effectance Motivation

DS $r = .62$ ($p = .000$) TD $r = .46$ ($p = .007$)

A few interesting correlations...

Typically Developing Children

All tasks (Picture Search Persistence, Fishing Persistence and Preference for Challenge) were significantly related to OBEDIENCE on the EZ.

(respectively, $r = .43, .42, .41$, all $p < .01$)

Children with Down Syndrome

Picture Search Persistence was negatively associated with DMQ Adult Social Persistence

($r = .53$, $p < .001$)

Conclusions

1. On task measures of persistence and preference for challenge, children with DS are not less motivated than TD children of similar MAs.
2. There are no motivational differences between those in mainstream versus special schools.
3. Mothers of children with DS rate them as less motivated than do TD mothers.
4. The findings are not consistent with those of Harter & Zigler (1974).
5. The study has implications for practitioners and families.