

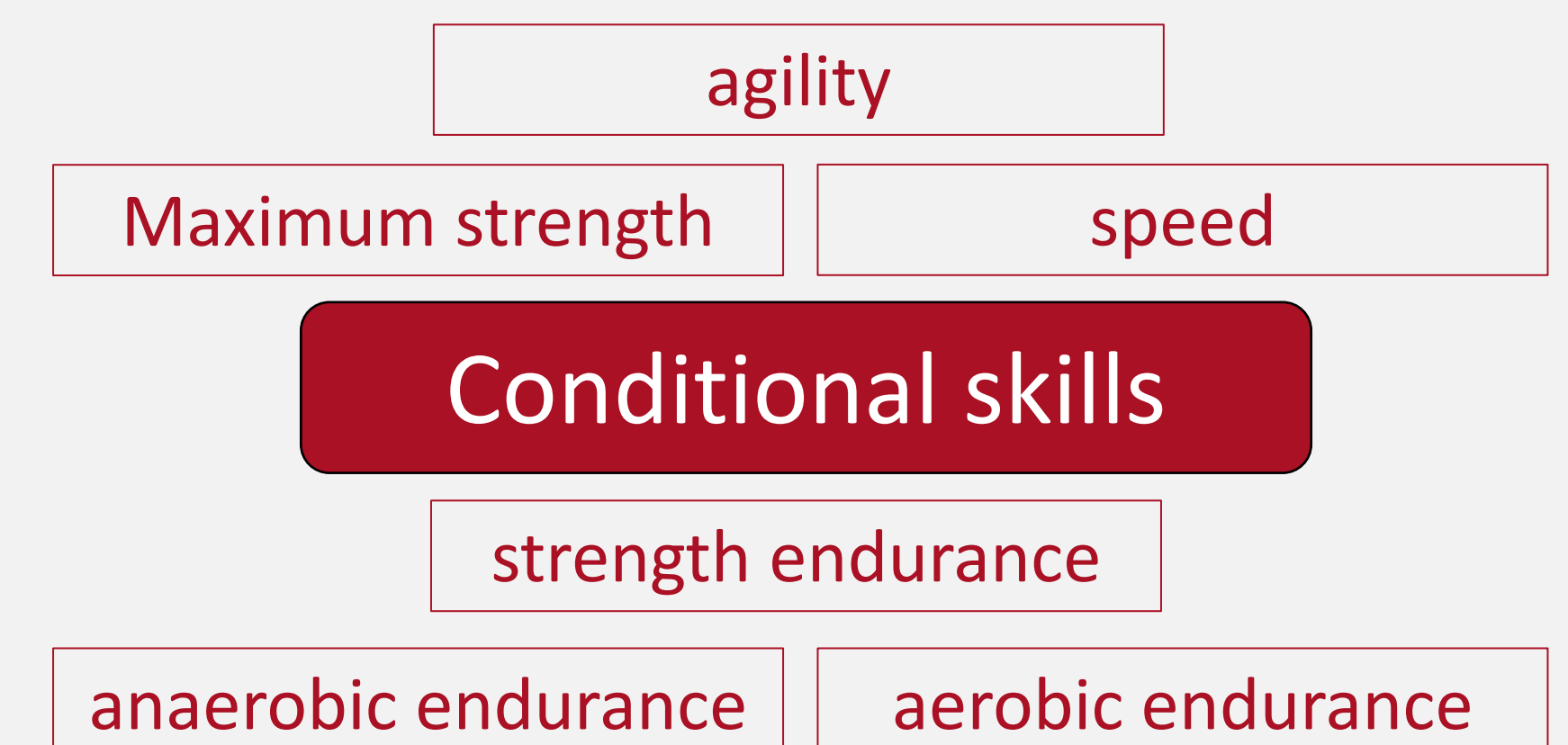
# Inclusion through the development of motor and coordinative skills of students with special educational needs within the setting of additional training in special schools

## Background

- Physical inactivity is particularly prevalent among children with intellectual disabilities (Wouters, Evenhuis & Hilgenkamp, 2019).
- In Germany just few children and adolescents with disabilities are part of regular sports clubs (Trescher & Hauck, 2020).
- Coordinative performance is both a prerequisite for sports activities and their outcome (Hirtz, 2015).
- Football is the most popular sport in Germany, with 24.154 clubs in 2023.
- The German Football Association reported about 7,4 million members across these clubs (DFB, 2023).
- > **Aim:** Improvement of motor skills through intervention → Simplified entry and motivation for soccer and other ball sports

## Intervention 1. FC Niño

6 special schools in Nuernberg (Bavaria)  
sports program: every 14 days one year  
groupsize: 12 – 15 kids  
coaches: 2



## Method



Pretest  
Jan 2023

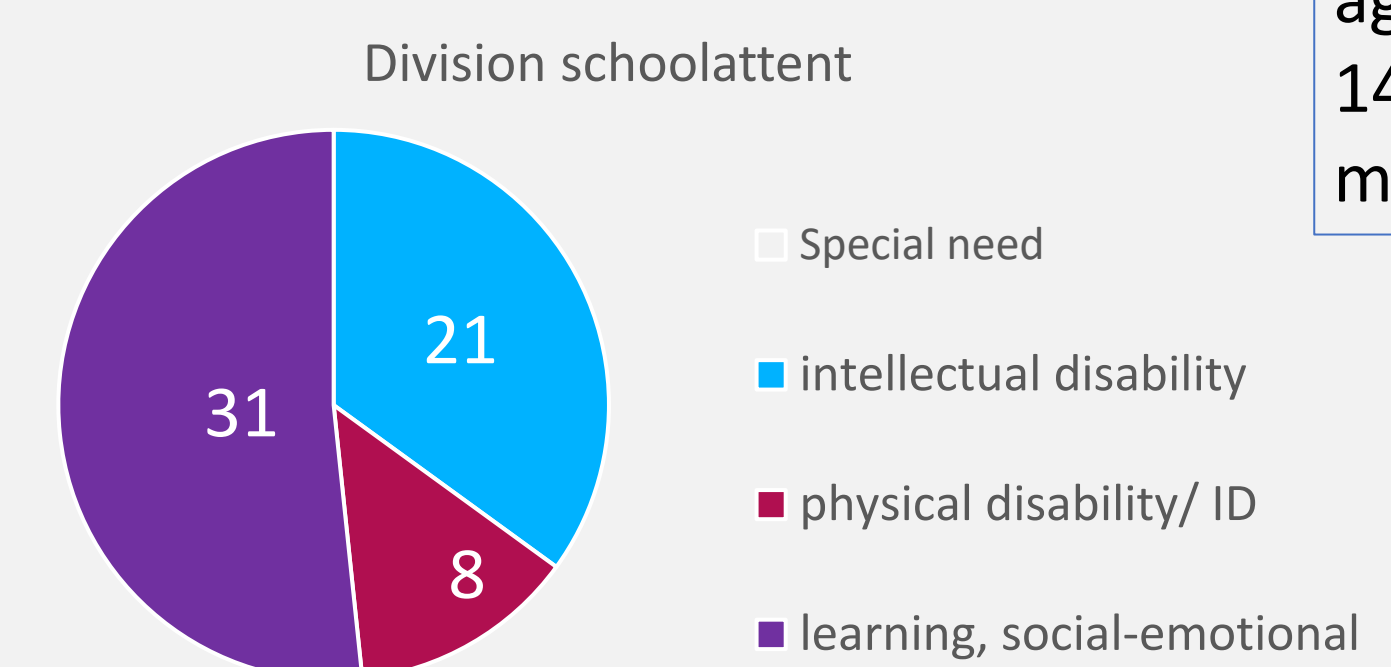


Posttest  
Dec 2023

**DMT (German Motor Test; Bös et al. 2016)**  
20 m sprint; balance backwards, trunk bend, Standing long jump

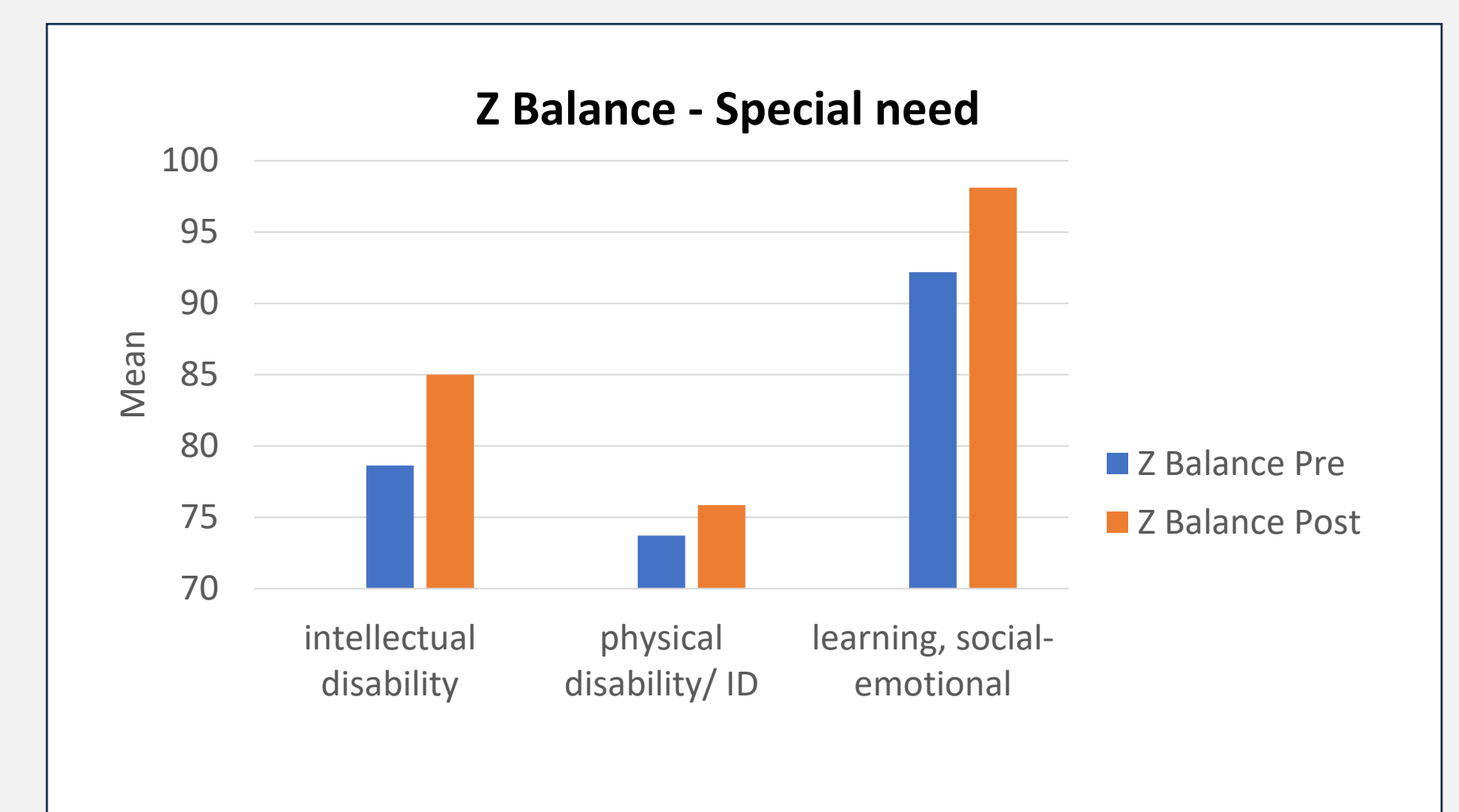
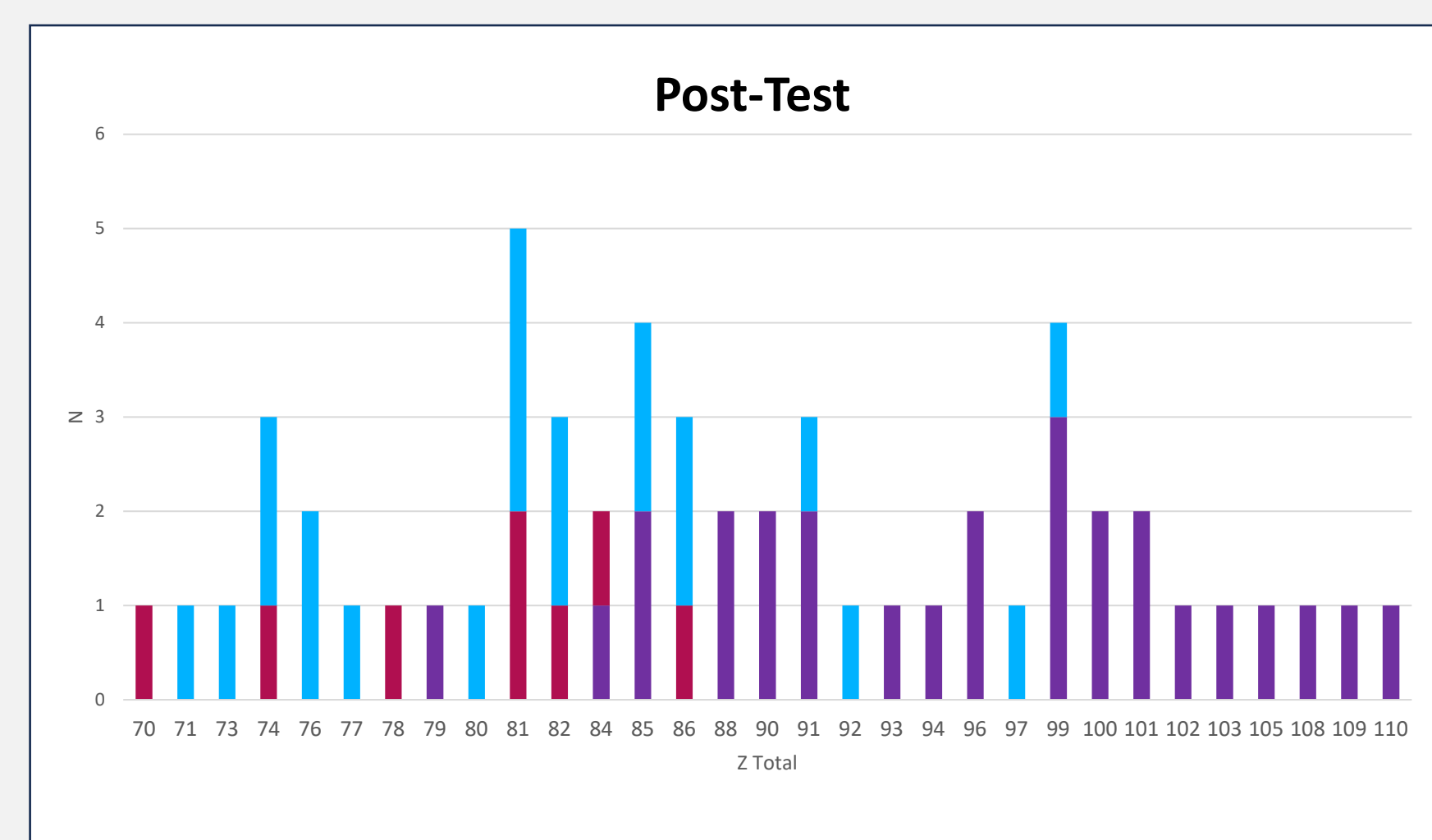
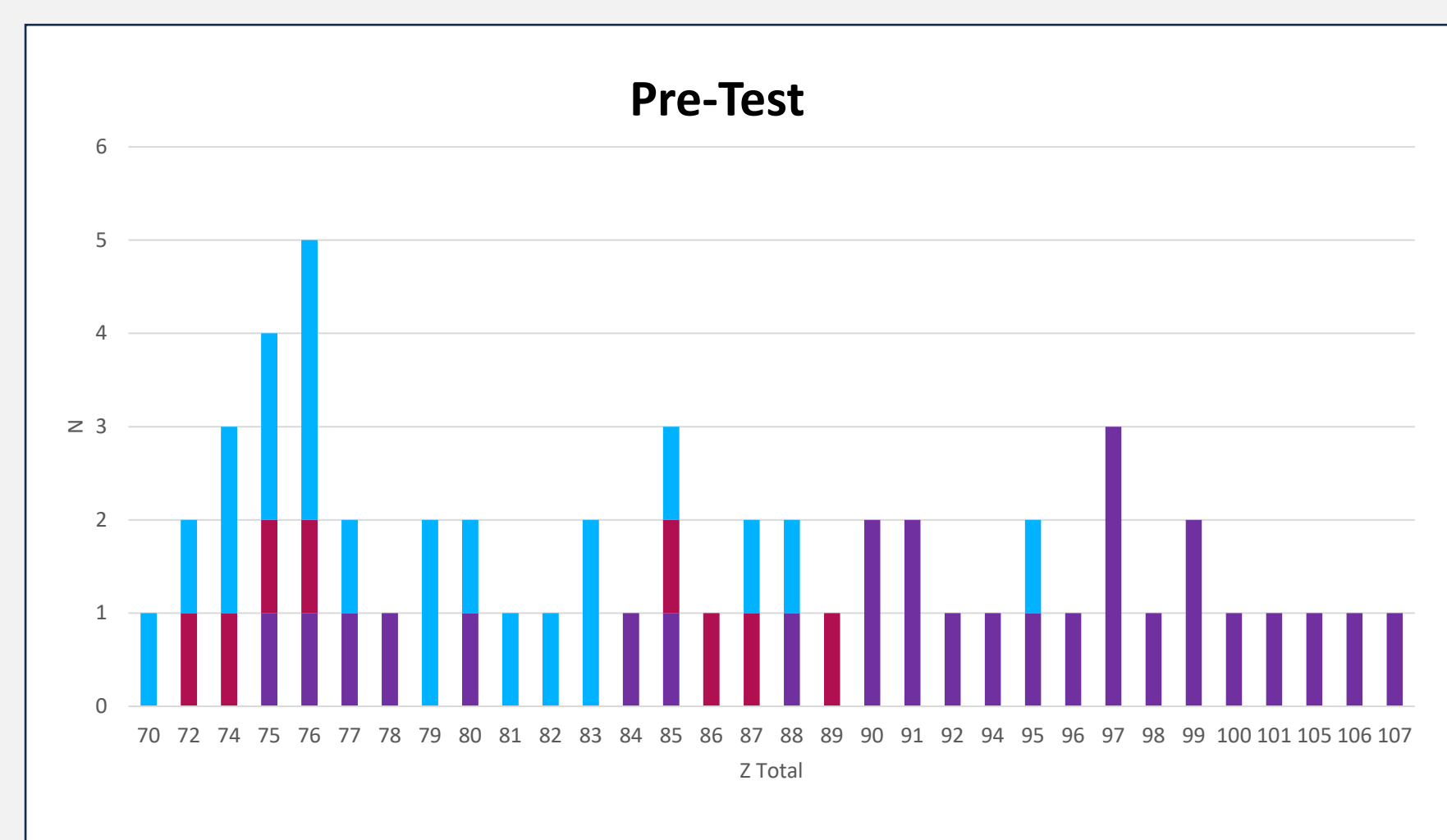
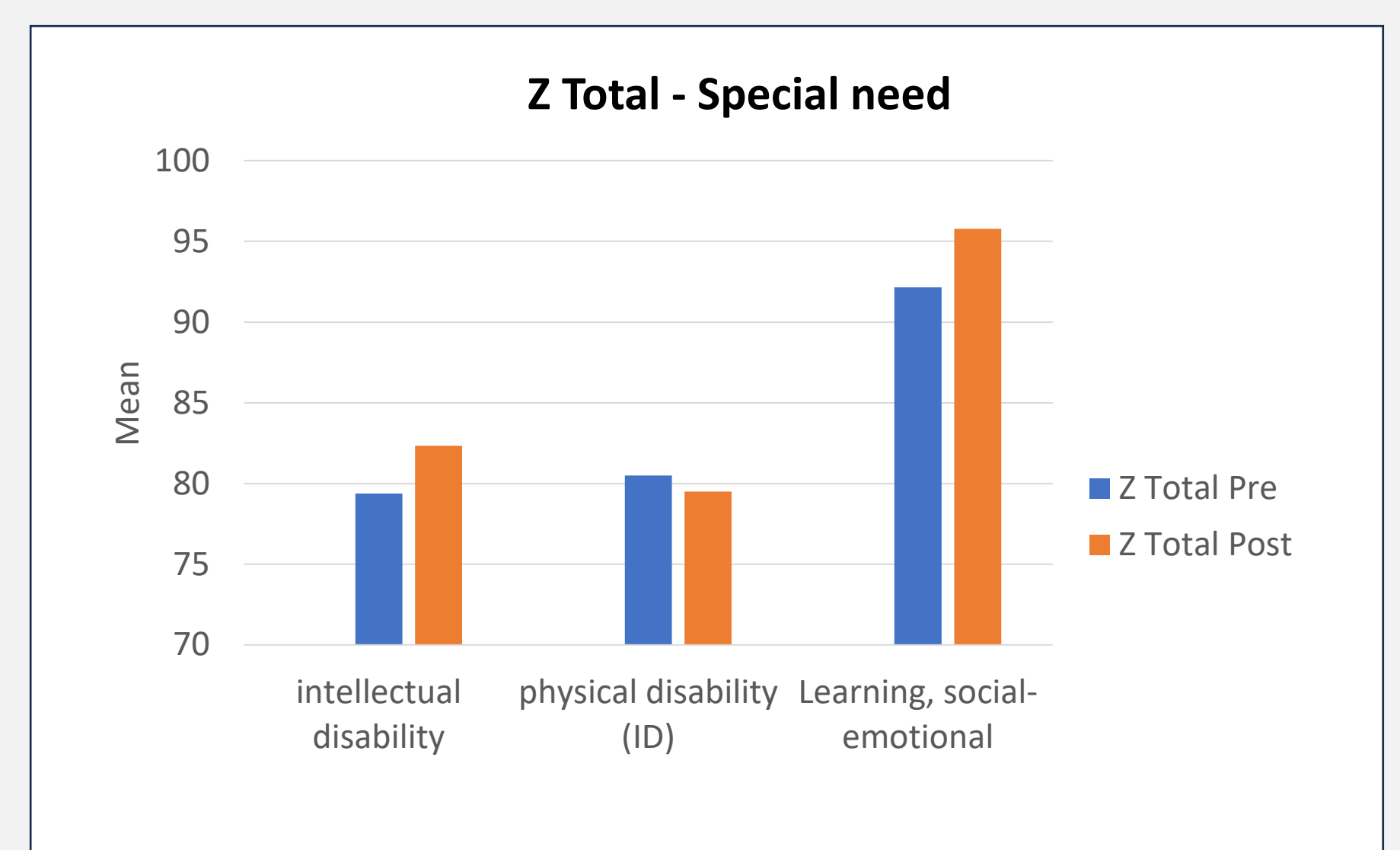
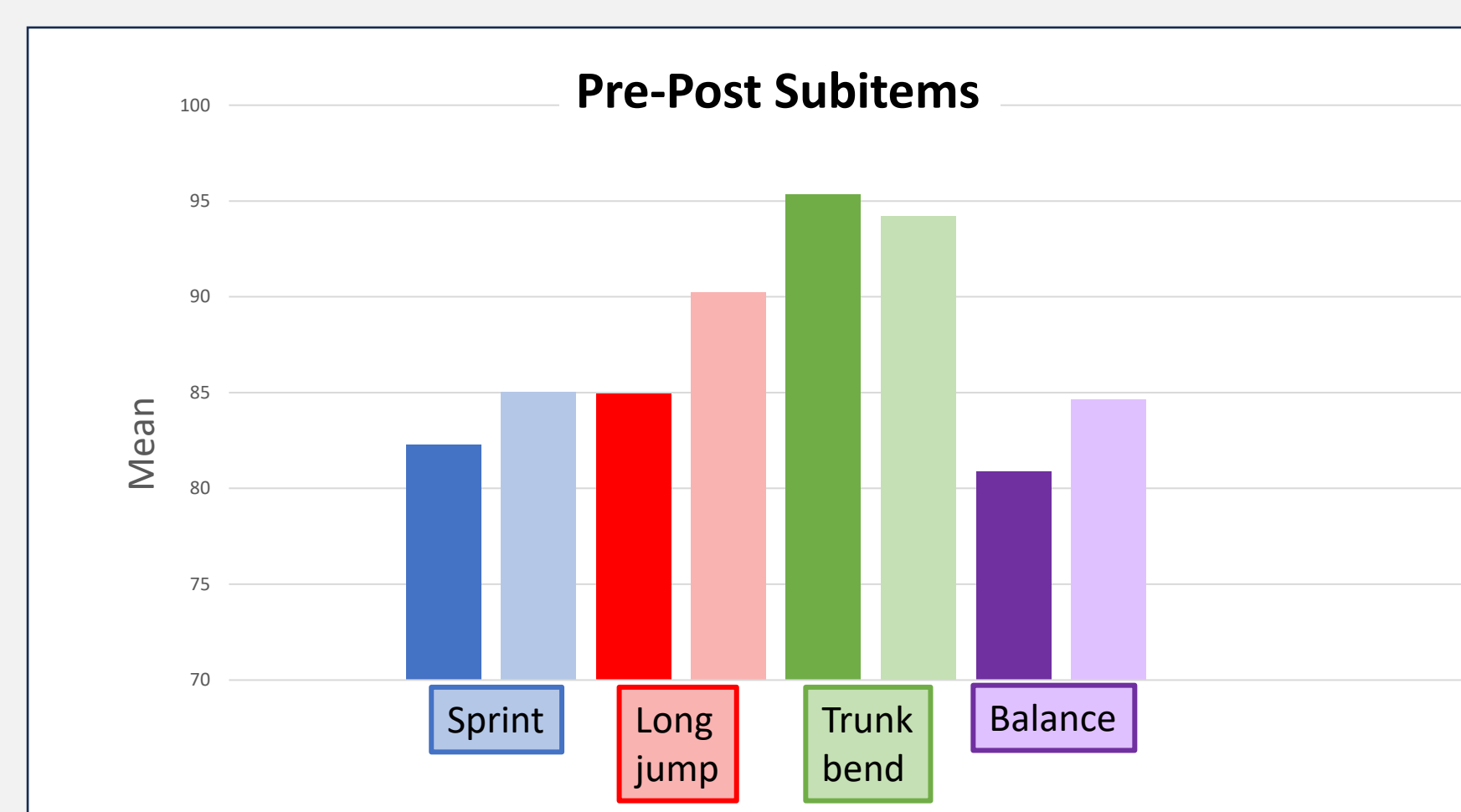
**Mobak (Motor Basic Competencies; Hermann et al. 2020)**  
throw dribble

## Participants



T-Test		Mean	SD	p	Cohens d
Z Total	Pre	85,89	9,980	<,001	,515 medium effect
	Post	88,67	10,504		
Z Sprint	Pre	82,21	14,067	,040	,238 small effect
	Post	84,95	13,294		
Z Balance	Pre	84,89	13,864	<,001	,626 medium effect
	Post	90,47	14,470		
Z Trunk bend	Pre	95,00	12,593	,295	,074 no effect
	Post	94,08	11,192		
Z Standing long jump	Pre	81,27	11,237	,002	,414 small effect
	Post	84,45	13,532		

## Results



## Discussion

- Highly significant change in Z-Mean and Z-Balance → positive effects on the development of children's motor skills
- No change in trunk flexibility → The reason for this could be that mobility is a largely anatomically determined personal performance requirement of the passive systems of energy transfer (Bös et al., 2016, p. 18).
- Both children with intellectual disabilities and children with learning and social-emotional needs made progress, the kids with physical disability ID didn't improve their motor skills → This indicates that the program still needs to be adjusted in this area
- Motor skills are lower in pupils with ID than in those with L/S-E needs (Maïano, Hue & April, 2019).
- **Outlook:** It is pleasing to see that more children are members of a sports club after the program than before it. This suggests that more children enter sports clubs by improving their motor skills through the intervention. For the future, an evaluation of the adapted program with a differentiated view of the subgroups in a study with control and intervention group would be desirable.

## References:

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