



Social participation and friendship among school-aged children with disabilities

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Background

- Social participation is “taking part, involvement, engagement, doing or being with others.”¹
- Greater participation is positively associated with overall health and well-being, especially in those with disability.^{2,3,4}
- Children with disabilities participate in fewer social and recreational activities than their typically developing peers.^{5,6}
- Children from higher income households participate in more community activities and have increased environmental supports.^{1,7}
- Parents of children with disabilities are more likely to report that physical and social environmental factors affect their children’s participation.^{1,4}
- Children with disabilities report a lower number of reciprocal friends and are less likely to have a best friend.⁸

Purpose of Study

The purpose of this study was to examine patterns of social participation and friendship among school-aged children with identified disabilities.

Research Questions

- What are the effects of age, sex, and income on social participation and friendship among children with identified disabilities?
- What are the associations between environmental supports and barriers and social participation and friendship among children with identified disabilities?
- What are the effects of severity of impairment on social participation and friendship among children with identified disabilities?

Measurement Tool

- Main outcome measure:** Participant and Environment Measure for Children and Youth (PEM-CY)
- Parent-reported measure to examine participation of children and youth and the impact of the environment on participation
 - Measures participation frequency and extent of involvement with desire for change
 - 3 domains (environment):
 - Home
 - School
 - Community
 - 5-17 years old
 - Evidence of reliability and validity⁷

Data Collection & Analyses

- Existing data from web-based parent survey
 - Selected items chosen for analysis
 - Environment (home, school, community)
 - Impairment type:
 - Cognitive
 - Physical
 - Psychological
- De-identified data collected in USA and Canada
- ANOVAs, t tests, and chi square analyses used to examine differences in social participation and friendship across impairment groups.
- Correlations used to examine relationships between age, participation/friendship scores, and environmental supports/barriers.

Participants

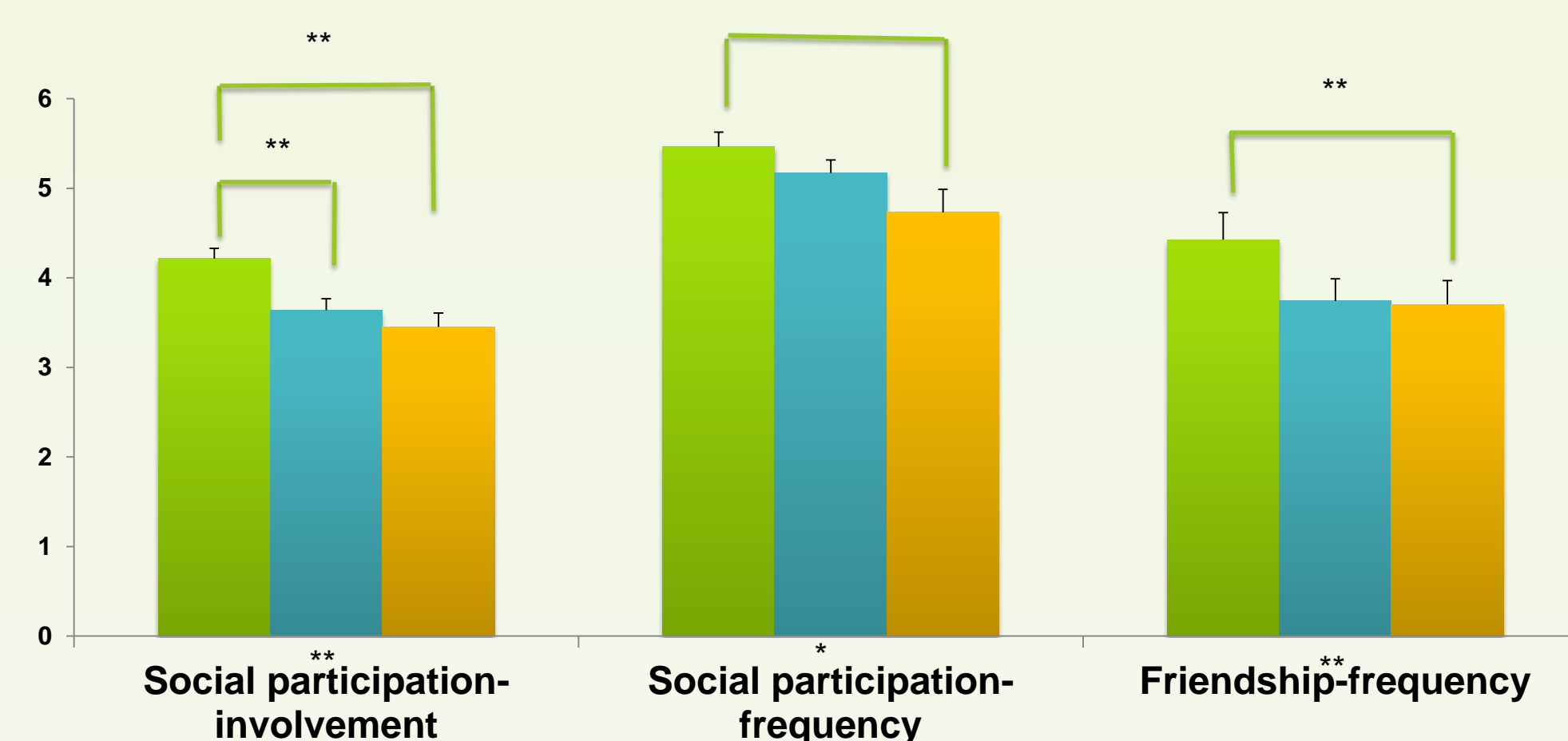
- Parents of 282 children with identified disabilities
- Child’s sex: male (58.9%), female (41.1%)
- Child’s age: <12 (49.6%), ≥ 12 (50.4%)
- Family income: < \$80,000 (43.3%), ≥ \$80,000 (53.5%)
- Race/ethnicity:
 - Caucasian (80.1%)
 - Asian/Southeast Asian (3.1%)
 - Black (3.1%)
 - Other (5.7%)
- A variety of health conditions were reported; the two most reported impairments were developmental delay (n=71; 25.2%) and orthopedic-movement disorder (n=53; 18.8%)

Discussion

- Differences were found between severity of impairment and impairment type with social participation and friendship.
- Findings add to previous research, which found differences in social participation with sex and age.^{8,9}
- Significant differences in the physical impairment group and frequencies may reflect less stigma and physical environment problems in this impairment category.
- Greater likelihood of identifying at least one good friend among children from lower income households may be explained by greater access to friends.
- No significant findings in “little problem” group for all impairment categories may be attributed to lack of exposure. Since this population may show less outward signs of a disability, they may be afforded less opportunities for participation.
- There is a need for increased environmental supports and reduced environmental barriers to optimize opportunities for social participation.

Results

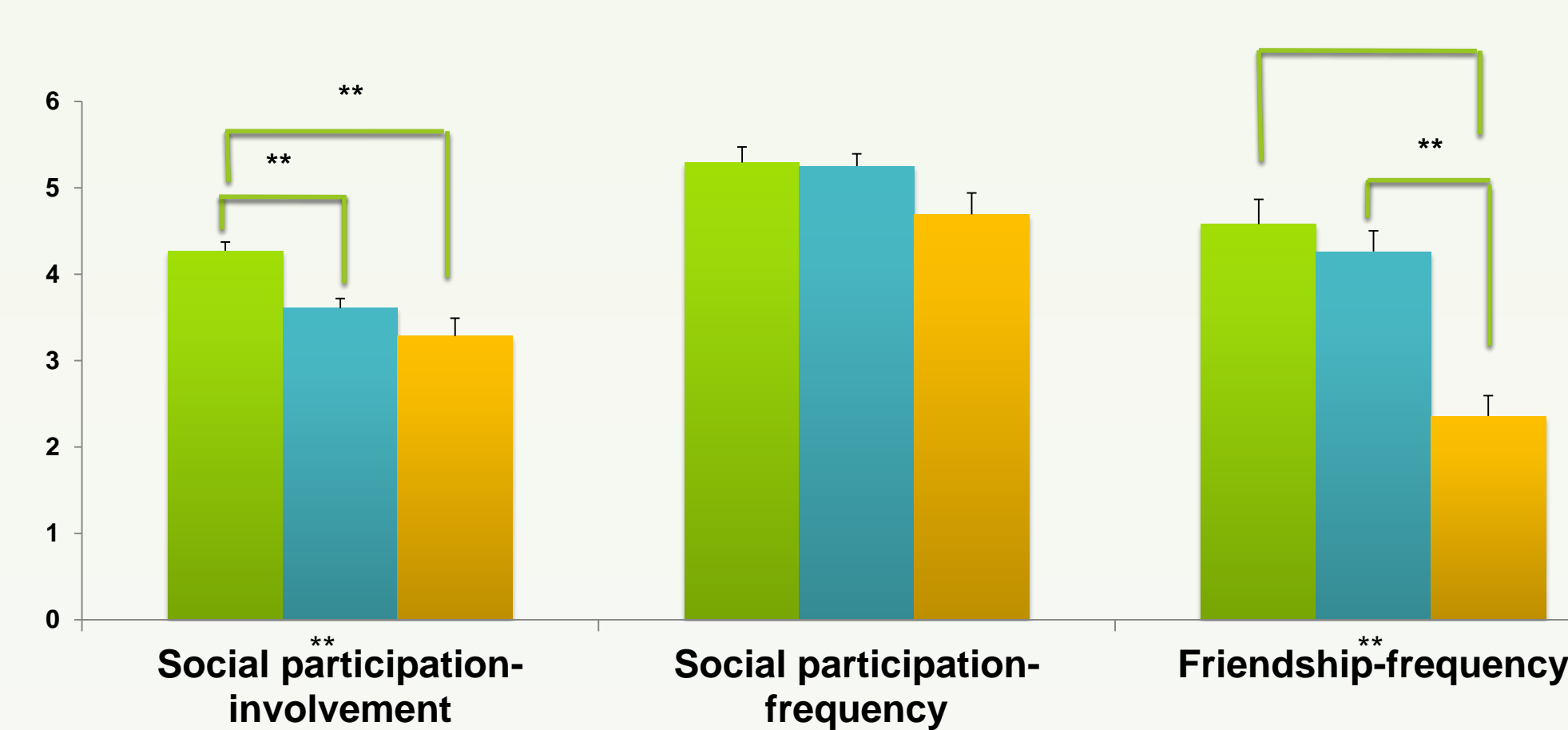
Figure 1. Difference in social participation & friendship between **psychological** impairment groups



- Significant differences found in social participation and friendship between **psychological** impairment extremes (Figure 1).

- Significant differences found in social participation and friendship between **cognitive** impairment extremes (Figure 2).

Figure 2. Difference in social participation & friendship between **cognitive** impairment groups

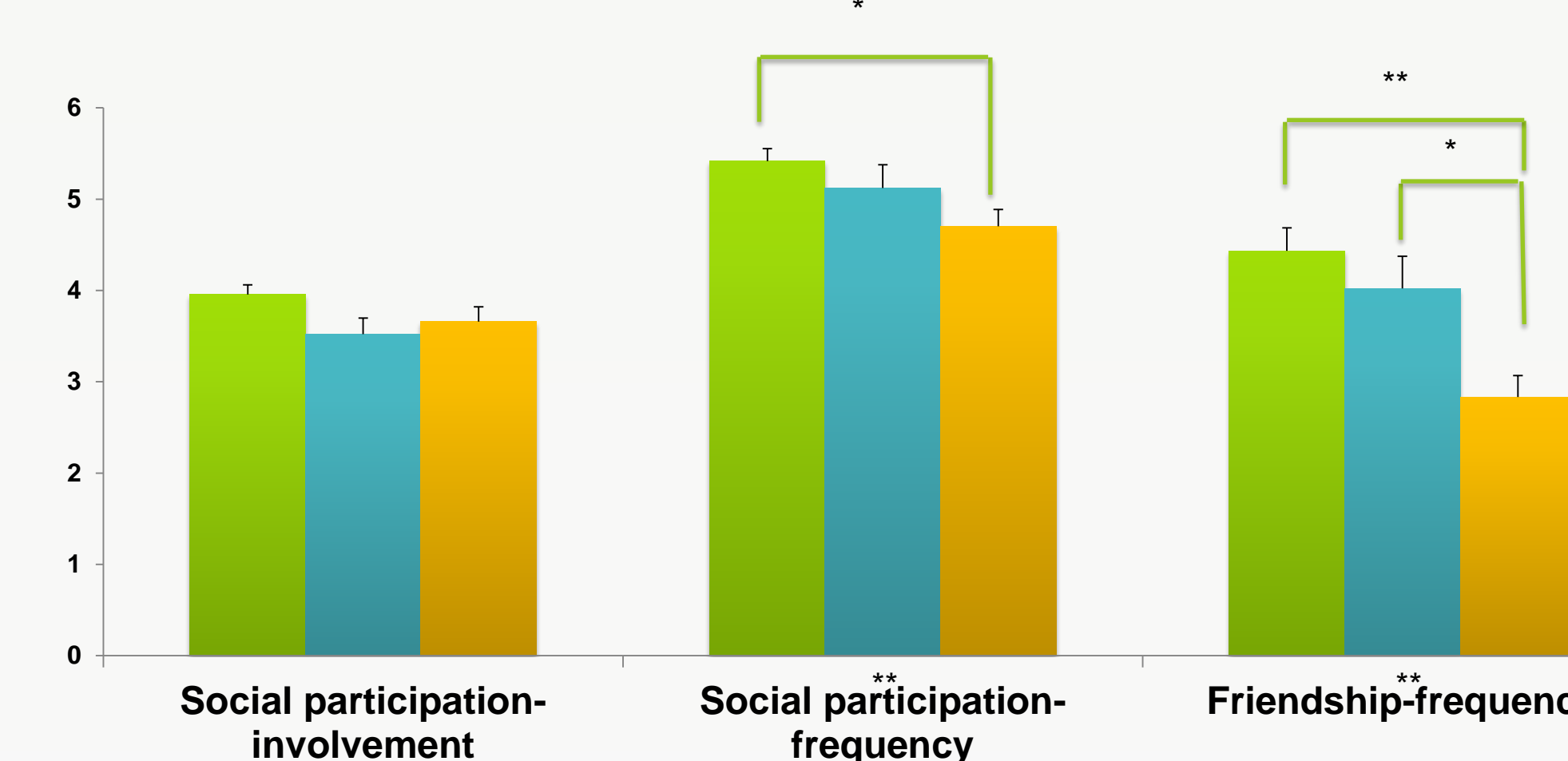


- Significant differences found in social participation and friendship between **physical** impairment extremes (Figure 3).

- Environmental barriers were significantly ($p \leq 0.01$) negatively correlated with social participation involvement ($r = 0.31$) and frequency ($r = 0.45$), and friendship frequency ($r = 0.43$).

- Environmental supports were positively correlated with social participation ($r = 0.19$; $p \leq 0.05$) and friendship frequency ($r = 0.30$; $p \leq 0.01$), but not social participation involvement ($r = 0.09$).

Figure 3. Difference in social participation & friendship between **physical** impairment groups



- Significant differences ($p \leq 0.05$) in social participation involvement found between income groups, but not for social participation frequency and friendship frequency.

- Significant differences ($p \leq 0.01$) found between level of psychological, physical, and cognitive impairment and friendship.
 - More children with “no impairment” rating reported having at least one friend than children with “big impairment” rating.

■ No impairment
■ Little impairment
■ Big impairment

* $p < 0.05$
 ** $p < 0.01$

Limitations

- Missing data (particularly for social participation involvement score)
- Unequal **impairment** subgroups may influence ability to detect significant differences **across subgroups**
- Multiple impairments not identified in children
- Parent-report measure may impact accuracy of results as child perspective not represented
- Results can not be generalized due to study design limitations (small sample, lack of diversity in race/ethnicity, family income, geographic location)

Future Research

- Investigate the differences in social participation and friendship between children with high family income and children with low family income
- Compare children with disabilities with children without disabilities

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