

Social Quantity Preferences in Adolescence: Investigating the Correlation between the Need to Belong and Decisions in Social Quantity

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Background

- The need to belong is a powerful, fundamental, and extremely pervasive social motivation (Baumeister & Leary, 2000).
- Social motivation** is defined as a psychological drive for the pursuit and maintenance of social connections
- A gap in literature exists surrounding the impact of **social quantity** (e.g., defined as the intersection between quantity within social interactions, including group sizes and duration lengths) **when teens make decisions.**

Objective

We aimed to explore the motivation behind decisions about spending time with adolescent peers. We hypothesized that adolescents with higher social motivation will prefer larger social quantity options.

Methods

- The Need to Belong Scale (NTBS, Baumeister & Leary, 1995) was used as a measurement of social motivation.
- Adolescents (aged 12-17 years, N = 23) completed a decision-making task when given a location and constraint. Across 80 trials, participants made decisions regarding group sizes and durations.
- We averaged the NTBS scores from the four categories resulting from the task and analyzed the difference via one-way ANOVA

Demographics	Adolescents n=23
Age M, SD, Range	M=14.4, SD=1.5, Range 12-17
Sex	47.83% Female, 52.17% Male
Race	83% White, 13% Black, 4% Biracial
Latino/Hispanic	17% Yes, 83% No
Psychiatric Status	52.17% Neurotypical, 34.78% Neurodivergent, 13.04% Autistic (ASD)

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References:

Baumeister, R. F., & Leary, M. R. (2000). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. In *Motivational science: Social and personality perspectives*. (pp. 24-49). Psychology Press.

Example of a **Duration Constraint** trial where participants decide on **group size**



Example of a **Group Size Constraint** trial where participants decide on **duration**



Figure 1. Fortune Teller Task. Visual representation of the Fortune Teller Task that participants completed.

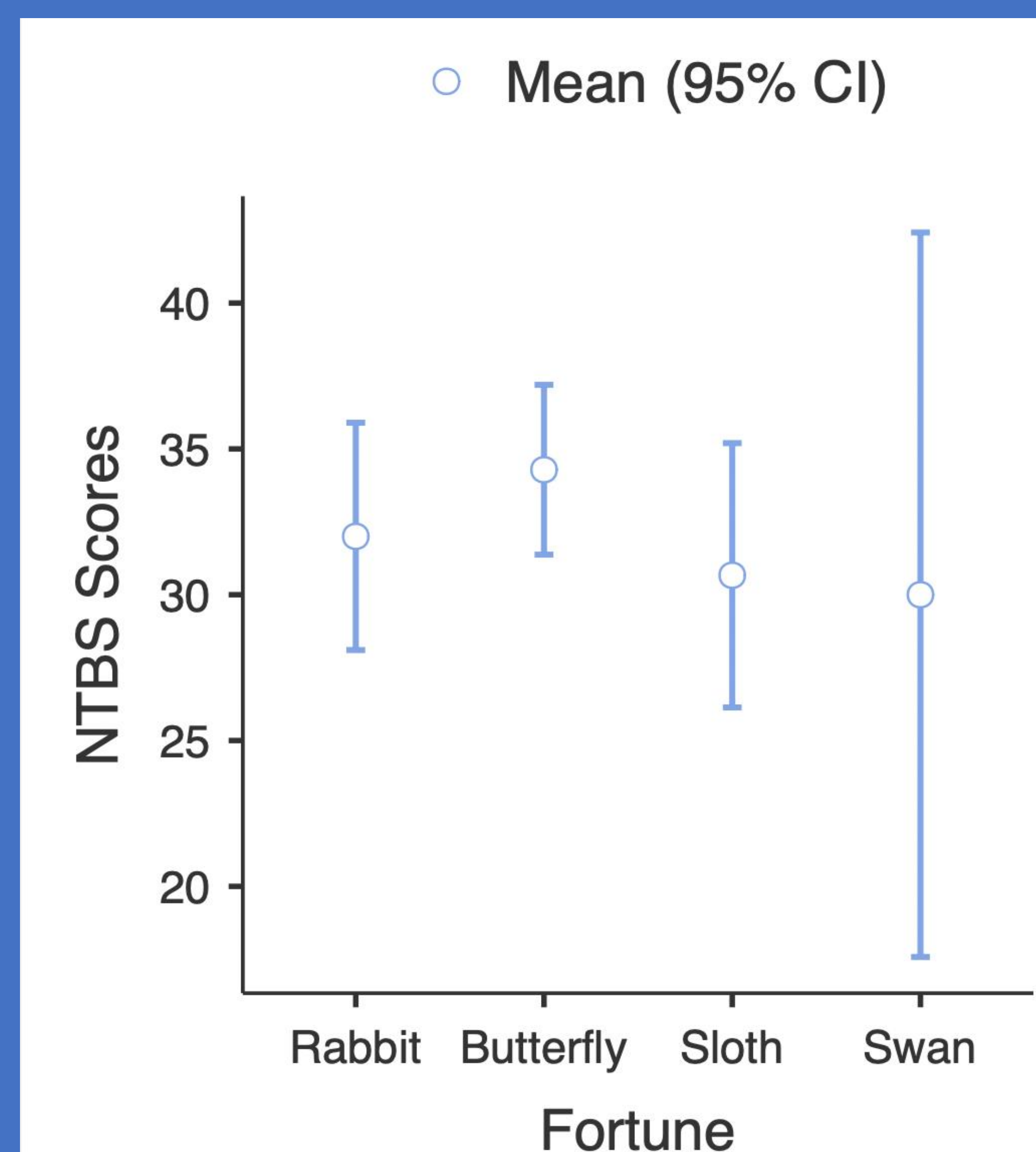


Figure 2. ANOVA analysis.

Visual comparison of the mean differences in need to belong between categories that were determined by teens' decisions. There was no significant differences across categories, $F(3, 7) = 1.13$, $p = 0.4$. Below find the proportion of teens in each category.

"Rabbit"

17.39% of teens

Preferred large group options

"Butterfly"

30.43% of teens

Preferred high social options

"Sloth"

39.13% of teens

Preferred low social options

"Swan"

14.29% of teens

Preferred long duration options

MAIN TAKEAWAY

This study contributes to addressing the literature gap on social quantity. Although results contradicted initial predictions and NTBS mean score differences were not statistically significant, they suggest directions for future research. Larger and more diverse sample sizes, as well as alternative social motivation measures could provide deeper insight. Understanding social motivation's influence on decisions may guide personalized interventions to support adolescents' social needs.

