# Developmental Differences in Reported Helicopter Parenting, Autonomy, and Glucose Monitoring in a Medical Specialty Camp

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## INTRODUCTION

### BACKGROUND

As one of the most common chronic illnesses for youth under 20 years of age, type 1 diabetes (T1D) represents a serious health challenge for the afflicted youth and a significant responsibility for their parents and caregivers (Basina & Maahs, 2018; Landers et al., 2016). Within this context of increasing rates of T1D and the daily complexity associated with managing this illness, **the burden of T1D can be overwhelming for afflicted youth**.

**Parents play a key role in mitigating the social, emotional, and physical challenges associated with T1D** (Landers et al., 2016). In developmentally appropriate approaches, parent(s) play a multitude of roles [i.e., monitoring continuous glucose monitors (CGMs), managing diet] and at the same time foster increasing personal autonomy in their child, shifting responsibilities to the child (Burckhardt et al., 2018; Comeaux & Jaser, 2010). However, when this transition doesn't occur and involvement becomes excessive (i.e., overparenting) it can lead to negative outcomes (Gagnon et al., 2020; Young et al., 2014).

Additionally, within the context of T1D, **"remote involvement" via CGMs may present another avenue for excessive and problematic behaviors to emerge**, where overparenting may shift from an in-person context, to a digitally centered one, where youth with T1D feel over monitored and thus act out to establish their own independence (Gagnon & Garst, 2019; Vikland & Wikblad, 2009). Medical Specialty Camps (MSCs) can enhance a youth's skills to independently manage their illness in a supportive, community-based setting (Gillard & Allsop, 2016). **Moreover, attendance of these MSCs has been associated with improved T1D management and glycemic control** (Wang et al., 2008). While MSC program-level factors that influence youth outcomes have received attention, individual, family level, and context-level characteristics which influence outcomes diabetes centered management are less clear.

## METHOD

### STUDY PURPOSE

The purpose of this study was to explore how these characteristics may influence rates of overparenting, autonomy granting, and monitoring of CGMs.

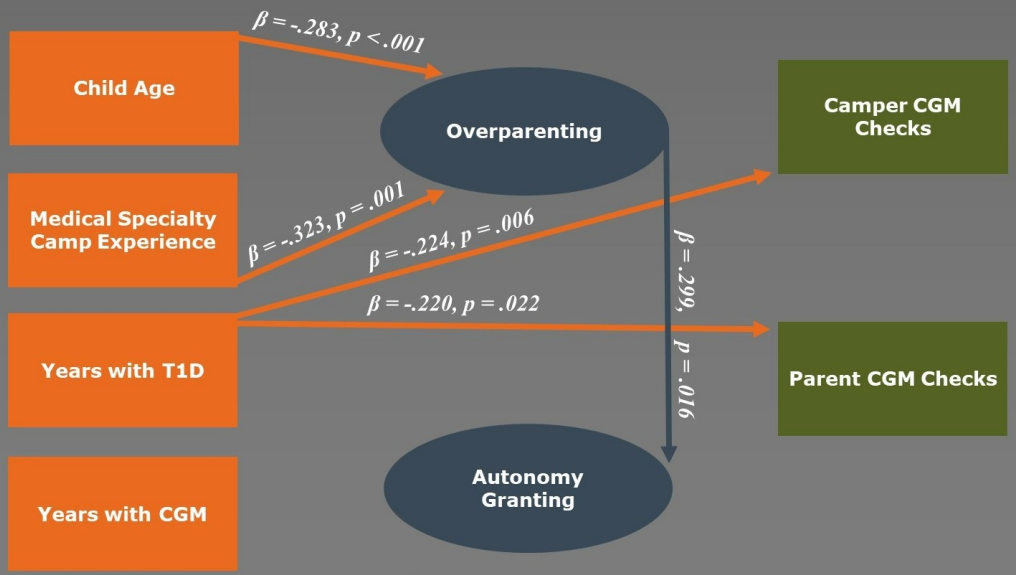
### PROCEDURES

Participants in the study were recruited through an ongoing partnership with a medical specialty camp (MSC) in the southeastern United States serving children with T1D. Specifically, data were collected in the summer of 2021 from 261 youth attending a MSC serving children with Type 1 diabetes. Campers primarily identified as female (59.5%; male = 38.5%), were an average 13.83 years old (*SD* = 2.01), and had attended the MSC for an average of 3.72 years (*SD* = 2.35). Campers primarily identified as either white (64.2%), African American (16.5%), multi-Racial (8.8%), Hispanic or Latino Origin (5.4%), or Asian origin (1.6%). Campers reported an average of 5.95 years being diagnosed with T1D (*SD* = 3.54).

### ANALYSES

Respondents completed paper surveys measuring their perceptions of overparenting (α = .908; 10-items; Gagnon & Garst, 2019), parental autonomy granting (α = .823; 4-items; Kunz & Grych, 2013), average daily personal checks of their CGM (*M* = 12.75, *SD* = 11.79), and average daily parental checks of their CGM (*M* = 12.02, *SD* = 14.42). The scale measurement properties were assessed utilizing a confirmatory factor analysis, which indicated acceptable levels of model fit: [$\chi^2(72) = 157.764$, $p < .001$, CFI = .936, TLI = .919, RMSEA = .067 (90%, CI .053 to .081). Next, the relations between child characteristics, perceived parental behaviors, and continuous glucose meters monitoring were examined utilizing a structural equation model, which also exhibited acceptable levels of model fit: [$\chi^2(144) = 214.000$, $p < .001$, CFI = .961, TLI = .949, RMSEA = .043 (90%, CI .031 to .055).

## RESULTS




Note. $\beta$ indicates standardized regression coefficient; exact *p*-value presented unless $p < .001$; Non-significant ($p > .05$) parameters excluded; Covariances, error terms, and items excluded for illustrative purposes.

## DISCUSSION

### DISCUSSION

The purpose of this study was to explore how child-centered characteristics may influence rates of overparenting, parental autonomy granting, and use/monitoring of CGMs. Consistent with T1D and overparenting literature, in the present study as campers aged they tended to report lower rates of overparenting.

More experienced medical specialty campers (controlling for camper age) also reported lower rates of overparenting. **Given the extra effort camp programmers may associate with "helicopter parents" (Garst & Gagnon, 2015), older and/or more experienced campers with T1D (and their parents) may put less strain on often limited resources.**

Autonomy granting behaviors (i.e., encouraging child independence) are typically negatively associated with overparenting, but in the present study, the opposite was demonstrated, where overparenting had a positive effect on autonomy granting. As illustrated in Schiffrin et al. (2014), this may be due to children perceiving autonomy granting differently. Specifically, **children may view this autonomy granting, not as "facilitating" independence, rather, as "forcing" independence**, a space where the child is not psychologically ready to go, reflecting the excessive behaviors underpinning overparenting.

Finally, it was unsurprising that we found a negative influence of years with T1D on CGM checks, given similar levels of decline reflected in the broader T1D literature (Dayte et al., 2021), where **adherence to diabetes management tends to decline in parallel with experience managing the illness.**

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