Beyond Commands: Unpacking the Role of Parental Behavior in Shaping Child Compliance

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Introduction

Outline

1. Background
2. Methods
    1. Change in Parenting Behaviors
    2. Change in Parenting Behaviors Predicting Compliance
    3. Contemporaneous Compliance Analyses
3. Results
4. Discussion

Background

1. Learning to comply important for child development (Deneault et al., 2023; Moffitt et al., 2011)
2. Risk for child abuse is heightened during caregiver-child compliance interactions (Rodriguez et al., 2018; Rodriguez, 2016; Urquiza & McNeil, 1996)
3. Important to study compliance in context of child-welfare (CW) families

Compliance and rearing

1. Studies of child welfare-involved (CW) families have shown that the risk for child abuse is heightened during caregiver-child compliance interactions (Rodriguez et al., 2018; Rodriguez, 2016; Urquiza & McNeil, 1996)
    1. Parents at high risk for abuse tend to find children's noncompliance behaviors more stressful to handle (Dopke & Milner, 2000)
    2. Parents at high risk for abuse appear to have stricter or narrower definitions of child behaviors that demonstrate compliance, compared to lower risk parents (Dopke et al., 2003; Dopke & Milner, 2000)
    3. These same parents are more likely to respond aggressively to noncompliance (Rodriguez, 2016)
2. As such, children's ability to cooperate with their caregivers and follow instructions has important implications for safety and socioemotional development.

Compliance and maltreatment

1. Parents with high abuse risk for abuse:
   1. Find child noncompliance to be more stressful (Dopke & Milner, 2000)
   2. Hold stricter definitions of child compliance (Dopke et al., 2003; Dopke & Milner, 2000)
   3. Are more likely to respond aggressively to noncompliance (Rodriguez, 2016)
2. Children's ability to follow caregiver instructions has important implications for safety and socioemotional development

PCIT, commands, and compliance

1. PCIT increases compliance in families who seek treatment for child disruptive and oppositional behavior (Thomas et al., 2017)
2. No evidence of PCIT moving compliance or parent use of direct commands in CW families

Hypotheses

1. This study asks three questions:
   1. How does PCIT influence parental behaviors
   2. How do changes in parenting behaviors influence child compliance
   3. Can contemporaneous behaviors within the Clean-Up DPICs task be used to predict compliance

Methods

PCIT administration

1. Pre- and post-PCIT DPICs data were acquired from 204 parent-child dyads using an intervention versus control RCT design.
2. The sample was drawn from consecutive family referrals received between April 2016 and June 2019 from the Department of Human Services-Child Welfare and Self-Sufficiency, and who consented to enroll in the study.
3. The DPICs Clean-Up task was used to measure changes in both parenting behavior and children's compliance

DPICs administration

1. The DPICs is composed of three separate 5-minute tasks:
   1. Child-Led play
   2. Parent-Led play
   3. **Clean-Up (CLUP) task**
2. The CLUP task involves a standardized set of toys distributed throughout the play room and parents instruct their children to clean the room

DPICs measurements

1. Verbal interactions from the CLUP task are coded into one of four categories:
    1. Positive: Behavioral description, reflection, praise
    2. Neutral: Neutral talk & questions
    3. Negative: Negative talk & noncompliable commands
    4. Command: Direct & indirect compliable commands

Question 1

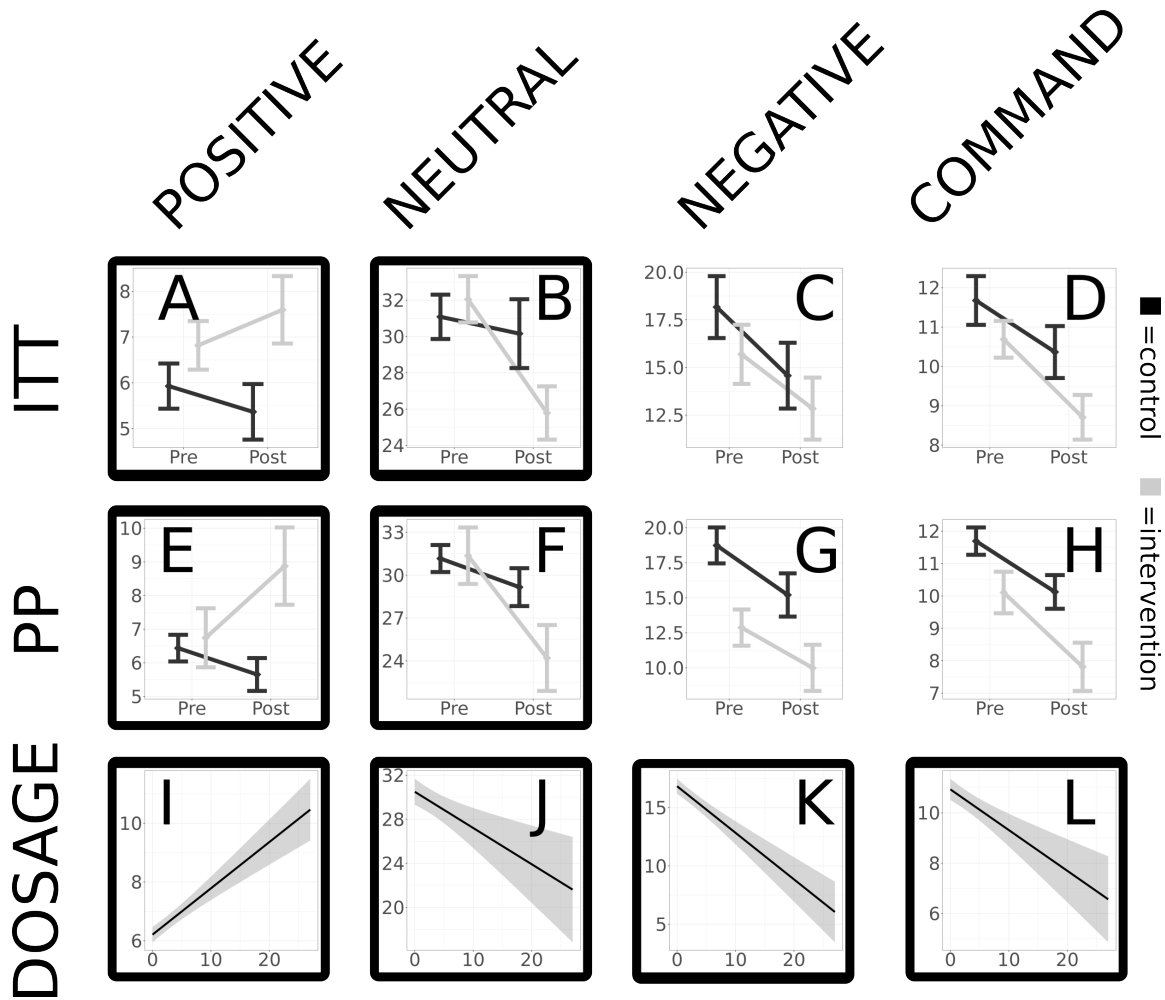
Question 1

1. Question 1 examines the influence that PCIT has on parenting behaviors, specifically how does PCIT influence the various domains of verbal interactions during the CLUP task
2. Specific hypotheses include:
    1. An increase in positive behaviors and a decrease in negative behaviors

Methods

1. The total number of each parenting behavior were calculated within every dyad's completed CLUP administration
2. A multilevel poisson regression was used to examine differences in pre- and post-intervention sums of behaviors
3. This was performed in a intent-to-treat (ITT), a per-protocol (PP), as well as a total dosage framework
    1. The group based approaches (ITT & PP required estimating a group*wave interaction, the dosage variable required estimating a main effect)

Results


POSITIVE
NEUTRAL
NEGATIVE
COMMAND
ITT
PP
DOSAGE
A
B
C
D
E
F
G
H
I
J
K
L
Pre
Post
0
10
20
■=control
■=intervention

Hypotheses

1. The model suggested an increase in positive behaviors in the ITT & PP groups & no significant difference in the total number of negative behaviors
2. The dosage effect suggested an increase in positive behaviors and a decrease in all other behavioral categories

Question 2

Question 2

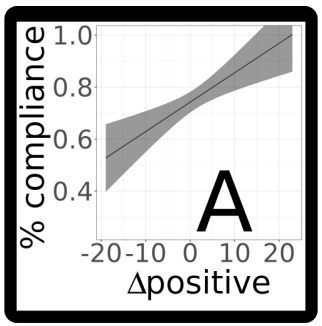
1. Question 2 examines how the change in parenting behavior (Δ_{t2-t1}) predicts the child's compliance at the post-intervention administration of the CLUP task.
    1. All models controlled for compliance and total number of commands at time 1.
2. Specific hypotheses include:
    1. An increase in positive behaviors would predict greater compliance
    2. A decrease in negative behaviors would predict greater compliance

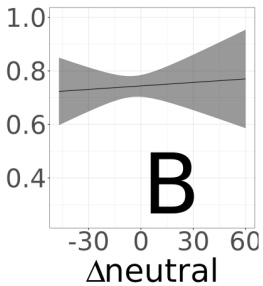
Methods

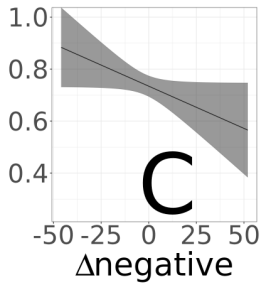
1. Post-intervention compliance was regressed onto the difference in parenting behaviors (Time 2 - Time 1) using a GLM
2. A separate model was estimated within each behavioral category (4 models)
3. Follow-up moderation models were examined in any model with a significant Δ main effect

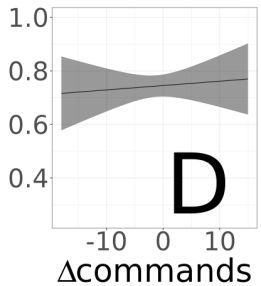
Results

MAIN EFFECT

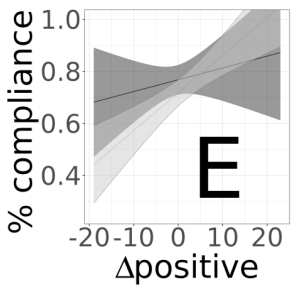


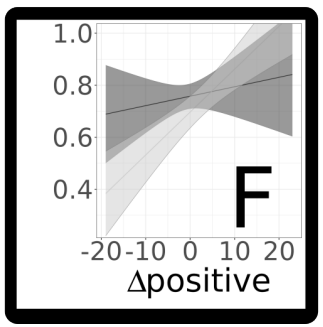


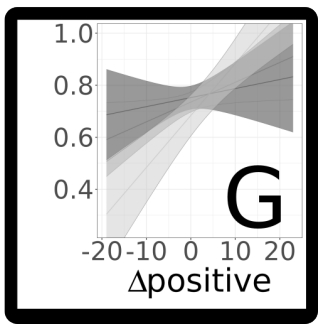




MODERATION







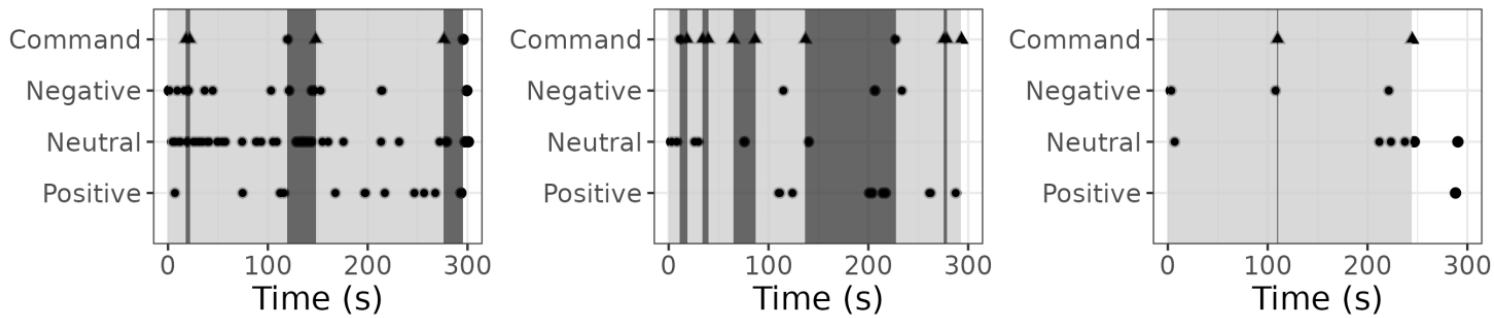
Question 3

Question 3

1. Question 3 examines in-the-moment influences of compliance
2. This was performed by a logistic regression predicting if a child complied for every compliable command a caregiver delivered (n=3,969) compliance it requires estimating a logistic regression for every delivered compliable command and to examine how to the frequency of parental commands
3. A multilevel logistic regression model was used. Fixed effects were included for the frequency of parental behaviors, if a command was direct, pre- versus post-intervention, as well as group and dosage effects
4. Random slope and intercept terms were included for all frequency variable terms

Methods - frequency creation

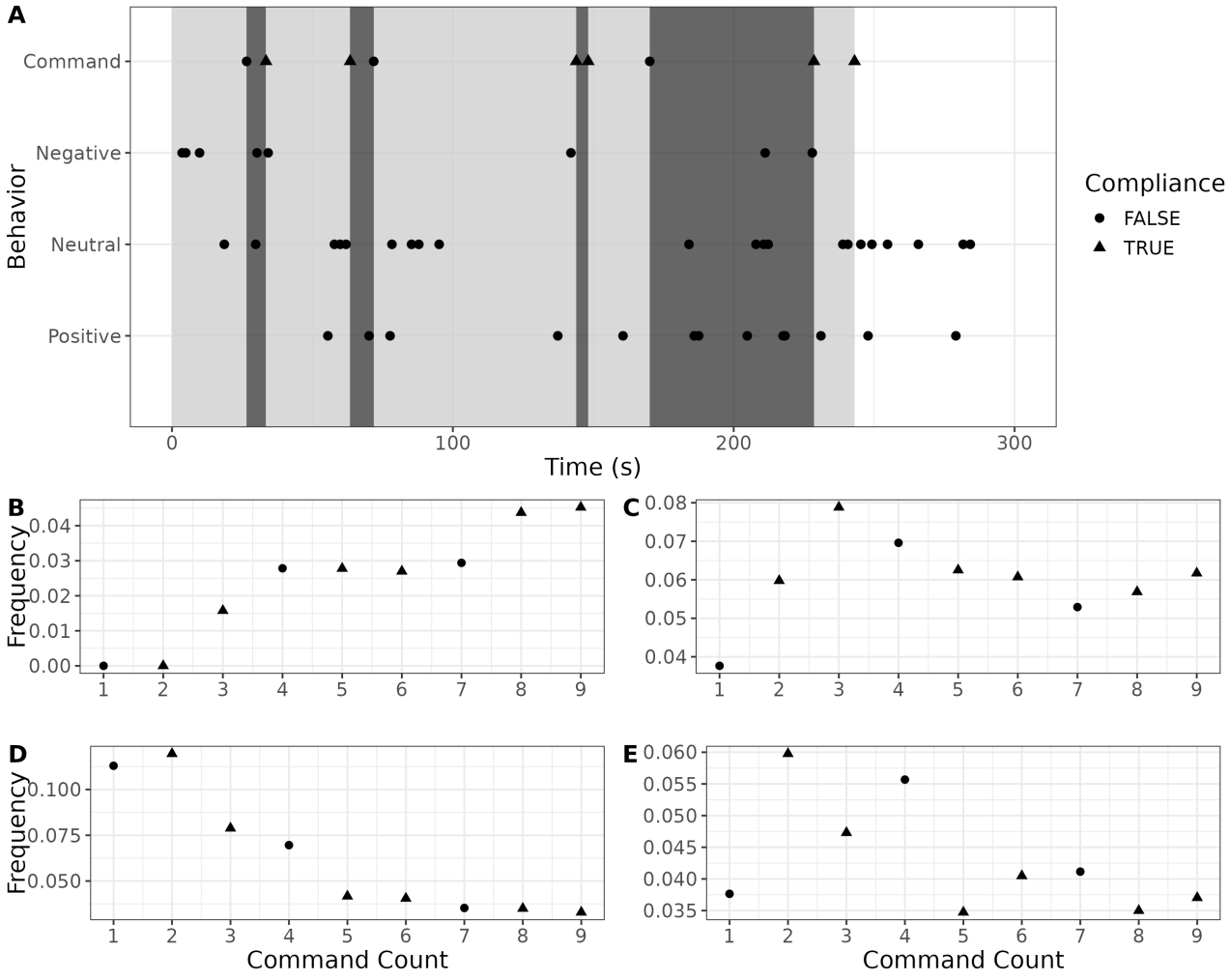
1. CLUP time series were acquired for all participants



2.

3. 28,361 verbal interactions were coded and available across all CLUP tasks

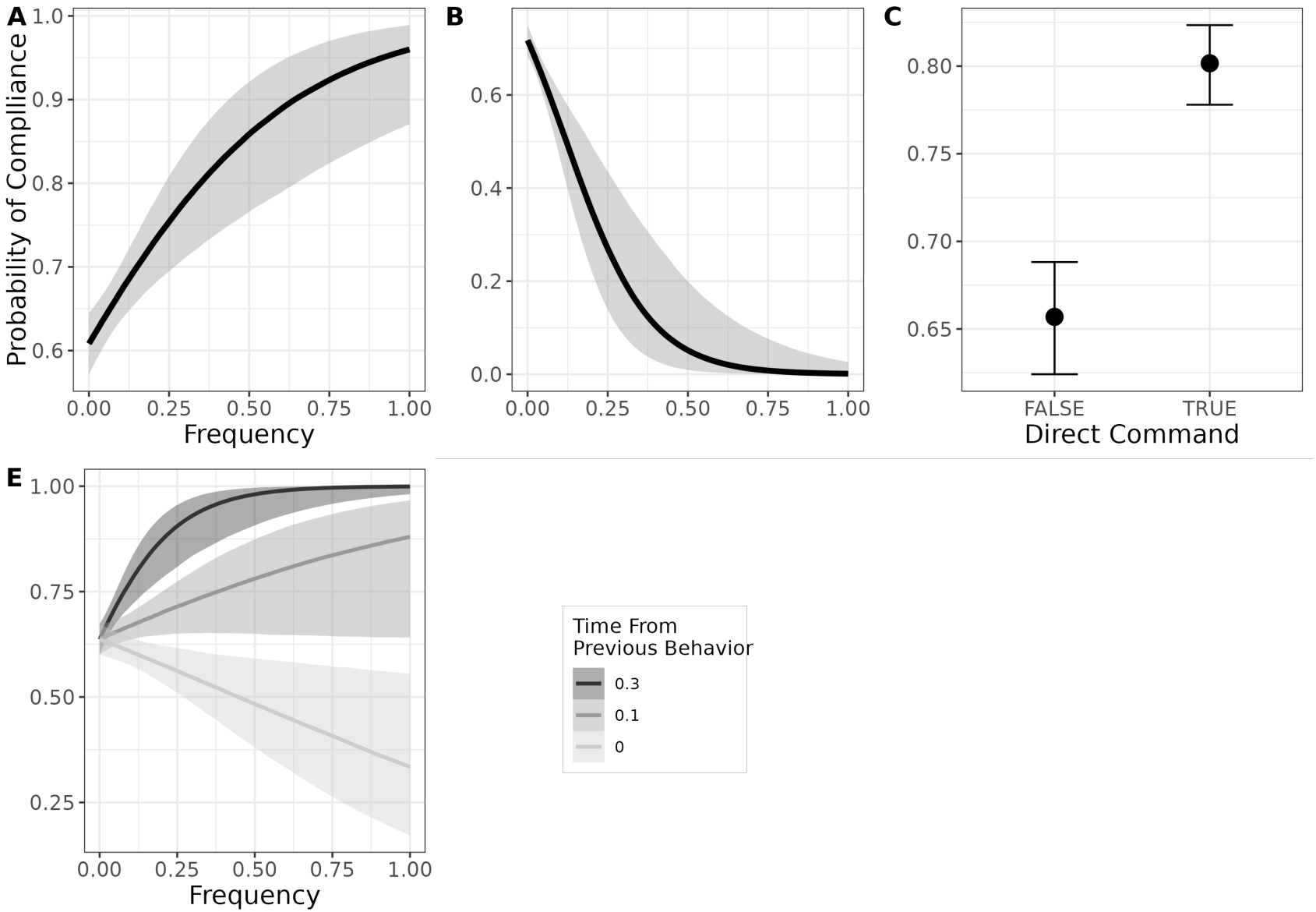
Methods - frequency creation



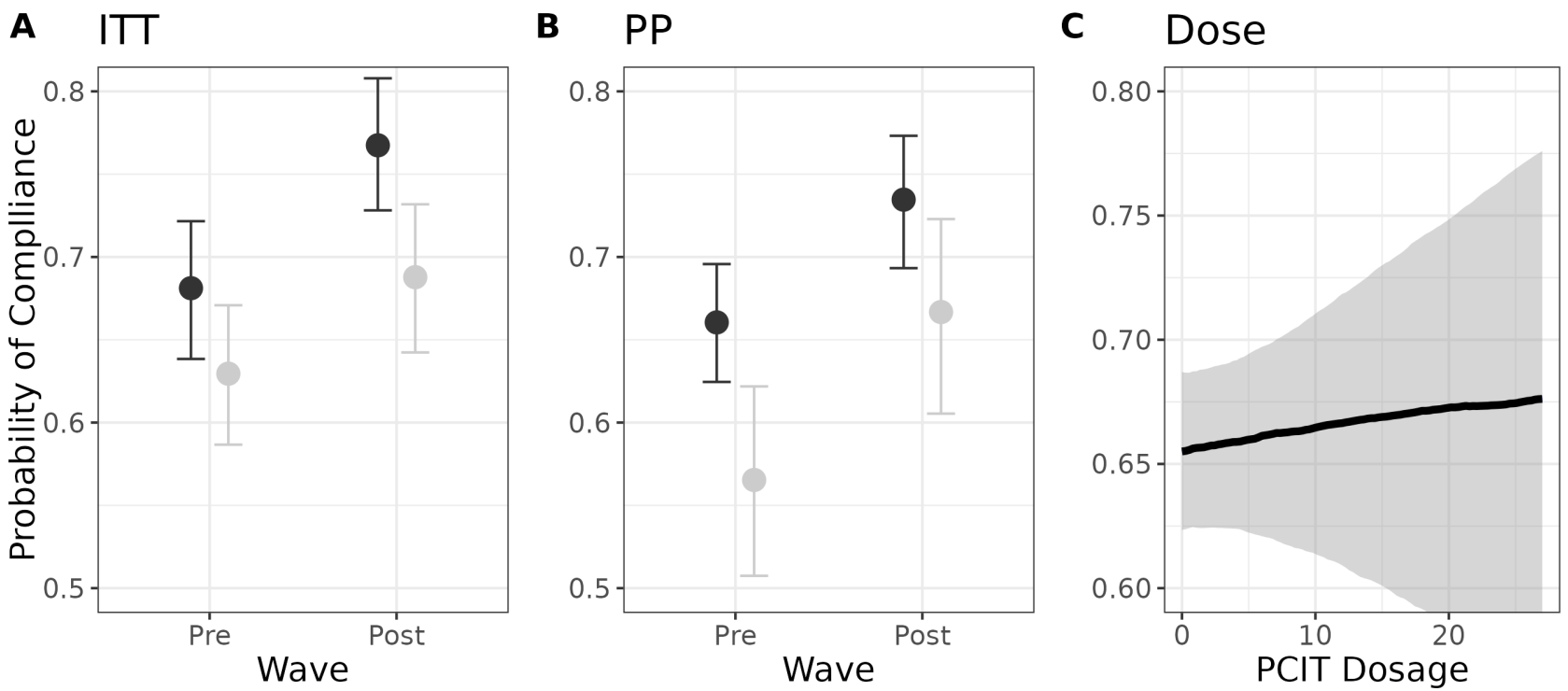
1

2 frequency was created by taking the sum of all actions taken prior to each compliable command and divided by the time of

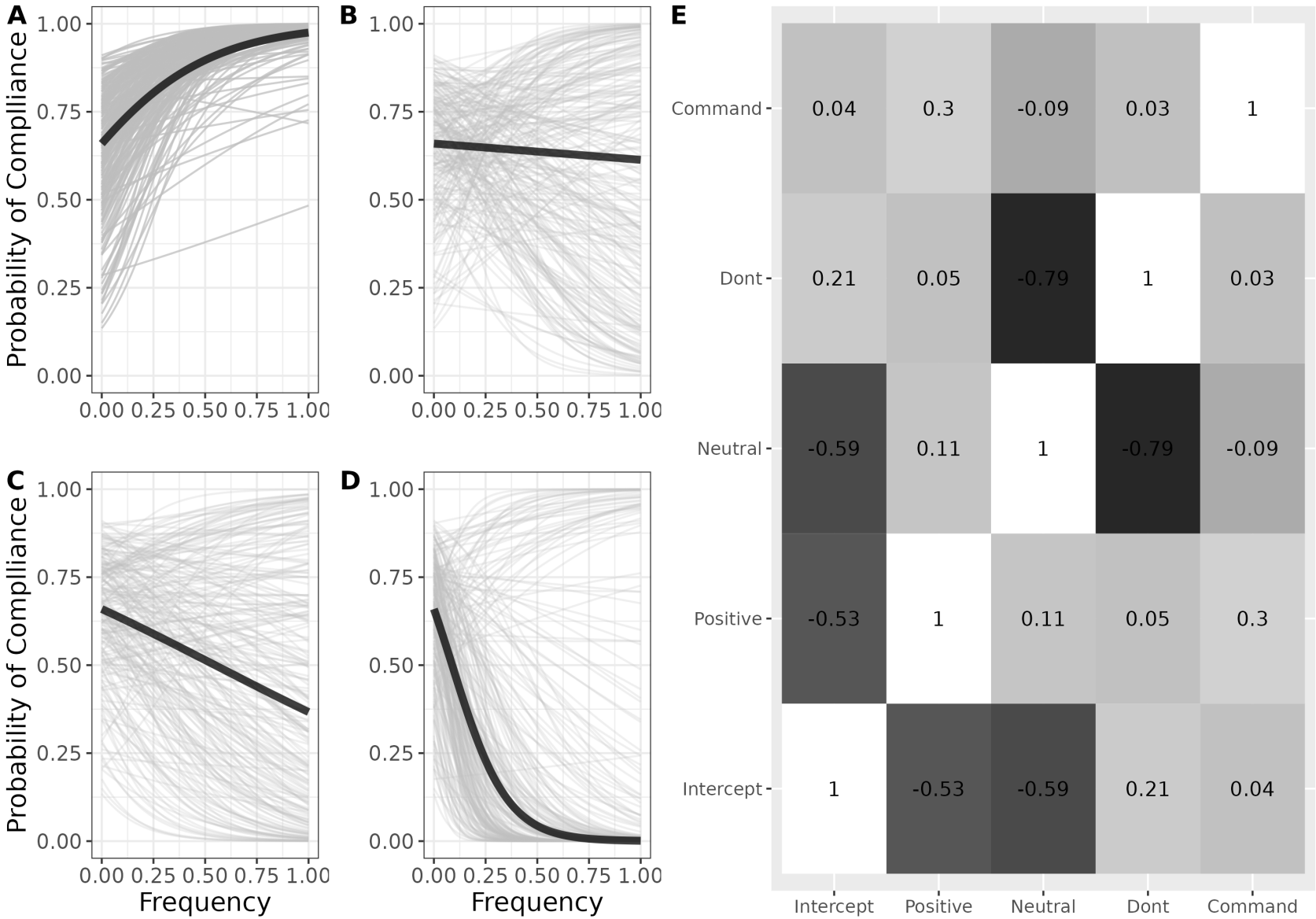
Results


A
Probability of Compliance
1.0
0.9
0.8
0.7
0.6
0.00
0.25
0.50
0.75
1.00
Frequency
B
0.6
0.4
0.2
0.0
0.00
0.25
0.50
0.75
1.00
C
0.80
0.75
0.70
0.65
FALSE
TRUE
Direct Command
E
1.00
0.75
0.50
0.25
0.00
0.25
0.50
0.75
1.00
Frequency
Time From
Previous Behavior
0.3
0.1
0

Results cont.



Results cont.



Discussion

PCIT modifies parent behaviors

1. ITT & PP group effects were observed in the positive and neutral behavioral categories
2. Main effect of dosage were observed across all behavioral categories
    1. Positive interactions had a positive effect
    2. All other behavior categories decreased

Compliance is influenced by changes in parental behavior

1. Changes in positive interactions predicted compliance at the post-intervention CLUP task
2. This effect was moderated by group assignment & dosage
    1. The intervention groups displayed a stronger slope when predicting compliance from changes in behavior

Predicting contemporaneous compliance

1. More frequent positive interaction improve compliance
2. Less frequent commands improve compliance
3. Direct commands display MUCH greater compliance compared to indirect counterparts
4. More negative interactions improve compliance when temporally distal
5. PCIT had very little effect on predicting compliance, despite displaying the desired effect on parenting behaviors (increasing positive interactions)

Dyad-specific variance

1. The positive interactions displayed the lowest amount of variability, nearly all dyad's slopes were positive: positive interactions are the most uniform interactions that can improve compliance
2. All other interaction categories displayed differences in slope sign: some positive and negative slopes
    1. Caregivers may apply alternative strategies to obtain compliance from their children

Big picture

1. PCIT, originally developed for child externalizing difficulties
2. CW families demonstrate parenting difficulties
3. Fewer commands led to greater compliance
4. PCIT encouraging less harsh control in CW families

Implications for outcomes

1. Direct commands in context of positive parenting is ideal
   PCIT seems to help these families get there
2. Greater dosage leads to reductions in commands and negative parenting behaviors
3. Overall: the behaviors we see here set children up for cooperation (Leijten et al., 2016; 2018; 2019)
4. This leads to positive developmental outcomes (Deneault et al., 2023; Moffitt et al., 2011)

Future directions

1. DPICS – only captures compliance within 5 seconds of original command Capture committed compliance: child's continued behavior
2. PRIDE skills collapsed in this model Look at
    1. PRIDE skills individually
3. PCIT seems to be reducing aversive parent control without decreasing child compliance in this CW sample