Data Request form YOUth (version 6.0, February 2020)

Introduction

The information you provide here will be used by the YOUth Executive Board, the Data Manager, and the Data Management Committee to evaluate your data request. Details regarding this evaluation procedure can be found in the Data Access Protocol.

All data requests will be published on the YOUth researcher's website in order to provide a searchable overview of past, current, and pending data requests. By default, the publication of submitted and pending data requests includes he names and institutions of the contact person and participating researchers as well as a broad description of the research context.

After approval of a data request, the complete request (including hypotheses and proposed analyses) will be published. If an applicant has reasons to object to the publication of their complete data request, they should notify the Project Manager, who will evaluate the objection with the other members of the Executive Board and the Data Management Committee. If the objection is rejected, the researcher may decide to withdraw their data request.

Section 1: Researchers

In this section, please provide information about the researchers involved with this data request.
- Name, affiliation and contact information of the contact person
- Name and details of participating researchers (e.g. intended co-authors)
- Name and details of the contact person within YOUth (if any)

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Section 2: Research context

In this section, please briefly describe the context for your research plans. This section should logically introduce the next section (hypotheses). As mentioned, please note that this section will be made publicly available on our researcher's website after submission of your request.

Please provide:

- The title of your research plan
- A very brief background for the topic of your research plan
- The rationale for and relevance of your specific research plan
- The specific research question(s) or aim(s) of your research (Please also provide a brief specification)
- A short description of the data you request

References can be added at the end of this section (optional).

Title of the study
Stability and Change in Parenting Profiles across Infancy and Toddlerhood

Background of the topic of your research plan, rationale, relevance (max. 500 words)
During infancy and toddlerhood parents are challenged to continuously adjust their parenting practices to the rapidly changing developmental needs of their children (Staples & Bates, 2018). For this reason, distinct parenting profiles may exist at different time-points across this period. Identifying distinct parenting profiles across infancy and toddlerhood may allow to more effective time and tailor parenting interventions to the needs of individual parents.   Based on children's developmental needs (Erikson, 1963), three parenting behaviors may be particularly relevant when aiming to identify parenting profiles during infancy and toddlerhood: (1) supportive presence (i.e., being accessible and emotionally supportive), (2) structure & limit-setting (i.e., adequately structuring situations and setting firm and consistent limits), and (3) quality of instruction (i.e., providing clear information and instructions). As these parenting behaviors may be distinctively challenging across this

period, the current study examines parenting profiles at three time-points (i.e., at 5, 10, 36 months).

As young infants fully rely on their parents, being accessible and emotionally supportive may already be challenging (Landry et al., 2001). In contrast, as children's sense of autonomy and language comprehension are still lacking (Bornstein, 2019), it seems likely that parents do not yet experience major difficulties with structure & limit-setting and quality of instructions (Bornstein et al., 2010). At 5 months old, we thus expect parenting profiles that most strongly differ on supportive presence.

At 10 months old, children have shown an increase in exploratory tendencies (Bornstein, 2019). Some parents may therefore struggle to provide sufficient structuring and limit-setting while other parents may use high structure & limit-setting to deal with their child's exploratory behaviors (Howes et al., 2008). At 10 months old, we therefore expect larger differences between parenting profiles in structure & limit-setting.

At 36 months old, children's sense of autonomy has further increased (Bornstein, 2019), challenging parents more strongly to provide adequate structuring and limit-setting. In addition, children's language comprehension has developed considerably (Bornstein, 2019), demanding from parents that they provide clear instructions to help their children to master their rapidly expanding world. At 36 months old, we therefore expect larger differences between parenting profiles on quality of instructions and structure & limit-setting.

Profile membership and transitions over time may be predicted by specific proximal and distal parental factors, and child-specific characteristics. For instance, it has been shown that parents with adequate parenting profiles exhibit higher levels of socio-economic status and parental self-efficacy (Carpenter et al., 2013; Guttentag et al., 2006), whereas parents with inadequate parenting profiles more often have children with a difficult temperament or regulatory deficits (Brady-Smith et al., 2013; Sturge-Apple et al., 2014). In addition, parents high on warmth and structuring have been shown to have more agreeable and conscientious personalities (Lally & Valentine-French, 2019).

Thus far, only a few studies examined the stability and change of parenting profiles in early childhood (Cooke et al., 2012; Pashall & Mastergeorge, 2018). Moreover, none of these studies examined parenting profiles in infancy, while this period is characterized by unique parenting challenges (Holden, 2019). The current study therefore extends previous work by (1) distinguishing parenting profiles at 3 time-points across infancy and toddlerhood in a low-risk sample, and (2) examining how profile membership and transitions are associated with relevant proximal and distal parental factors, and child-specific characteristics.

The specific research question(s) or aim(s) of your research
1) Which parenting profiles exist at each time-point during infancy and toddlerhood (5 months, 10 months, 36 months) based on parent's supportive presence, structure & limit-setting and quality of instructions?
2) How are parenting profiles at each time-point (5 months, 10 months, 36 months) associated with relevant proximal and distal parental factors, and child-specific characteristics?
3) Which transitions between parenting profiles emerge across time (5 months, 10 months, 36 months)?
4) How are transitions between parenting profiles associated with relevant proximal and distal parental factors, and child-specific characteristics?

Summary of the data requested for your project: Please indicate which data you request to answer your research question.

Parenting behaviors
- Observed parenting behaviors at wave 1 (around 5-months), wave 2 (around 10-months), and wave 3 (around 3-years) will be assessed using the PCI video tasks (i.e., supportive presence, structure & limit-setting, quality of instructions). Parenting behaviors will be observed during structured tasks and unstructured free play.

Proximal parental factors:
- To assess parental sense of competence, a Dutch translation of the Parenting Stress Index (PSI; Abidin, 1990) will be used, called the Nijmeegse Ouderlijke Stress Index (NOSI; De Brock et al., 2001).
- To assess parent's personality, the Dutch version of the Neuroticism–Extraversion–Openness-Five Factor Inventory 3 (NEO-FFI-3; Hoekstra & De Fruyt, 2014) will be used.

Distal parental factors
- The questionnaire about demographics will be used to assess parental education level, family income, having a first-born child, family relations, and household composition.
- To assess the stressful live events and long-term stressors, the questionnaires about the social environment and live events will be used.

Child-specific factors
- To assess children's difficult temperament at wave 1 (around 5-months) and wave 2 (around 10-months), the subscales Sadness, Distress to Limitations, Fear, and Falling Reactivity of the Infant Behavior Questionnaire Revised (IBQ-R-SF; Gartstein & Rothbart, 2003) will be used
- To assess children's self-regulation at wave 1 (around 5-months) and wave 2 (around 10-months), the subscales Duration of Orienting, Low Intensity Pleasure, Cuddliness, and Soothability of the the short form of the Infant Behavior Questionnaire Revised (IBQ-R-SF; Gartstein & Rothbart, 2003) will be used. To assess children's self-regulation at wave 3 (around 3-years), the subscales Attention Focusing, Attention Shifting, Cuddliness, Inhibitory Control, and Low-Intensity Pleasure, a short form of the Early Childhood Behavior Questionnaire (ECBQ-SF; Putnam et al., 2006) and the subscales Attention Focusing, Inhibitory Control, Perceptual Sensitivity, and Low Intensity Pleasure of the Child Behavior Questionnaire (CBQ-SF; Putnam and Rothbart, 2006) will be used. The ECBQ-SF and CBQ-SF are the parallel measures of the IBQ-R-SF to cover the next age-range.

References (optional)
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12. Staples, A. D., & Bates, J. E. (2018). Parenting of infants and toddlers. In M. R. Sanders & A. Morawska (Eds.), *Handbook of parenting and child development across the lifespan* (pp. 585-607). Springer International Publishing. https://doi.org/10.1007/978-3-319-94598-9_26

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Section 3: Hypotheses

In this section, please provide your research hypotheses. For each hypothesis:
- Be as specific as possible
- Provide the anticipated outcomes for accepting and/or rejecting the hypothesis

Hypotheses

As to our knowledge, no research on distinguishing parenting profiles across infancy and toddlerhood yet exists, no person-centered studies have been conducted based on these three parenting dimensions together (i.e., supportive presence, structure & limit-setting, quality of instruction), and person-centered research thus far mainly focused on high- or diverse risk samples, we could not directly base our hypotheses on previous work. Nevertheless, given that previous research on parenting profiles in early childhood often distinguished between competent, sufficient and maladaptive profiles (e.g., Farkas et al., 2020; Pashall & Mastergeorge, 2018), we predict a similar distinction on each time-point in our study. In addition, in line with previous work, we expect the structure of the developmentally supportive parenting profiles to remain relatively stable over time and maladaptive parenting profiles to show the largest changes in structure (Cook et al., 2012; Pashall & Mastergeorge, 2018).

We expect the following parenting profiles at around 5 months old:
- o Competent Profile (high supportive presence, high structuring & limit-setting, high quality of instruction).
- o Sufficient Profile (moderate supportive presence, moderate structuring & limit-setting, moderate quality of instruction).
- o Unsupportive Profile (low supportive presence, moderate structuring & limit setting, moderate quality of instruction).

We expect the following parenting profiles at around 10 months old:
- o Competent Profile (high supportive presence, high structuring & limit-setting, high quality of instruction).
- o Sufficient Profile (moderate supportive presence, moderate structuring & limit-setting, moderate quality of instruction).
- o Unsupportive-Permissive Profile (low supportive presence, low structuring & limit setting, moderate quality of instruction).

We expect the following parenting profiles at around 36 months old:
- o Competent Profile (high supportive presence, high structuring & limit-setting, high quality of instruction).
- o Sufficient Profile (moderate supportive presence, moderate structuring & limit-setting, moderate quality of instruction).
- o Unsupportive-Powerless Profile (low supportive presence, low structuring & limit setting, low quality of instruction).

We expect the following associations between profile membership and parental factors and child-characteristics at each time-point:
- o We expect parents with a non-first-born child, a higher score on parental SES, agreeableness, and conscientiousness to be more likely to have a Competent profile.

- We expect parents having a child with more self-regulatory deficits and difficult temperament, a higher score on neuroticism, more stressful life events, and a lower score on agreeableness and conscientiousness to be more likely to have an Unsupportive profile.

We expect the following associations between profile transitions and parental factors and child-characteristics across time-points:
- We expect transitions to the Supportive profile to be associated with higher perceived parental competence, parental SES, agreeableness, and conscientiousness.
- We expect transitions to the Unsupportive-Permissive and Unsupportive-Powerless profile to be associated with having a child with more self-regulatory deficits and difficult temperament, more stressful life events, higher neuroticism, lower agreeableness, and lower conscientiousness.

Section 4: Methods

In this section, you should make clear how the hypotheses are tested. Be as specific as possible. Please describe:
- The study design and study population (Which data do you require from which subjects?)
- The general processing steps (to prepare the data for analysis)
- The analysis steps (How are the data analysed to address the hypotheses? If possible, link each description to a specific hypothesis)
- Any additional aspects that need to be described to clarify the methodological approach (optional)

Study design, study population and sample size (e.g. cross-sectional or longitudinal; entire population or a subset; substantiate your choices)

Study population: All available children and parents from the YOUth baby & child cohort who participated at the 3 waves (around 5, 10, 36 months).

Sample size: All participants that are collected thus far. We expect the sample size to be around N=250.

Study design: The study design consist of a longitudinal design.

General processing steps to prepare the data for analysis

The Parent-Child Interaction videos (PCI) will be coded by trained and reliable coders. For coding the PCI videos, an adapted version of the Erickson scales (Erickson et al., 1985) will be used to code different dimensions of parenting: supportive presence, structure and limit setting, and quality of instruction. The dimensions of parenting behaviors will be scored on a 7 point Likert scale. Interrater reliability over 25% of videos will be determined. As most videos already have been coded for a previous study following this procedure, we will code the additional videos using the same procedure.

Specific processing and analysis steps to address the hypotheses

First, to identify parenting profiles at around 5, 10, and 36 months old, we will conduct Latent Profile Analyses (LPA) for each time-point separately.

Second, to test how profile membership at each time-point is associated with relevant parental factors and child-characteristics, we will use a three-step multinomial logistic regression method in which the covariates are added to the LPA models (Asparouhov & Muthen, 2014).

Third, to investigate the nature and likelihood of transitions between profiles across time, we will conduct Latent Transition Analyses (LTA). In addition, invariance tests will be conducted to test for empirical stability and change in profile structure across time.

Fourth, to test how profile transitions at each time-point are associated with relevant parental factors and child-characteristics, we will use a three-step multinomial logistic regression method in which the covariates are added to the LTA models.

Section 5: Data request

In this section, please specify as detailed as possible which data (and from which subjects) you request.

Data requested

We would like to receive the following data of the children and parents from the YOUth baby & child cohort that participated at the around 3 years old wave:
 	
20w pregnant
  ▪ List of longterm stressful life events
 	
30w pregnant
  ▪ NEO-FFI-3
 	
5 months
  ▪ Parent Child Interaction videos
  ▪ NOSI
  ▪ Major life events questionnaire
  ▪ Demographics questionnaire
  ▪ IBQ-R-SF
 	
10 months
  ▪ Parent Child Interaction videos
  ▪ NOSI
  ▪ Major life events questionnaire
  ▪ Demographics questionnaire
  ▪ IBQ-R-SF
 	
Around 3 years
  ▪ Parent Child Interaction videos
  ▪ NOSI
  ▪ Major life events questionnaire
  ▪ Demographics questionnaire
  ▪ ECBQ-SF/CBQ -SF

Data request for the purpose of:

☒ Analyses in order to publish

☐ Analyses for data assessment only (results will not be published)

Publication type (in case of analyses in order to publish):

☒ Article or report

☐ PhD thesis

☐ Article that will also be part of a PhD thesis

Would you like to be notified when a new data lock is available?

☒ Yes

☐ No

Upon approval of a data request, the complete request will be made publicly available on our researcher's website by default.

Do you agree with publishing the complete request on our researcher's website after it is approved?

☒ Yes

☐ No. Please provide a rationale