

Concept Paper Form

Provisional Paper Title: How do socially mobile individuals parent their children? Investigation in a prospective longitudinal study
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P.I. Sponsor: (if the proposing author is a student or colleague of an original PI) Supervisors for this project would be Sara Jaffee and Jasmin Wertz)
Today's Date: 9/29/2022

Please describe your proposal in 2-3 pages with sufficient detail for helpful review.

Objective of the study:

Parenting practices are thought to play an important role in predicting children's development, including their academic achievement, socioemotional outcomes, self-esteem, cognitive outcomes, and linguistic development (Kotchick & Forehand, 2002; Ogg & Anthony, 2020). As parenting practices are associated with such widespread developmental consequences, there is a need to better understand the determinants of parenting behaviors.

Socioeconomic status (SES) has been intensely studied as one such determinant of parenting (Hoff & Laursen, 2019). Several studies have demonstrated that lower SES is associated with less supportive and stimulating parenting, and greater use of harsh disciplinary practices (Conrad-Hiebner & Byram, 2020; Elder, Nguyen, & Caspi, 1985; McLoyd et al., 1994). On the other end of the spectrum, higher-SES parents tend to engage in more warm and responsive parenting practices (Weis & Toolis, 2008), parenting behaviors that support language development (Hoff & Laursen, 2019), and parenting behaviors that promote cognitive stimulation, which predicts later executive functioning abilities and academic achievement (Rosen et al., 2020). These findings linking SES to parenting are consistent with sociological theories that posit that parental SES plays a significant role in shaping parenting practices, with researchers noting significantly different parenting behaviors between working-class and middle-class parents (e.g., Lareau, 2002).

On the other hand, life-course developmental research suggest that parents' own childhood circumstances also play an important role in their later parenting behaviors. Researchers have observed intergenerational continuities in parenting behaviors, suggesting that

parents may utilize the same parenting strategies as they experienced in childhood (Ogg & Anthony, 2020). Continuities in parenting practices across generations may also be attributable to intergenerational continuities in SES (Conger & Donellan, 2007). Thus, individuals' childhood SES may also play a role in determining their own parenting behaviors.

In order to disentangle the role of early life experiences from adulthood circumstances in determining parenting behaviors, one group of individuals who may be particularly informative to study are parents whose SES changed from childhood to parenthood. We call these parents socially mobile. To the extent that adult SES is associated with parenting, we would expect upwardly mobile parents (i.e., those whose SES improves from childhood to adulthood) to be more likely to engage in the parenting practices of always-high-SES parents, including more warm, responsive, and cognitively stimulating parenting. To the extent that childhood SES is associated with parenting, we would expect upwardly mobile parents to be more likely to engage in the parenting practices of always-low-SES parents, including greater use of harsh disciplinary practices, less parental warmth, and less cognitive stimulation. Furthermore, there might be additional challenges for socially mobile individuals that impact on parenting, e.g., experiencing upward mobility can be stressful due to the greater demands placed on the self to strive for achievement and navigating unfamiliar social contexts (Miller et al., 2020). Because of this stress, we might also predict that parenting practices among the upwardly mobile may not change as much as expected (i.e., their parenting will be similar to those who remain stable in the SES of origin). To date, only two studies have tested the association between social mobility and parenting outcomes, one looking at parental values (Sieben, 2017) and the other looking at self-reported parenting practices at school-age (Roksa & Potter, 2011). Here we propose to expand this literature by testing associations between social mobility and observed parenting practices in early childhood.

We propose to use the multigenerational data available from the Dunedin Study and the Parenting Study to assess whether social mobility uniquely predicts parenting practices; namely, parental warmth, cognitive stimulation, and harsh disciplinary practices. First, we will examine whether socially mobile Dunedin participants utilize different parenting practices relative to other Dunedin participants with different social mobility trajectories who started in the same SES (**Aim 1**). We hypothesize that upwardly mobile Dunedin participants utilize more parental warmth, more cognitive stimulation, and fewer harsh disciplinary practices relative to non-mobile or downwardly mobile Dunedin participants who started in a comparable childhood social class; conversely, we hypothesize that downwardly mobile Dunedin participants utilize less parental warmth, less cognitive stimulation, and more harsh disciplinary practices relative to non-mobile or upwardly mobile Dunedin participants who started in a comparable childhood social class. We will control for additional factors which may also influence parenting behaviors such as parental age, gender, and race/ethnicity.

Second, if we find differences in parenting practices between Dunedin participants with differing social mobility trajectories as proposed in **Aim 1**, we will explore factors that might explain the relationship between social mobility and parenting practices (**Aim 2**). We are especially interested in the parenting practices of upwardly mobile individuals. We will test three not mutually exclusive possibilities. The first possibility is that upwardly mobile

individuals have experienced more developmentally adaptive parenting themselves in childhood (Ogg & Anthony, 2020), which they in turn use with their own offspring. The second possibility is that greater educational attainment among upwardly mobile individuals may facilitate the use of more adaptive parenting practices (Davis-Kean et al., 2021). The third possibility is that pre-existing characteristics may predict both upward mobility and adaptive parenting in certain individuals; for example, individuals with high IQ and self-control are more likely to be upwardly mobile (Brody et al., 2013; Forrest et al., 2011), and these characteristics are also associated with use of certain parenting practices (Kovan et al., 2009; Verhoeven et al., 2007). In summary, we will explore whether the parenting experienced by Dunedin participants, their educational attainment, and their pre-existing individual differences account for any relationship between their social mobility and parenting practices (**Aim 2**).

Data analysis methods:

Aim 1: We will use analyses of variance to test whether there are differences in parenting practices between Dunedin participants with different social mobility trajectories. We will use a combination of childhood and adulthood SES to classify mobility; we will also use parental and adulthood educational attainment and occupational status to classify mobility in sensitivity analyses. Models will be adjusted for participant age, gender, and race/ethnicity.

ANOVAs will be followed by a series of planned contrasts to test differences in parenting between Dunedin participants with particular social mobility trajectories who were comparable in their childhood social class. We are especially interested in examining differences between 1) upwardly mobile vs. stable SES; 2) upwardly mobile vs. downwardly mobile; and 3) downwardly mobile vs. stable SES.

Aim 2: We will use linear regression to determine whether Dunedin participants' experienced parenting, parental educational attainment, and pre-existing characteristics (childhood IQ, self-control) predict their own parenting behaviors. Models will be adjusted for participant age, gender, and race/ethnicity.

Variables needed at which ages:

From main Dunedin study:

Phase	Variable name	Variable label
Cross-phase or identifier variables	snum	Study member ID
	sex	SM sex
	sesav115	average high ses, 1 thru 15, 6 = high
	lscuw311	low self-control factor, unweight, 3-11
	wfsiq711std	Full scale IQ ages 7 to 11, standardized to mean 100, sd15
	age_at_birth1	Age of SM at birth of 1st child
	posparec	positive parenting (early childhood)

	posparmc	positive parenting (mid childhood)
	posparea	positive parenting (early adolescence)
	negparec	negative parenting (early childhood)
	negparmc	negative parenting (mid childhood)
	negparea	negative parenting (early adolescence)
	cogstiec	cognitive stimulation (early childhood)
	cogstimc	cognitive stimulation (middle childhood)
38	sesHiHmk38	SES38 hmk based on age 32 occ/educ, High = High, Mar 2013 (if there is an updated variable for age 45, we would like to request this instead)
	MaxEduc38	highest education attainment, thru PHD/prof degrees (if there is an updated variable for age 45, we would like to request this instead)

From Parenting Study:

Phase	Variable name	Variable label
Age 3	snum	Study member
	vidratp3_sensitive_2017	Video-rated sensitivity
	vidratp3_intrusive_2017	Video-rated intrusiveness
	vidratp3_detach_2017	Video-rated detachment
	vidratp3_cogstim_2017	Video-rated stimulation
	vidratp3_posreg_2017	Video-rated positive regard
	vidratp3_negreg_2017	Video-rated negative regard
	vidratc3_posmood_2017	Video-rated positive mood
	vidratc3_negmood_2017	Video-rated negative mood
	vidratc3_activitylvl_2017	Video-rated activity
	vidratc3_persistence_2017	Video-rated persistence
	parposv3_2017	Video-rated parent positivity
	kidnegv3_2017	Video-rated child negativity
	kidposv3_2017	Video-rated child positivity
	zvideowarmsens	Video-rated warm, sensitive parenting as previously constructed by Wertz et al. (2019)
	zvideocogstim	Video-rated stimulating parenting as previously constructed by Wertz et al. (2019)
	hi1 through to hi45	HOME items (did not write out every item individually here)
	zhomesensitive	HOME-rated warm, sensitive parenting as previously constructed by Wertz et al. (2019)
	zhomecognitive	Video-rated stimulating parenting as previously constructed by Wertz et al. (2019)
	childage	Childage (months)
	childsex	Child sex
	PARAGE_2018	SMs age at time of parenting interview, Corrected April

		2018
	pi1	relationship of parent interviewed to target child
	pi6	Ordinal position of target child
	pi7	Marital status with other biological parent
	pi8	Marital status
	pi10	Educational qualifications
	pi11	Occupation
	pi17	Total household income
	PSseshi	SES at time of parenting interview, 6 = hi
	pi36	Physical punishment
	pi37	How badly did you hurt child
	pi34_1a through pi34_17a	Frequency of control strategies

Variables we were not sure existed in the parenting study, if they do, we would like to request these:

- Educational attainment of co-parent (if available)
- Race/ethnicity of offspring (if available)

Significance of the Study (for theory, research methods or clinical practice):

Findings of this study have the potential to inform social and family policy. We are especially interested in examining upwardly mobile participants' parenting, as our results will indicate whether achieving high SES in adulthood is sufficient to bring these individuals' parenting to a level comparable to those parents who have had high SES in both childhood and adulthood, which would provide the offspring of socially mobile parents with the same parenting-advantages as the offspring of always high-SES parents. There are two main implications: First, should we find that upwardly mobile parents utilize an equivalent level of parental warmth, cognitive stimulation, and harsh discipline relative to always high-SES parents, this would suggest that policies that promote social mobility in one generation will provide an advantage to the next generation in the form of more warm, sensitive, stimulating parenting. Second, if we find that upwardly mobile parents differ in their parenting from those parents with high SES in childhood and adulthood, then this suggests that even though upwardly mobile and always-high SES parents look ostensibly similar in their social class, the families of upwardly mobile individuals may benefit from additional parenting support. Finally, our study also has implications for future research, as it will inform best practices for future research on SES as a determinant of parenting by demonstrating whether SES over the life course is more informative for parenting outcomes than SES measured only at the time of parenthood.

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Data Security Agreement

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Proposing Author: Samiha Islam
Today's Date: 9/29/2022

<input checked="" type="checkbox"/>	I am current on Human Subjects Training (CITI (www.citiprogram.org) or equivalent)
<input checked="" type="checkbox"/>	My project is covered by the Duke ethics committee OR I have /will obtain ethical approval from my home institution.
<input checked="" type="checkbox"/>	I will treat all data as "restricted" and store in a secure fashion. My computer or laptop is: a) encrypted (recommended programs are FileVault2 for Macs, and Bitlocker for Windows machines) b) password-protected c) configured to lock-out after 15 minutes of inactivity AND d) has an antivirus client installed as well as being patched regularly.
<input checked="" type="checkbox"/>	I will not "sync" the data to a mobile device.
<input checked="" type="checkbox"/>	In the event that my laptop with data on it is lost, stolen or hacked, I will immediately contact Moffitt or Caspi.
<input checked="" type="checkbox"/>	I will not share the data with anyone, including my students or other collaborators not specifically listed on this concept paper.
<input checked="" type="checkbox"/>	I will not post data online or submit the data file to a journal for them to post. <i>Some journals are now requesting the data file as part of the manuscript submission process. Study participants have not given informed consent for unrestricted open access, so we have a managed-access process. Speak to Temi or Avshalom for strategies for achieving compliance with data-sharing policies of journals.</i>
<input checked="" type="checkbox"/>	I will delete all data files from my computer after the project is complete. Collaborators and trainees may not take a data file away from the office. This data remains the property of the Study and cannot be used for further analyses without an approved concept paper for new analyses.
<input checked="" type="checkbox"/>	I have read the Data Use Guidelines and agree to follow the instructions.

Signature: Samiha Islam