

Title: Preschool Center Quality and Socioemotional Readiness for School: Variation by Demographic and Child Characteristics

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Background / Context:

Approximately seventy-five percent of U.S. children currently experience routine non-parental care (e.g. preschool) before they enter kindergarten (U.S. Census Bureau, 2006). Both federal and state governments view high quality child care as a means to improve school readiness skills for children from economically disadvantaged families. High quality child care is viewed by parents and policy makers as a means to promote academic and social skills prior to entry to formal education based on strong evidence from experimental studies and modest, but relatively consistent evidence from larger, more representative observational studies (Vandell, 2004; Pianta, Barnett, Burchinal, & Thornburg, 2009). Much evidence suggests that it is the elements of process quality which lead to desirable child outcomes (Burchinal, Peisner-Feinberg, Bryant, & Clifford, 2000; Mashburn et al., 2008). Our paper examines the relationship between process quality—specifically, observed preschool center quality measures in preschool settings—and socioemotional school readiness outcomes at kindergarten entry. This is an extension of our previous work undertaking similar analyses for cognitive and achievement outcomes (Dang et al., 2011).

Prior studies yield relatively modest associations between child care quality and socioemotional outcomes (Camilli et al., 2010). Questions have been raised about why these associations tend to be so modest, suggesting that high quality care might have a larger effect for children deemed more vulnerable due to family demographics or the child's skill level at entry to care. The evidence has been mixed when examined in individual studies; however, most of these studies do not include the full range of child care quality or children from diverse backgrounds (Vandell, 2004). This raises questions about which subsets of children experience larger and smaller program impacts. Researchers have postulated several competing hypotheses about differential program effects. Two of these are especially relevant to children's participation in high-quality early education programs and specify who is expected to derive greater benefit from these high-quality programs. The *compensatory hypothesis* (Sameroff & Chandler, 1975) predicts that children who are at risk because of economic disadvantage, low skills, or difficult temperaments derive greater benefit from high-quality early education programs relative to children who are not at risk. This hypothesis provided the rationale for the funding of programs such as Head Start. Alternatively, the *accumulated advantages* hypothesis posits that children with greater initial individual abilities (*skill begets skill*) (Cunha, Heckman, Lochner and Masterov, 2006) or less-risky advantage-laden family environments (*accumulated advantages*) will derive greater benefits from high-quality early education programs than less advantaged peers because of their ability to build on existing skills or family advantage.

Purpose / Objective / Research Question / Focus of Study:

The aim of our paper is to address two research questions related to the policy goal of having all children ready to learn at kindergarten entry. First, to what extent are children's socioemotional skills and behavior higher when they experience higher quality preschools? Second, are the effects of preschool center quality on these school readiness skills different by demographic (i.e. race/ethnicity, gender, maternal education) or child characteristics (i.e. child's initial cognitive/achievement skills, attention, problem behaviors)?

Research Hypotheses. In line with the literature, we hypothesize that there are positive preschool center quality main effects for socioemotional outcomes. Along with examining preschool center quality main effects, we examine several moderators consisting of demographic and child characteristics. The first two moderators are the race/ethnicity and gender of the child. For the other moderators of interest in our study, we test the *compensatory hypothesis* that, owing to greater environmental vulnerability, high-risk children benefit the most from high-quality early child care programs. That is, higher quality preschool programs have a larger impact for children whose mothers have twelve years or less of schooling and for children with low socioemotional skills, or more behavior problems at entry to the preschool program.

Setting:

All data included in these secondary data analyses were collected in preschool center-based care.

Population / Participants / Subjects:

The section below and Table 1 provide an overview of the four databases in the study.

(please insert Table 1 here)

NICHD Study of Early Child care and Youth Development (SECCYD). Nonexperimental longitudinal data from the NICHD SECCYD are drawn from a multisite study of births in 1991. Although not nationally representative, the study sample (n=1,364) closely matches national and census tract records with respect to demographic variables. Assessments includes demographic and parental characteristics; quality of parenting; type, amount, and quality of child care; and children's social, language, cognitive, and academic skills.

Early Childhood Longitudinal Study – Birth Cohort (ECLS-B). The ECLS-B has followed a large, nationally representative sample of children born in 2001 to kindergarten entry. The ECLS-B provides detailed information on children's development, health, and learning experiences during the years leading up to school. The base year sample includes about 10,700 infants during the 9-month data collection wave. Data collection ended during the school year in which the child attended kindergarten, with an approximate completed sample size of 8,000.

National Center for Early Development and Learning (NCEDL). The NCEDL followed 2,983 children enrolled in 721 pre-K classrooms randomly chosen within selected regions of eleven states with mature pre-K programs. These eleven states served approximately 80% of children in the U.S. who attend state pre-K programs in the study years of 2001-2003. Children and their classroom experiences were assessed in the fall and spring of the pre-K year for all children and in the fall and spring of the kindergarten year for the first cohort of children.

Early Head Start (EHS). Our final database comes from the evaluation of the EHS program. In 1996, 3,001 children under one year of age from low income families from seventeen sites were randomly assigned to receive EHS services, or to a control group. Data included direct assessments of the children, laboratory tasks, maternal report interviews and questionnaires, and observations of the quality of the home and child care environments.

Measures

Table 2 describes the key dependent and independent variables in our analyses. The primary measures of interest for each of the four studies are described below.

(please insert Table 2 here)

Outcome Measures

Problem behaviors. We specifically examined externalizing problem behaviors. For the NICHD SECCYD, the Child Behavior Checklist (CBCL) (Achenbach, 1991) externalizing behavior subscale was included in the analyses. Conducting our own factor analysis for the ECLS-B, we created an externalizing problem behavior composite from several items. For the NCEDL study, the Hightower Teacher-Child Rating Scale Conduct Problems subscale was used. Finally, for EHS we used both the Child Behavior Checklist (CBCL) aggressive behaviors subscale and the FACES social behavior problems subscale.

Social skills. Not surprisingly, the social skills measures also varied across the four datasets. The NICHD SECCYD used the Social Skills Rating System (SSRS) and the California Preschool social competency scale. Conducting our own factor analysis for the ECLS-B, we created a social skills composite from several items. For the NCEDL study, the Hightower Teacher-Child Rating Scale social skills scale was used.

Child Care Quality Measures

For this study, we chose child care quality measures that assess practices thought to improve children's socioemotional skills; these include two global quality measures and a measure of instructional quality. The **Early Childhood Environment Rating Scale-Revised (ECERS-R)** (Harms, Clifford, & Cryer, 1998)—used in the ECLS-B, NCEDL, and EHS databases—is a widely used measure of global classroom quality. The **Observational Record of the Caregiving Environment (ORCE)** was designed specifically for the NICHD SECCYD to assess the quality of caregiver-child interaction experienced by individual children. Finally, the NCEDL also used the **Classroom Assessment Scoring System (CLASS)** (Pianta, La Paro, & Hamre, 2008), an observational assessment to rate teacher-child interactions on nine dimensions of the socioemotional and instructional climate of the classroom. We use both the *CLASS Emotional Climate and Instructional Climate* in the current analyses.

Control Variables. Where available, our covariates include: baseline cognitive and achievement skills, child age, low birth weight, maternal characteristics (such as depression and sensitivity), parenting quality, household structure, and family income. Our general rationale for selecting covariates was to include as many possible characteristics that could account for selection bias by including variables that came before the measurement of the outcome variables.

Research Design:

Our secondary data analysis involves conducting parallel analyses predicting school readiness skills from preschool center quality across four large databases and then combining the results using meta-analytic techniques. The four databases analyzed in the study were selected because they were large child care databases with both preschool center quality and child outcome measures.

Data Collection and Analysis:

For each database, we estimated change models in which changes in child social skills or problem behavior are regressed on average child care quality in between the outcome measurements, plus controls. Our predictors include observed child care quality and interactions between quality and demographic characteristics on one set of analyses and the child characteristics of baseline social skills and externalizing problem behaviors on another set of analyses. We will then combine coefficients for quality main effects and interactions using meta-analytic techniques using the Comprehensive Meta-Analysis (CMA) software (Borenstein, Hedges, Higgins, & Rothstein, 2009).

Findings / Results:

The results from our preliminary analyses of three of the large databases indicate little consistent evidence supporting either main effects or differential effects for subgroups of high quality childcare on children's socioemotional school readiness. Tables 3 – 14 show preliminary results from the NICHD and EHS datasets.

(please insert Tables 3 - 14 here)

We can think of several possible reasons for these preliminary results. First, differences in the normal range of preschool center quality may not matter as much for school readiness. Human development is multi-faceted, thus it is unreasonable to expect child care quality effects to be large (Lamb & Ahnert, 2006). Child care quality matters but maybe not as much as previous researchers and policymakers had hoped. Second, some of the earlier work on child care quality has suggested bigger quality effects while the more recent work on quality effects (NICHD ECCRN & Duncan, 2003) is more similar to our findings because the earlier studies did not control for selection bias as well as later studies did (Vandell, 2004). Finally, there is the possibility that preschool center quality may not be adequately measured in currently available databases (Burchinal, Kainz, & Cai, 2011; Zaslow, et al., 2006). All of the present quality measures were developed conceptually by child development experts without the much needed psychometric analysis of the child care quality instruments. On the whole, our preliminary findings are consistent with other recent studies suggesting that currently available quality measures are not adequate to the research tasks being undertaken (Burchinal et al., 2011; Zaslow, et al., 2006).

Conclusions:

While policymakers justifiably attach considerable weight to experimental evaluations of child care programs, there is much to be learned from rigorous analyses of longitudinal data that are more representative of the population. Our paper applies meta-analytic techniques to summarize results from original analyses of four longitudinal data sets to estimate variation in preschool. In summary, the consistency of these generally null results and the precision with which they are estimated across the different databases, multiple outcomes, and multiple child care quality measures suggests the following: (1) there are no significant preschool center quality main effects on socioemotional child outcomes, (2) there is generally an absence of *differential* preschool center quality effects on these socioemotional school readiness outcomes for subgroups of children defined by demographic or child characteristics, and (3) preschool center quality may not be adequately measured in currently available databases.

Appendices

Appendix A. References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Bayley, N. (1993). *Bayley Scales of Infant Development, Second Edition*. San Antonio, TX: Psychological Corporation.
- Borenstein, M., Hedges, L.V., Higgins, J.P., & Rothstein, H.R. (2009). *Introduction to meta-analysis*. Chichester (UK): John Wiley & Sons.
- Burchinal, M., Kainz, K., & Cai, Y. (2011). How well do our measures of quality predict child outcomes? A meta-analysis and coordinated analysis of data from large-scale studies of early childhood settings. In M. Zaslow (Ed.) *Reasons to take stock and strengthen our measures of quality*. Baltimore, MD: Brooks Publishing.
- Burchinal, M. R., Peisner-Feinberg, E., Bryant, D. M., & Clifford, R. (2000). Children's social and cognitive development and child care quality: Testing for differential associations related to poverty, gender, or ethnicity. *Applied Developmental Science, 4*, 149-165.
- Camilli, G., Vargas, S., Ryan, S., & Barnett, W. S. (2010). Meta-analysis of the effects of early education interventions on cognitive and social development. *Teachers College Record*. Downloaded from <http://www.tcrecord.org/content.asp?contentid=15440>
- Cunha, F., Heckman, J., Lochner, L., & Masterov, D. V. (2006). Interpreting the evidence of life cycle skill formation. In F. Hanushek & F. Welch (Eds.), *Handbook of the Economics of Education*. North Holland, Amsterdam: Elsevier.
- Dang, T., Farkas, G., Burchinal, M.R., Duncan, G.J., Vandell, D.L., Li, W., et al. (2011). *Preschool center quality and school readiness: Quality main effects and variation by demographic and child characteristics*. Poster presented at the Society for Research on Educational Effectiveness Conference, March 3-5, 2011, Washington, D.C.
- Harms, T., Clifford, R. M., & Cryer, D. (1998). *Early Childhood Environment Rating Scale (Rev. ed.)*. New York: Teachers College Press.
- Helburn, S.W., & Howes, C. (1996). Child care cost and quality. *The Future of Children: Financing Child Care, 6*(2), 62-82.
- Hightower, A. D., Work, W. C., Cowen, E. L., Lotyczewski, B. S., Spinell, A. P., Guare, J. C., & Rohrbeck, C. A. (1986). The Teacher-Child Rating Scale: A brief objective measure of elementary children's school problem behaviors and competencies. *School Psychology Review, 15*(3), 393-409.
- Lamb, M. E., & Ahnert, L. (2006). Nonparental child care: context, concepts, correlates, and consequences. In W. Damon & R. M. Lerner (Series Eds.) & K. A. Renninger & I. E. Sigel (Vol. Eds.), *Handbook of child psychology: Vol. 4. Child psychology in practice* (6th ed., pp. 950-1016). New York: Wiley.
- Mashburn, A. J., Pianta, R. C., Hamre, B., Downer, J., Barbarin, O., Bryant, D., Burchinal, M., Early, D., & Howes, C. (2008). Measures of classroom quality in prekindergarten and

- children's development of academic, language, and social skills. *Child Development*, 79, 732-749.
- NICHD Early Child Care Research Network & Duncan, G. J. (2003). Modeling the impacts of child care quality on children's preschool cognitive development. *Child Development*, 74, 1454-75.
- Pianta, R. C., Burchinal, M., Barnett, E. S., & Thornburg, K. (2009). Preschool in the United States: What we know, what we need to know, and implications for policy and research. *Psychological Science in the Public Interest*.
- Pianta, R., La Paro, K., & Hamre, B. (2008). *Classroom Assessment Scoring System (CLASS) Manual, PreK*. Baltimore, MD: Brookes.
- Sameroff, A. J. & Chandler, M. J. (1975). Reproductive risk and the continuum of caretaker casualty. In F. D. Horowitz (Ed.), *Review of Child Development Research (Vol. 4)*. Chicago: University of Chicago Press.
- U.S. Census Bureau (2006). Who's Minding the Kids? Child Care Arrangements: Summer 2006, Detailed Tables.
- Vandell, D. L. (2004). Early child care: The known and unknown. *Merrill-Palmer Quarterly*, 50(3), 387-414.
- Zaslow, M., Halle, T., Martin, L., Cabrera, N., Calkins, J., Pitzer, L., & Margie, N. G. (2006). Child outcome measures in the study of child care quality. *Evaluation Review*, 30(5), 577-610.

Appendix B. Tables and Figures

Table 1. Descriptions of the four databases

	NICHD SECCYD	ECLS-B	NCEDL 11-state	EHS
Sample				
All children in center care	733	5399	2982	609
Children with observed child care quality scores	670	1429 ^A	2982	241
Number of classrooms	623	1429	721	241
Year quality & post-test collected	1995-1996	2005-2006	2001 for Multi-State Study of Pre-K and 2004 for SWEEP ^B	2001-2003 (three cohorts)
Population analysis sample represents	Children at the 10 locations across the U.S. who were in center-based care the year before pre-k.	A nationally representative sample of children born in 2001 who were in center care at 4 years of age	State funded pre-K classrooms and children in 11 participating states	Children who had been in EHS Evaluation Study as infants or toddlers
Percent Head Start Classroom (%)	9	22	15	45
Percent in state pre-K (%)	n/a	19	100	n/a
Percent housed in public schools (%)	n/a	25	62	n/a
Mean child (SD) age (months) at baseline assessment	37.68 (0.75)	24.48 (1.32)	55.56 (3.84)	37.10 (1.41)
Mean child (SD) age (months) at outcome assessment	56.86 (1.11)	53.16 (4.08)	60.60 (3.84)	62.36 (3.84)

Note: NICHD-SECCYD= National Institute of Child Health and Human Development-Study of Early Child Care and Youth Development; ECLS-B=Early Childhood Longitudinal Study – Birth Cohort; NCEDL=National Center for Early Development and Learning; EHS=Early Head Start.

^A A random subset of the ECLS-B sample had child care settings evaluated.

^B SWEEP=State-Wide Early Education Programs

Table 2. Key Dependent/Independent Variables

	NICHD SECCYD	ECLS-B	NCEDL 11-state	EHS
Outcomes				
Externalizing problem behaviors	Child Behavior Checklist (CBCL) externalizing problem behaviors only	ECLS-B externalizing problem behaviors (composite created from several items)	Hightower's Teacher-Child Rating Scale conduct problems subscale (spring pre-K)	Child Behavior Checklist (CBCL) aggressive behaviors only & FACES social behavioral problems
Social skills	Social Skills Rating System (SSRS) & California Preschool social competency scale	ECLS-B Social Skills (composite created from several items)	Hightower's Teacher-Child Rating Scale—social skills (spring pre-K)	n/a
Preschool Center Quality				
	Observational Record of the Caregiving Environment (ORCE) (36, 54 months) ($\alpha = .80-.90$)	Early Childhood Environment Rating Scale-Revised (ECERS-R composite) (48 months) ($\alpha = .92$)	Early Childhood Environment Rating Scale-Revised (ECERS-R composite) ($\alpha = .92$) & Classroom Assessment Scoring System, Factor 1: Emotional Climate ($\alpha = .??$) (pre-K) & Classroom Assessment Scoring System, Factor 2: Instructional Climate ($\alpha = .83$) (pre-K)	Early Childhood Environment Rating Scale-Revised (ECERS-R composite) (48 months) ($\alpha = .92$)
Baseline Child Characteristics				
Cognitive/Language & Achievement/Mathematics	Bayley (24 months) ($\alpha = .83$)	BSID-SF (a modified version of the Bayley) (24 months) ($\alpha = .80$)	Peabody Picture Vocabulary Test (PPVT-III) ($\alpha = .92-.98$) & Woodcock-Johnson III applied problems (both at fall pre-K) ($\alpha = .92-.94$)	Bayley (36 months) ($\alpha = .83$)
Attention Skills	Attention subscale from Child Behavior Checklist (CBCL) (24 months)	Attention rating from Bayley Infant Behavior Record (IBR) (24 months)	Hightower's Teacher-Child Rating Scale task orientation subscale (fall pre-K) ($\alpha = .95$)	Child sustained attention to objects during Three Bags mother-child interaction (36 months)
Externalizing problem behavior	Child Behavior Checklist (CBCL) externalizing problem behaviors only (36 months) ($\alpha = .86$)	n/a	Hightower's Teacher-Child Rating Scale conduct problems subscale (fall pre-K) ($\alpha = .91$)	n/a

Note: NICHD SECCYD= National Institute of Child Health and Human Development-Study of Early Child Care and Youth Development; ECLS-B=Early Childhood Longitudinal Study – Birth Cohort; NCEDL=National Center for Early Development and Learning; EHS=Early Head Start. All reliability coefficients (alphas) are from the measure's authors.

Dataset: NICHD

Table 3. Summary of regression results on ORCE quality 36-54 month, for children in center care @36-54 month

	CBCL-externalizing (Maternal rating)		CBCL-externalizing (Maternal rating)		CBCL-externalizing (Maternal rating)		CBCL-externalizing (Maternal rating)		CBCL-externalizing (Maternal rating)		CBCL-externalizing (Maternal rating)		CBCL-externalizing (Maternal rating)	
	<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>	
ORCE (36-54m)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)
ORCE*black					-0.25*	(0.13)								
ORCE*hispanic					-0.01	(0.21)								
ORCE*other					-0.21	(0.17)								
ORCE*male							-0.01	(0.08)						
ORCE*mother: some college							-0.02	(0.10)						
ORCE*mother: BA plus							0.12	(0.12)						
ORCE*<25% problem behavior									-0.14	(0.08)				
ORCE*<25% MDI @ 24m											-0.16	(0.10)		
ORCE*<25% sustained attention													0.10	(0.10)
black	-0.08	(0.14)	-0.10	(0.14)	-0.09	(0.14)	-0.07	(0.14)	-0.10	(0.14)	-0.08	(0.14)	-0.08	(0.14)
hisp	-0.09	(0.16)	-0.07	(0.16)	-0.08	(0.16)	-0.09	(0.16)	-0.08	(0.15)	-0.08	(0.15)	-0.10	(0.16)
other	-0.01	(0.18)	-0.02	(0.19)	-0.01	(0.18)	0.01	(0.19)	0.03	(0.19)	-0.04	(0.18)	-0.02	(0.18)
male	-0.16*	(0.07)	-0.17*	(0.08)	-0.16*	(0.07)	-0.16*	(0.07)	-0.18*	(0.07)	-0.15*	(0.08)	-0.16*	(0.07)
mother: some college	0.07	(0.10)	0.06	(0.10)	0.08	(0.10)	0.08	(0.10)	0.07	(0.10)	0.07	(0.10)	0.07	(0.10)
mother: BA plus	-0.09	(0.14)	-0.10	(0.14)	-0.10	(0.14)	-0.10	(0.14)	-0.09	(0.14)	-0.10	(0.14)	-0.09	(0.14)
Dummy for <25% problem behavior			0.12	(0.09)					0.12	(0.09)				
Problem behavior			0.10	(0.05)					0.10	(0.05)				
Dummy for <25% MDI @ 24m			0.21	(0.14)							0.19	(0.14)		
MDI (24m)			0.08	(0.06)							0.06	(0.06)		
Dummy for <25% sustained attention			-0.13	(0.12)									-0.13	(0.12)
Sustained attention			-0.05	(0.05)									-0.04	(0.05)
exclusive maternal care (36-54m)	-1.04***	(0.25)	-1.29	(0.72)	-1.03***	(0.26)	-1.06***	(0.26)	-1.40*	(0.70)	-0.99***	(0.25)	-1.01***	(0.26)
center care proportion (36-54m)	0.03	(0.04)	0.05	(0.04)	0.03	(0.04)	0.03	(0.04)	0.06	(0.04)	0.03	(0.04)	0.03	(0.04)
maternal partner lives at home	0.04	(0.11)	0.02	(0.11)	0.05	(0.11)	0.05	(0.11)	0.04	(0.11)	0.03	(0.11)	0.03	(0.11)
income/poverty thresholds	0.01	(0.04)	0.01	(0.04)	0.01	(0.04)	0.01	(0.04)	0.01	(0.04)	0.01	(0.04)	0.00	(0.04)
maternal depression	0.20***	(0.05)	0.20***	(0.05)	0.21***	(0.05)	0.20***	(0.05)	0.21***	(0.05)	0.20***	(0.05)	0.20***	(0.05)
maternal sensitivity	-0.06	(0.05)	-0.04	(0.05)	-0.06	(0.05)	-0.06	(0.05)	-0.04	(0.05)	-0.06	(0.05)	-0.06	(0.05)
H.O.M.E. score (36-54m)	-0.08	(0.06)	-0.06	(0.06)	-0.09	(0.06)	-0.08	(0.06)	-0.05	(0.06)	-0.08	(0.06)	-0.08	(0.06)
_cons	-0.03	(0.10)	-0.02	(0.10)	-0.05	(0.10)	-0.04	(0.10)	-0.03	(0.10)	-0.03	(0.10)	-0.03	(0.10)
N	733		733		733		733		733		733		733	

Note: *B(se)* = regression coefficient and standard error; site dummies, maternal personality, maternal progressive ideas about raising kids, and maternal benefit from work are included in the regression; **p* < .05. ***p* < .01. ****p* < .001.

Dataset: NICHD

Table 4. Summary of regression results on ORCE quality 36-54 month, for children in center care @36-54 month

	CBCL-externalizing (Caregiver rating)		CBCL- externalizing (Caregiver rating)		CBCL- externalizing (Caregiver rating)		CBCL-externalizing (Caregiver rating)		CBCL-externalizing (Caregiver rating)		CBCL-externalizing (Caregiver rating)		CBCL-externalizing (Caregiver rating)	
	<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>	
ORCE (36-54m)	0.00	(0.05)	0.02	(0.05)	0.01	(0.05)	0.00	(0.05)	0.01	(0.05)	0.00	(0.05)	0.00	(0.05)
ORCE*black					0.22	(0.15)								
ORCE*hispanic					0.36	(0.22)								
ORCE*other					-0.11	(0.20)								
ORCE*male							-0.01	(0.08)						
ORCE*mother: some college							0.05	(0.10)						
ORCE*mother: BA plus							0.07	(0.12)						
ORCE*<25% problem behavior									-0.19**	(0.07)				
ORCE*<25% MDI @ 24m											-0.01	(0.10)		
ORCE*<25% sustained attention													0.01	(0.11)
black	-0.24	(0.18)	-0.29	(0.19)	-0.22	(0.18)	-0.24	(0.18)	-0.28	(0.19)	-0.27	(0.19)	-0.24	(0.18)
hispanic	0.06	(0.20)	0.06	(0.19)	-0.00	(0.21)	0.07	(0.20)	0.08	(0.19)	0.05	(0.20)	0.07	(0.20)
other	0.02	(0.19)	0.04	(0.18)	0.02	(0.19)	0.02	(0.19)	0.08	(0.18)	0.02	(0.19)	0.02	(0.19)
male	-0.03	(0.08)	-0.09	(0.08)	-0.02	(0.08)	-0.03	(0.08)	-0.06	(0.08)	-0.06	(0.08)	-0.03	(0.08)
mother: some college	-0.03	(0.11)	-0.03	(0.11)	-0.03	(0.11)	-0.02	(0.11)	-0.04	(0.11)	-0.03	(0.11)	-0.03	(0.11)
mother: BA plus	-0.08	(0.14)	-0.08	(0.15)	-0.09	(0.14)	-0.08	(0.14)	-0.10	(0.15)	-0.07	(0.14)	-0.08	(0.14)
Dummy for <25% problem behavior			-0.02	(0.10)					-0.02	(0.10)				
Problem behavior			0.21**	(0.08)					0.20**	(0.08)				
Dummy for <25% MDI @ 24m			-0.03	(0.15)							-0.02	(0.15)		
MDI (24m)			-0.07	(0.07)							-0.08	(0.07)		
Dummy for <25% sustained attention			-0.01	(0.13)									-0.02	(0.14)
Sustained attention			-0.01	(0.06)									-0.01	(0.06)
exclusive maternal care (36-54m)	-0.27	(0.30)	-0.97	(1.53)	-0.26	(0.29)	-0.29	(0.31)	-1.02	(1.56)	-0.28	(0.32)	-0.27	(0.30)
center care proportion (36-54m)	0.15***	(0.04)	0.17***	(0.04)	0.15***	(0.04)	0.15***	(0.04)	0.17***	(0.04)	0.16***	(0.04)	0.15***	(0.04)
maternal partner lives at home	-0.08	(0.12)	-0.10	(0.12)	-0.09	(0.12)	-0.08	(0.12)	-0.08	(0.12)	-0.09	(0.12)	-0.08	(0.12)
income/poverty thresholds	0.04	(0.05)	0.04	(0.04)	0.05	(0.05)	0.04	(0.05)	0.03	(0.04)	0.05	(0.05)	0.04	(0.05)
maternal depression	-0.01	(0.06)	-0.01	(0.06)	-0.01	(0.06)	-0.01	(0.06)	-0.00	(0.05)	-0.01	(0.06)	-0.01	(0.06)
maternal sensitivity	-0.17**	(0.06)	-0.13*	(0.06)	-0.17**	(0.06)	-0.17**	(0.06)	-0.14*	(0.06)	-0.16**	(0.06)	-0.17**	(0.06)
H.O.M.E. score (36-54m)	-0.18**	(0.06)	-0.12	(0.06)	-0.17**	(0.06)	-0.18**	(0.06)	-0.13*	(0.06)	-0.15*	(0.07)	-0.18**	(0.06)
_cons	0.06	(0.11)	0.08	(0.11)	0.06	(0.11)	0.06	(0.11)	0.08	(0.11)	0.07	(0.11)	0.06	(0.11)
N	733		733		733		733		733		733		733	

Note: *B(se)* = regression coefficient and standard error; site dummies, maternal personality, maternal progressive ideas about raising kids, and maternal benefit from work are included in the regression; **p* < .05. ***p* < .01. ****p* < .001.

Dataset: NICHD

Table 5. Summary of regression results on ORCE quality 36-54 month, for children in center care @36-54 month

	SSRS social skill		SSRS social skill		SSRS social skill		SSRS social skill		SSRS social skill		SSRS social skill		SSRS social skill	
	<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>	
ORCE (36-54m)	0.07	(0.04)	0.07	(0.04)	0.05	(0.04)	0.07	(0.04)	0.07	(0.04)	0.07	(0.04)	0.07	(0.04)
ORCE*black					-0.21	(0.13)								
ORCE*hispanic					-0.54*	(0.25)								
ORCE*other					-0.01	(0.18)								
ORCE*male							0.08	(0.07)						
ORCE*mother: some college							0.07	(0.09)						
ORCE*mother: BA plus							0.09	(0.12)						
ORCE*<25% problem behavior									0.02	(0.07)				
ORCE*<25% MDI @ 24m											0.10	(0.11)		
ORCE*<25% sustained attention													-0.08	(0.09)
black	-0.02	(0.15)	-0.00	(0.15)	-0.04	(0.15)	-0.01	(0.15)	-0.01	(0.15)	-0.00	(0.15)	-0.02	(0.15)
hispanic	0.04	(0.19)	0.04	(0.19)	0.14	(0.17)	0.05	(0.18)	0.04	(0.19)	0.04	(0.19)	0.04	(0.19)
other	-0.13	(0.17)	-0.12	(0.17)	-0.13	(0.17)	-0.13	(0.17)	-0.14	(0.17)	-0.12	(0.17)	-0.11	(0.17)
male	0.34***	(0.07)	0.36***	(0.07)	0.33***	(0.07)	0.34***	(0.07)	0.34***	(0.07)	0.36***	(0.07)	0.34***	(0.07)
mother: some college	0.10	(0.10)	0.09	(0.10)	0.10	(0.10)	0.11	(0.10)	0.10	(0.10)	0.09	(0.10)	0.10	(0.10)
mother: BA plus	-0.08	(0.13)	-0.09	(0.13)	-0.07	(0.13)	-0.06	(0.13)	-0.08	(0.13)	-0.09	(0.13)	-0.08	(0.13)
Dummy for <25% problem behavior														
Problem behavior														
Dummy for <25% MDI @ 24m														
MDI (24m)														
Dummy for <25% sustained attention														
Sustained attention														
exclusive maternal care (36-54m)	0.45	(0.23)	0.40	(0.47)	0.44*	(0.22)	0.43	(0.24)	0.45	(0.46)	0.46	(0.25)	0.40	(0.24)
center care proportion (36-54m)	-0.05	(0.04)	-0.07	(0.04)	-0.05	(0.04)	-0.05	(0.04)	-0.06	(0.04)	-0.06	(0.04)	-0.05	(0.04)
maternal partner lives at home	-0.35***	(0.10)	-0.34**	(0.11)	-0.35***	(0.10)	-0.36***	(0.10)	-0.36***	(0.10)	-0.34***	(0.10)	-0.34**	(0.11)
income/poverty thresholds	0.01	(0.04)	0.00	(0.04)	0.00	(0.04)	0.01	(0.04)	0.01	(0.04)	0.01	(0.04)	0.01	(0.04)
maternal depression	-0.09*	(0.05)	-0.10*	(0.05)	-0.08	(0.05)	-0.09*	(0.05)	-0.09*	(0.05)	-0.09*	(0.05)	-0.09*	(0.05)
maternal sensitivity	0.04	(0.05)	0.03	(0.05)	0.04	(0.05)	0.04	(0.05)	0.04	(0.05)	0.03	(0.05)	0.03	(0.05)
H.O.M.E. score (36-54m)	0.23***	(0.06)	0.21***	(0.06)	0.23***	(0.06)	0.23***	(0.06)	0.22***	(0.06)	0.21***	(0.06)	0.22***	(0.06)
_cons	0.29**	(0.09)	0.27**	(0.09)	0.29**	(0.09)	0.29**	(0.09)	0.29**	(0.09)	0.28**	(0.09)	0.27**	(0.09)
N	733		733		733		733		733		733		733	

Note: *B(se)* = regression coefficient and standard error; site dummies, maternal personality, maternal progressive ideas about raising kids, and maternal benefit from work are included in the regression; **p* < .05. ***p* < .01. ****p* < .001.

Dataset: NICHD

Table 6. Summary of regression results on ORCE quality 36-54 month, for children in center care @36-54 month

	California Preschool social competency scale		California Preschool social competency scale		California Preschool social competency scale		California Preschool social competency scale		California Preschool social competency scale		California Preschool social competency scale			
	<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>			
ORCE (36-54m)	0.08	(0.04)	0.06	(0.05)	0.07	(0.04)	0.07	(0.04)	0.07	(0.04)	0.07	(0.04)		
ORCE*black					-0.12	(0.13)								
ORCE*hispanic					-0.16	(0.21)								
ORCE*other					0.10	(0.22)								
ORCE*male							0.04	(0.08)						
ORCE*mother: some college							0.07	(0.10)						
ORCE*mother: BA plus							-0.15	(0.13)						
ORCE*<25% problem behavior									0.15*	(0.07)				
ORCE*<25% MDI @ 24m											0.19	(0.11)		
ORCE*<25% sustained attention												-0.12	(0.10)	
black	0.22	(0.18)	0.32	(0.18)	0.21	(0.18)	0.21	(0.18)	0.24	(0.18)	0.30	(0.18)	0.23	(0.17)
hispanic	-0.03	(0.19)	0.02	(0.19)	0.00	(0.19)	-0.01	(0.18)	-0.04	(0.18)	0.01	(0.19)	-0.01	(0.19)
other	0.14	(0.21)	0.12	(0.21)	0.14	(0.22)	0.11	(0.22)	0.10	(0.21)	0.16	(0.21)	0.14	(0.22)
male	-0.34***	(0.07)	-0.25**	(0.08)	-0.35***	(0.07)	-0.35***	(0.07)	-0.32***	(0.07)	-0.28***	(0.08)	-0.34***	(0.07)
mother: some college	0.01	(0.11)	-0.01	(0.11)	0.00	(0.11)	0.01	(0.11)	0.01	(0.11)	-0.01	(0.11)	0.01	(0.11)
mother: BA plus	0.06	(0.15)	0.02	(0.14)	0.07	(0.15)	0.08	(0.14)	0.07	(0.15)	0.02	(0.14)	0.06	(0.14)
Dummy for <25% problem behavior			0.02	(0.09)					0.02	(0.09)				
Problem behavior			-0.14*	(0.05)					-0.14*	(0.05)				
Dummy for <25% MDI @ 24m			-0.00	(0.14)							-0.00	(0.14)		
MDI (24m)			0.19**	(0.07)							0.20**	(0.07)		
Dummy for <25% sustained attention			0.00	(0.13)									0.02	(0.13)
Sustained attention			-0.03	(0.05)									-0.01	(0.05)
exclusive maternal care (36-54m)	0.00	(0.31)	0.37	(1.00)	-0.00	(0.31)	0.02	(0.31)	0.44	(1.13)	0.02	(0.31)	-0.02	(0.32)
center care proportion (36-54m)	0.01	(0.04)	-0.02	(0.04)	0.01	(0.04)	0.00	(0.04)	-0.00	(0.04)	-0.02	(0.04)	0.00	(0.04)
maternal partner lives at home	-0.02	(0.12)	0.00	(0.11)	-0.02	(0.12)	-0.04	(0.12)	-0.03	(0.11)	0.01	(0.12)	-0.02	(0.12)
income/poverty thresholds	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.01	(0.04)	-0.03	(0.04)	-0.01	(0.04)
maternal depression	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)	0.02	(0.05)	0.01	(0.05)
maternal sensitivity	0.10	(0.06)	0.06	(0.06)	0.10	(0.06)	0.10	(0.06)	0.08	(0.06)	0.08	(0.06)	0.10	(0.06)
H.O.M.E. score (36-54m)	0.20**	(0.07)	0.11	(0.07)	0.20**	(0.07)	0.20**	(0.07)	0.17**	(0.07)	0.13	(0.07)	0.20**	(0.07)
_cons	0.03	(0.10)	-0.00	(0.10)	0.02	(0.10)	0.04	(0.10)	0.01	(0.10)	-0.00	(0.10)	0.02	(0.10)
N	733		733		733		733		733		733		733	

Note: *B(se)* = regression coefficient and standard error; site dummies, maternal personality, maternal progressive ideas about raising kids, and maternal benefit from work are included in the regression; **p* < .05. ***p* < .01. ****p* < .001.

Dataset: EHS

Table 7. Summary of regression results on ECERS effect for children in center care

	CBCL-aggressive		CBCL-aggressive		CBCL-aggressive		CBCL-aggressive		CBCL-aggressive	
	<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>	
ECERS	0.07*	(0.03)	0.06	(0.04)	0.06	(0.04)	0.07	(0.05)	0.05	(0.04)
ECERS*black					0.04	(0.11)				
ECERS*hispanic					0.09	(0.17)				
ECERS*other					0.07	(0.29)				
ECERS*male							-0.07	(0.10)		
ECERS*mother: some college							-0.05	(0.12)		
ECERS*mother: BA plus							0.08	(0.20)		
ECERS*MDI									0.03	(0.11)
ECERS*sustained attention										0.29** (0.09)
Black	-0.34***	(0.07)	-0.33***	(0.08)	-0.33***	(0.08)	-0.33***	(0.08)	-0.33***	(0.08)
Hispanic	-0.34***	(0.09)	-0.32**	(0.10)	-0.31**	(0.10)	-0.32**	(0.10)	-0.32**	(0.10)
Other	-0.26*	(0.13)	-0.22	(0.16)	-0.22	(0.17)	-0.23	(0.16)	-0.22	(0.16)
Male	0.14*	(0.06)	0.07	(0.06)	0.07	(0.07)	0.07	(0.06)	0.07	(0.06)
mother: some college	-0.15	(0.08)	-0.20*	(0.09)	-0.20*	(0.09)	-0.21*	(0.09)	-0.20*	(0.09)
mother: BA plus	-0.04	(0.08)	-0.02	(0.12)	-0.02	(0.12)	-0.03	(0.12)	-0.02	(0.12)
Dummy for <25% MDI			-0.11	(0.11)	-0.12	(0.11)	-0.12	(0.12)	-0.11	(0.11)
Bayley MDI@36 m			-0.06	(0.06)	-0.06	(0.06)	-0.06	(0.06)	-0.06	(0.06)
Dummy for <25% sustained attention			0.11	(0.14)	0.11	(0.14)	0.11	(0.14)	0.12	(0.14)
Sustained attention (continuous)			-0.01	(0.06)	-0.01	(0.06)	-0.01	(0.06)	-0.01	(0.06)
mother's partner live in house	-0.04	(0.06)	-0.05	(0.08)	-0.05	(0.08)	-0.05	(0.08)	-0.05	(0.08)
1=<33% of poverty	0.17*	(0.09)	0.17	(0.09)	0.17	(0.10)	0.16	(0.09)	0.18	(0.10)
1=33%-67% of poverty	-0.07	(0.07)	-0.13	(0.09)	-0.13	(0.09)	-0.14	(0.09)	-0.13	(0.09)
1=67%-99% of poverty	-0.01	(0.09)	0.02	(0.11)	0.01	(0.10)	0.01	(0.10)	0.02	(0.11)
Teenager mom	-0.06	(0.07)	-0.14	(0.08)	-0.13	(0.08)	-0.14	(0.08)	-0.14	(0.08)
H.O.M.E. total score	-0.24***	(0.03)	-0.24***	(0.04)	-0.24***	(0.04)	-0.24***	(0.04)	-0.24***	(0.04)
_cons	0.00	(0.03)	0.02	(0.05)	0.02	(0.05)	0.01	(0.05)	0.01	(0.05)
<i>N</i>	1597		1597		1597		1597		1597	

Note: B(se) = regression coefficient and standard error; site dummies are included in the regression; *p < .05. **p < .01. ***p < .001.

Dataset: EHS

Table 8. Summary of regression results on ECERS effect for children in center care

	FACES social behavioral problems		FACES social behavioral problems		FACES social behavioral problems		FACES social behavioral problems		FACES social behavioral problems		FACES social behavioral problems	
	<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>		<i>B(se)</i>	
ECERS	0.05	(0.05)	0.05	(0.06)	0.05	(0.06)	0.06	(0.06)	0.04	(0.06)	0.04	(0.05)
ECERS*black					0.04	(0.11)						
ECERS*hispanic					0.21	(0.15)						
ECERS*other					-0.06	(0.28)						
ECERS*male							-0.09	(0.08)				
ECERS*mother: some college							-0.15	(0.11)				
ECERS*mother: BA plus							0.00	(0.12)				
ECERS*MDI									0.04	(0.10)		
ECERS*sustained attention											0.16	(0.08)
Black	-0.30***	(0.07)	-0.35***	(0.09)	-0.34***	(0.09)	-0.36***	(0.09)	-0.35***	(0.09)	-0.35***	(0.09)
Hispanic	-0.14	(0.08)	-0.18	(0.10)	-0.15	(0.10)	-0.18	(0.10)	-0.18	(0.10)	-0.18	(0.10)
Other	-0.05	(0.12)	-0.10	(0.16)	-0.07	(0.17)	-0.11	(0.16)	-0.10	(0.16)	-0.11	(0.16)
Male	0.21***	(0.05)	0.14*	(0.07)	0.14*	(0.07)	0.14*	(0.07)	0.14*	(0.07)	0.14*	(0.06)
mother: some college	-0.29***	(0.08)	-0.30***	(0.09)	-0.30***	(0.09)	-0.33***	(0.09)	-0.30***	(0.09)	-0.30**	(0.09)
mother: BA plus	-0.10	(0.09)	-0.06	(0.11)	-0.06	(0.11)	-0.06	(0.11)	-0.06	(0.11)	-0.06	(0.11)
Dummy for <25% MDI			-0.08	(0.12)	-0.11	(0.12)	-0.08	(0.12)	-0.08	(0.12)	-0.08	(0.12)
Bayley MDI@36 m			-0.06	(0.06)	-0.07	(0.06)	-0.05	(0.06)	-0.06	(0.06)	-0.06	(0.06)
Dummy for <25% sustained attention			0.11	(0.13)	0.11	(0.13)	0.10	(0.13)	0.11	(0.13)	0.11	(0.13)
Sustained attention (continuous)			-0.00	(0.06)	-0.00	(0.06)	-0.00	(0.06)	-0.00	(0.06)	-0.00	(0.06)
mother's partner live in house	0.02	(0.06)	0.02	(0.08)	0.02	(0.08)	0.03	(0.08)	0.02	(0.08)	0.01	(0.08)
1=<33% of poverty	0.15	(0.09)	0.11	(0.10)	0.11	(0.09)	0.12	(0.10)	0.12	(0.10)	0.11	(0.10)
1=33%-67% of poverty	0.03	(0.08)	-0.02	(0.09)	-0.03	(0.09)	-0.05	(0.10)	-0.02	(0.09)	-0.02	(0.09)
1=67%-99% of poverty	0.01	(0.09)	-0.00	(0.09)	-0.01	(0.09)	-0.01	(0.09)	-0.01	(0.09)	-0.01	(0.09)
Teenager mom	-0.05	(0.06)	-0.12	(0.07)	-0.10	(0.07)	-0.12	(0.07)	-0.12	(0.07)	-0.12	(0.07)
H.O.M.E. total score	-0.23***	(0.03)	-0.23***	(0.04)	-0.24***	(0.04)	-0.24***	(0.04)	-0.23***	(0.04)	-0.23***	(0.04)
_cons	0.00	(0.03)	0.02	(0.05)	0.03	(0.05)	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)
<i>N</i>	1597		1597		1597		1597		1597		1597	

Note: B(se) = regression coefficient and standard error; site dummies are included in the regression; *p < .05. **p < .01. ***p < .001.

Dataset: NCEDL 11-state

Table 9. Social Skills scores on classroom quality measure—ECERS Composite

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Social Skills		Social Skills		Social Skills		Social Skills		Social Skills		Social Skills		Social Skills	
ECERS-R Composite	0.00	(0.02)	0.00	(0.02)	0.00	(0.02)	0.00	(0.02)	0.01	(0.02)	-0.01	(0.02)	-0.00	(0.02)
ECERS-R*Black					-0.01	(0.04)								
ECERS-R*Hispanic					0.01	(0.04)								
ECERS-R*Other					-0.11*	(0.05)								
ECERS-R*Male							0.03	(0.03)						
ECERS-R*Some College							-0.09*	(0.04)						
ECERS-R*BA Plus							-0.05	(0.04)						
ECERS-R*Worst 25% Problem Behav.									-0.02	(0.04)				
ECERS-R*Worst 25% PPVT											0.05	(0.04)		
ECERS-R*Worst 25% Attention													0.02	(0.04)
Black	-0.03	(0.05)	-0.01	(0.05)	-0.01	(0.05)	-0.02	(0.05)	-0.01	(0.05)	-0.01	(0.05)	-0.01	(0.05)
Hispanic	-0.04	(0.05)	-0.02	(0.05)	-0.02	(0.05)	-0.02	(0.05)	-0.03	(0.05)	-0.03	(0.05)	-0.03	(0.05)
Other (not B, H, or W)	-0.00	(0.05)	0.00	(0.05)	0.02	(0.05)	0.00	(0.05)	0.00	(0.05)	-0.00	(0.05)	-0.00	(0.05)
Male	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)
Mom Ed: Some College	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)
Mom Ed: BA Plus	0.11*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)
Worst 25% Problem Behav.			0.01	(0.07)	0.01	(0.07)	0.01	(0.07)	0.01	(0.07)	0.01	(0.07)	0.01	(0.07)
Problem Behav, Fall	-0.08***	(0.02)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)
Worst 25% PPVT			-0.08	(0.05)	-0.09	(0.05)	-0.09	(0.05)	-0.08	(0.05)	-0.08	(0.05)	-0.08	(0.05)
Worst 25% Attention			-0.13*	(0.06)	-0.13*	(0.06)	-0.12*	(0.06)	-0.12*	(0.06)	-0.13*	(0.06)	-0.12*	(0.06)
Attention, Fall	0.08*	(0.04)	0.03	(0.04)	0.03	(0.04)	0.04	(0.04)	0.03	(0.04)	0.03	(0.04)	0.03	(0.04)
Social skills, Fall	0.55***	(0.03)	0.55***	(0.03)	0.55***	(0.03)	0.54***	(0.03)	0.55***	(0.03)	0.55***	(0.03)	0.55***	(0.03)
Age (yrs) of child	0.15**	(0.05)	0.14**	(0.05)	0.14**	(0.05)	0.14**	(0.05)	0.13**	(0.05)	0.14**	(0.05)	0.13**	(0.05)
Outcome age- Assessment age	0.10	(0.25)	0.10	(0.25)	0.12	(0.25)	0.10	(0.25)	0.10	(0.25)	0.10	(0.25)	0.10	(0.25)
Poverty, yes	-0.05	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)
Number of people/household	0.00	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)
_cons	-0.75**	(0.28)	-0.64*	(0.28)	-0.65*	(0.28)	-0.66*	(0.28)	-0.63*	(0.28)	-0.64*	(0.28)	-0.63*	(0.28)
N	2995		2995		2995		2995		2995		2995		2995	

Note: Standardized regression coefficients on imputed dataset; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Dummy variables (male, race, mom’s education) are mean centered; Grandma-, father-, step-father-present & state controls are included; Omitted race=white & omitted Mom Ed=12 yrs or less;

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dataset: NCEDL 11-state

Table 10. Social Skills scores on classroom quality measure—CLASS Factor 1: Emotional Climate

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Social Skills		Social Skills		Social Skills		Social Skills		Social Skills		Social Skills		Social Skills	
CLASS F1-Emotional Climate	0.03	(0.02)	0.03	(0.02)	0.03	(0.02)	0.03	(0.02)	0.02	(0.02)	0.02	(0.02)	0.03	(0.02)
CLASS F1*Black					-0.01	(0.04)								
CLASS F1*Hispanic					-0.02	(0.04)								
CLASS F1*Other					-0.02	(0.06)								
CLASS F1*Male							0.04	(0.03)						
CLASS F1*Some College							-0.05	(0.04)						
CLASS F1*BA Plus							-0.06	(0.05)						
CLASS F1*Worst 25% Problem Behav.									0.03	(0.04)				
CLASS F1*Worst 25% PPVT											0.01	(0.03)		
CLASS F1*Worst 25% Attention													0.00	(0.04)
Black	-0.02	(0.05)	-0.00	(0.05)	0.00	(0.05)	-0.00	(0.05)	0.00	(0.05)	-0.00	(0.05)	-0.00	(0.05)
Hispanic	-0.04	(0.05)	-0.02	(0.05)	-0.02	(0.05)	-0.03	(0.05)	-0.02	(0.05)	-0.02	(0.05)	-0.02	(0.05)
Other (not B, H, or W)	-0.00	(0.05)	0.00	(0.05)	0.01	(0.05)	-0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)
Male	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)
Mom Ed: Some College	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.03	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)
Mom Ed: BA Plus	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.11*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)
Worst 25% Problem Behav.			0.01	(0.07)	0.01	(0.07)	0.00	(0.07)	0.01	(0.07)	0.01	(0.07)	0.01	(0.07)
Problem Behav, Fall	-0.08***	(0.02)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)
Worst 25% PPVT			-0.08	(0.05)	-0.08	(0.05)	-0.08	(0.05)	-0.08	(0.05)	-0.08	(0.05)	-0.08	(0.05)
Worst 25% Attention			-0.13*	(0.06)	-0.12*	(0.06)	-0.12*	(0.06)	-0.12*	(0.06)	-0.13*	(0.06)	-0.13*	(0.06)
Attention, Fall	0.08*	(0.04)	0.04	(0.04)	0.04	(0.04)	0.04	(0.04)	0.04	(0.04)	0.04	(0.04)	0.04	(0.04)
Social skills, Fall	0.54***	(0.04)	0.54***	(0.04)	0.54***	(0.04)	0.54***	(0.03)	0.54***	(0.04)	0.54***	(0.04)	0.54***	(0.04)
Age (yrs) of child	0.15**	(0.05)	0.13**	(0.05)	0.13**	(0.05)	0.13**	(0.05)	0.13**	(0.05)	0.13**	(0.05)	0.13**	(0.05)
Outcome age- Assessment age	0.10	(0.25)	0.10	(0.25)	0.11	(0.25)	0.09	(0.25)	0.10	(0.25)	0.10	(0.25)	0.10	(0.25)
Poverty, yes	-0.04	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)
Number of people/household	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)
_cons	-0.74**	(0.28)	-0.62*	(0.28)	-0.63*	(0.28)	-0.61*	(0.28)	-0.63*	(0.28)	-0.62*	(0.28)	-0.62*	(0.28)
N	2995		2995		2995		2995		2995		2995		2995	

Note: Standardized regression coefficients on imputed dataset; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Dummy variables (male, race, mom's education) are mean centered; Grandma-, father-, step-father-present & state controls are included; Omitted race=white & omitted Mom Ed=12 yrs or less;

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dataset: NCEDL 11-state

Table 11. Social Skills scores on classroom quality measure—CLASS Factor 2: Instructional Climate

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Social Skills		Social Skills		Social Skills		Social Skills		Social Skills		Social Skills		Social Skills	
CLASS F2-Emotional Climate	0.04*	(0.02)	0.04*	(0.02)	0.04*	(0.02)	0.04*	(0.02)	0.04*	(0.02)	0.01	(0.02)	0.03	(0.02)
CLASS F2*Black					0.03	(0.04)								
CLASS F2*Hispanic					0.01	(0.04)								
CLASS F2*Other					-0.03	(0.05)								
CLASS F2*Male							-0.02	(0.03)						
CLASS F2*Some College							-0.06	(0.04)						
CLASS F2*BA Plus							-0.08	(0.04)						
CLASS F2*Worst 25% Problem Behav.									-0.01	(0.04)				
CLASS F2*Worst 25% PPVT											0.10*	(0.04)		
CLASS F2*Worst 25% Attention													0.03	(0.04)
Black	-0.03	(0.05)	-0.01	(0.05)	0.00	(0.05)	-0.00	(0.05)	-0.01	(0.05)	-0.01	(0.05)	-0.01	(0.05)
Hispanic	-0.04	(0.05)	-0.02	(0.05)	-0.02	(0.05)	-0.02	(0.05)	-0.02	(0.05)	-0.03	(0.05)	-0.02	(0.05)
Other (not B, H, or W)	-0.00	(0.05)	0.00	(0.05)	0.01	(0.05)	0.01	(0.05)	0.00	(0.05)	-0.00	(0.05)	0.00	(0.05)
Male	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)	-0.13***	(0.03)
Mom Ed: Some College	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)	-0.02	(0.04)
Mom Ed: BA Plus	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)	0.10*	(0.04)
Worst 25% Problem Behav.			0.00	(0.07)	0.00	(0.07)	0.00	(0.07)	0.00	(0.07)	-0.01	(0.07)	0.00	(0.07)
Problem Behav, Fall	-0.08***	(0.02)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.03)	-0.08*	(0.04)	-0.07*	(0.04)	-0.08*	(0.03)
Worst 25% PPVT			-0.08	(0.05)	-0.08	(0.05)	-0.08	(0.05)	-0.08	(0.05)	-0.07	(0.05)	-0.08	(0.05)
Worst 25% Attention			-0.12*	(0.06)	-0.12*	(0.06)	-0.12*	(0.06)	-0.12*	(0.06)	-0.12*	(0.06)	-0.12*	(0.06)
Attention, Fall	0.08*	(0.04)	0.04	(0.04)	0.03	(0.04)	0.04	(0.04)	0.04	(0.04)	0.03	(0.04)	0.04	(0.04)
Social skills, Fall	0.55***	(0.03)	0.55***	(0.03)	0.55***	(0.03)	0.54***	(0.03)	0.54***	(0.03)	0.55***	(0.03)	0.55***	(0.03)
Age (yrs) of child	0.15**	(0.05)	0.13**	(0.05)	0.14**	(0.05)	0.14**	(0.05)	0.14**	(0.05)	0.13**	(0.05)	0.13**	(0.05)
Outcome age- Assessment age	0.08	(0.25)	0.08	(0.25)	0.07	(0.25)	0.07	(0.25)	0.08	(0.25)	0.04	(0.25)	0.08	(0.25)
Poverty, yes	-0.04	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)	-0.03	(0.04)
Number of people/household	0.00	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)	0.01	(0.01)
_cons	-0.72*	(0.28)	-0.60*	(0.28)	-0.60*	(0.28)	-0.61*	(0.28)	-0.60*	(0.28)	-0.59*	(0.28)	-0.60*	(0.28)
N	2995		2995		2995		2995		2995		2995		2995	

Note: Standardized regression coefficients on imputed dataset; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Dummy variables (male, race, mom's education) are mean centered; Grandma-, father-, step-father-present & state controls are included; Omitted race=white & omitted Mom Ed=12 yrs or less;

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dataset: NCEDL 11-state

Table 12. Externalizing Problem Behaviors scores on classroom quality measure—ECERS Composite

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors	
ECERS-R Composite	-0.00	(0.02)	-0.00	(0.02)	-0.00	(0.02)	-0.00	(0.02)	0.00	(0.02)	0.02	(0.02)	0.01	(0.02)
ECERS-R*Black					-0.01	(0.04)								
ECERS-R*Hispanic					0.01	(0.04)								
ECERS-R*Other					0.04	(0.04)								
ECERS-R*Male							-0.00	(0.03)						
ECERS-R*Some College							0.02	(0.04)						
ECERS-R*BA Plus							0.03	(0.04)						
ECERS-R*Worst 25% Problem Behav.									-0.01	(0.04)				
ECERS-R*Worst 25% PPVT											-0.06	(0.04)		
ECERS-R*Worst 25% Attention													-0.04	(0.04)
Black	0.05	(0.05)	0.05	(0.05)	0.04	(0.05)	0.05	(0.05)	0.05	(0.05)	0.04	(0.05)	0.04	(0.05)
Hispanic	-0.03	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.03	(0.04)	-0.04	(0.04)
Other (not B, H, or W)	0.03	(0.05)	0.03	(0.05)	0.02	(0.05)	0.03	(0.05)	0.03	(0.05)	0.03	(0.05)	0.03	(0.05)
Male	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)
Mom Ed: Some College	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)
Mom Ed: BA Plus	-0.14**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)	-0.14**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)
Worst 25% Problem Behav.			-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)
Problem Behav, Fall	0.71***	(0.02)	0.75***	(0.03)	0.75***	(0.03)	0.75***	(0.03)	0.75***	(0.03)	0.75***	(0.03)	0.75***	(0.03)
Worst 25% PPVT			0.03	(0.04)	0.03	(0.04)	0.03	(0.04)	0.04	(0.04)	0.03	(0.04)	0.03	(0.04)
Worst 25% Attention			-0.06	(0.06)	-0.06	(0.06)	-0.06	(0.06)	-0.06	(0.06)	-0.06	(0.06)	-0.06	(0.06)
Attention, Fall	-0.01	(0.02)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)
Age (yrs) of child	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.01	(0.05)
Outcome age- Assessment age	0.13	(0.22)	0.13	(0.21)	0.13	(0.21)	0.13	(0.21)	0.13	(0.21)	0.13	(0.21)	0.13	(0.21)
Poverty, yes	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.04)	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)
Number of people/household	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)
_cons	0.03	(0.25)	0.05	(0.26)	0.06	(0.26)	0.06	(0.26)	0.05	(0.26)	0.06	(0.26)	0.05	(0.26)
<i>N</i>	2995		2995		2995		2995		2995		2995		2995	

Note: Standardized regression coefficients on imputed dataset; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Dummy variables (male, race, mom’s education) are mean centered; Grandma-, father-, step-father-present & state controls are included; Omitted race=white & omitted Mom Ed=12 yrs or less;

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dataset: NCEDL 11-state

Table 13. Externalizing Problem Behaviors scores on classroom quality measure— CLASS Factor 1: Emotional Climate

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors	
CLASS F1-Emotional Climate	-0.04*	(0.02)	-0.04*	(0.01)	-0.03*	(0.02)	-0.03*	(0.01)	-0.03	(0.02)	-0.03	(0.02)	-0.03	(0.02)
CLASS F1*Black					-0.02	(0.04)								
CLASS F1*Hispanic					0.00	(0.04)								
CLASS F1*Other					0.02	(0.05)								
CLASS F1*Male							-0.00	(0.03)						
CLASS F1*Some College							-0.03	(0.04)						
CLASS F1*BA Plus							0.08*	(0.03)						
CLASS F1*Worst 25% Problem Behav.									-0.04	(0.04)				
CLASS F1*Worst 25% PPVT											-0.02	(0.03)		
CLASS F1*Worst 25% Attention													-0.03	(0.04)
Black	0.04	(0.05)	0.03	(0.05)	0.02	(0.05)	0.03	(0.05)	0.03	(0.05)	0.03	(0.05)	0.03	(0.05)
Hispanic	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.05	(0.04)	-0.04	(0.04)	-0.04	(0.04)
Other (not B, H, or W)	0.03	(0.05)	0.03	(0.05)	0.02	(0.05)	0.03	(0.05)	0.03	(0.05)	0.03	(0.05)	0.03	(0.05)
Male	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.16***	(0.03)	0.16***	(0.03)	0.15***	(0.03)	0.15***	(0.03)
Mom Ed: Some College	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)
Mom Ed: BA Plus	-0.14**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)	-0.15***	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)
Worst 25% Problem Behav.			-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)
Problem Behav, Fall	0.71***	(0.02)	0.75***	(0.03)	0.75***	(0.03)	0.75***	(0.03)	0.74***	(0.03)	0.74***	(0.03)	0.74***	(0.03)
Worst 25% PPVT			0.03	(0.04)	0.03	(0.04)	0.03	(0.04)	0.03	(0.04)	0.03	(0.04)	0.03	(0.04)
Worst 25% Attention			-0.06	(0.06)	-0.06	(0.06)	-0.06	(0.06)	-0.07	(0.06)	-0.06	(0.06)	-0.07	(0.06)
Attention, Fall	-0.01	(0.02)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)
Age (yrs) of child	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)	0.01	(0.05)
Outcome age- Assessment age	0.13	(0.22)	0.13	(0.21)	0.12	(0.22)	0.15	(0.21)	0.13	(0.21)	0.14	(0.22)	0.13	(0.22)
Poverty, yes	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.04)	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)
Number of people/household	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)
_cons	0.01	(0.25)	0.04	(0.25)	0.04	(0.26)	0.02	(0.25)	0.04	(0.25)	0.03	(0.25)	0.04	(0.25)
<i>N</i>	2995		2995		2995		2995		2995		2995		2995	

Note: Standardized regression coefficients on imputed dataset; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Dummy variables (male, race, mom's education) are mean centered; Grandma-, father-, step-father-present & state controls are included; Omitted race=white & omitted Mom Ed=12 yrs or less;

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dataset: NCEDL 11-state

Table 14. Externalizing Problem Behaviors scores on classroom quality measure— CLASS Factor 2: Instructional Climate

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors		Problem Behaviors	
CLASS F2-Emotional Climate	-0.02	(0.02)	-0.02	(0.02)	-0.02	(0.02)	-0.02	(0.02)	-0.01	(0.02)	-0.01	(0.02)	-0.01	(0.02)
CLASS F2*Black					0.02	(0.05)								
CLASS F2*Hispanic					-0.02	(0.03)								
CLASS F2*Other					0.02	(0.05)								
CLASS F2*Male							0.03	(0.03)						
CLASS F2*Some College							0.02	(0.03)						
CLASS F2*BA Plus							0.05	(0.03)						
CLASS F2*Worst 25% Problem Behav.									-0.04	(0.04)				
CLASS F2*Worst 25% PPVT											-0.04	(0.04)		
CLASS F2*Worst 25% Attention													-0.06	(0.04)
Black	0.05	(0.05)	0.04	(0.05)	0.05	(0.05)	0.04	(0.05)	0.04	(0.05)	0.04	(0.05)	0.04	(0.05)
Hispanic	-0.03	(0.04)	-0.04	(0.04)	-0.05	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.04	(0.04)
Other (not B, H, or W)	0.03	(0.05)	0.03	(0.05)	0.02	(0.05)	0.02	(0.05)	0.03	(0.05)	0.03	(0.05)	0.03	(0.05)
Male	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.16***	(0.03)
Mom Ed: Some College	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)	-0.01	(0.04)
Mom Ed: BA Plus	-0.14**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)	-0.13**	(0.04)
Worst 25% Problem Behav.			-0.09	(0.07)	-0.09	(0.07)	-0.09	(0.07)	-0.08	(0.07)	-0.09	(0.07)	-0.09	(0.07)
Problem Behav, Fall	0.71***	(0.02)	0.75***	(0.03)	0.75***	(0.03)	0.75***	(0.03)	0.74***	(0.03)	0.74***	(0.03)	0.74***	(0.03)
Worst 25% PPVT			0.03	(0.04)	0.03	(0.04)	0.03	(0.04)	0.03	(0.04)	0.03	(0.04)	0.03	(0.04)
Worst 25% Attention			-0.06	(0.06)	-0.06	(0.06)	-0.07	(0.06)	-0.07	(0.06)	-0.06	(0.06)	-0.07	(0.06)
Attention, Fall	-0.01	(0.02)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)
Age (yrs) of child	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)	0.00	(0.05)
Outcome age- Assessment age	0.14	(0.22)	0.14	(0.22)	0.15	(0.22)	0.14	(0.21)	0.14	(0.21)	0.16	(0.22)	0.15	(0.22)
Poverty, yes	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)	-0.04	(0.03)
Number of people/household	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)	0.00	(0.01)
_cons	0.01	(0.25)	0.03	(0.25)	0.04	(0.26)	0.04	(0.25)	0.03	(0.25)	0.03	(0.25)	0.02	(0.25)
<i>N</i>	2995		2995		2995		2995		2995		2995		2995	

Note: Standardized regression coefficients on imputed dataset; Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Dummy variables (male, race, mom’s education) are mean centered; Grandma-, father-, step-father-present & state controls are included; Omitted race=white & omitted Mom Ed=12 yrs or less;

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$