
Making the Most of Small Effects

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Abstract

The idea that classroom social ecologies are shaped by the aggregate effects of peers' prior care experiences is provocative, even though the evidence is weak that this explains the small and diminishing effect of childcare experience in the National Institute of Child Health and Human Development study. Small effects may indeed be small effects, but students of early development should attend to the potential importance of group-level influences on social and cognitive growth.

Keywords: child care; group influences; classrooms

Introduction

Public interest in the effects of childcare reflects our best hopes and worst fears about early childhood development. Parents today make childcare choices with concerns about brain development and school readiness that seldom troubled earlier generations, yet the landscape of childcare policy remains discouraging and has improved little during the past 30 years. Belsky's (this issue) essay offers a fascinating window into the consequences of childcare through the effects of childcare histories on classroom functioning in the primary grades. In his thought-provoking analysis, children's classroom behavior is influenced by the aggregate effects of peers' previous childcare histories to benefit (the language environment) or impair (the social context) classroom experience regardless of each child's personal history of care. This is his explanation for the well-documented small (and diminishing) effects of early childcare experience on later behavior. According to Belsky, childcare effects appear to be diminishing because they are disseminating into peer networks: the characteristics of children with early childcare experience are becoming true of a generational cohort.

These are rich ideas meriting further exploration. Although students of adolescence and adulthood are accustomed to considering group-level influences beyond individual-level differences, this is a relatively new orientation for students of early development who are still accustomed to focusing on the mother-child dyad or the child alone. Whether an analysis focused on group experience of early care is the right approach, the notion that school entry brings together children with different prior experiences that may, in the aggregate, influence classroom functioning is potentially powerful. In many respects, Belsky's analysis brings to mind Judith Rich Harris's (1995) group socialization theory of development that emphasized the importance of intra- and inter-group processes over dyadic peer relationships as the central

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socialization context of childhood and adolescence. Thus whatever else may be said about this provocative essay, these ideas merit further consideration.

Peers, Parents, and 'Enduring' Influences

There is, of course, more to be said.

Peer influences are important, certainly, but social development is influenced by both parents and peers. Harris (1995) turned to group socialization theory because of her conclusion (from her reading of developmental behavioral genetics) that parents' caregiving has few long-term effects on children's development. But the National Institute of Child Health and Human Development (NICHD) study of early child care and youth (SECCYD) does not permit that conclusion. One of its central, consistent findings is that the quality of maternal care predicts the security of attachment, learning skills, socioemotional functioning, and other important developmental outcomes better than the quality or amount of childcare for nearly all outcomes (see, e.g., Belsky et al., 2007; NICHD Early Child Care Research Network [ECCRN], 2001a, 2002, 2005). With respect to attachment, for example, maternal sensitivity has consistently been the most robust predictor of a secure attachment, with childcare experience relevant only in conditions when mothers are insensitive (NICHD ECCRN 1997, 2001b; see Friedman & Boyle, *in press*, for a review). Moreover, parenting influences endure. In the most recent NICHD ECCRN report, parenting quality predicted all developmental outcomes and did so much more strongly than any of the childcare measures, predicting reading, math, vocabulary, as well as behavior problems, social skills, and work habits in middle childhood (Belsky et al., 2007).

Thus one of the reasons for the small effects of early childcare experience on cognitive and socioemotional outcomes in middle childhood is that even when childcare influences are more contemporaneous with developmental outcomes, they are nearly always outweighed by the influence of parental care. With further development, of course, they are likely to become subsumed into subsequent psychosocial influences at home and in school. Over time, parenting effects cumulate while childcare influences are past.

This is important because it contributes to the view that childcare effects are indeed waning rather than disseminating into the broader peer network. In the most recent NICHD ECCRN report, the findings showed that the effects of early experience in center care on sixth-grade behavior problems were small, children were well within the normal range in externalizing behavior, these effects declined over repeated assessments in the primary grades, and teacher ratings on externalizing behavior were not mirrored in significant group differences on teacher ratings of children's social skills, socioemotional functioning or, for that matter, work habits (Belsky et al., 2007). One has to wonder, therefore, how influential are the characteristics of children with extensive center experience on their peers and teachers in the sixth-grade classroom.

An elegant study by Dmitrieva, Steinberg, and Belsky (2007) provides, however, empirical support for Belsky's view. In this study of kindergarteners from the early childhood longitudinal study, kindergarten cohort (ECLS-K), researchers found that beyond the influence of individual children's prior childcare history, classroom-level measures of peer childcare experience also significantly predicted teacher-reported externalizing behavior and children's academic achievement. Contrary to the NICHD study findings, the amount (not quality) of prior childcare experience for both individual-level and group-level measures was positively associated with academic

achievement. Consistent with the NICHD findings, however, these measures were also positively associated with externalizing behavior. Children in classrooms with peers who had lots of prior childcare experience were rated as more problematic, but achieved more, than children in classrooms with peers who had little such experience, although these effects were very small.

It is important to note that the measure of the amount of prior childcare experience available to the ECLS-K was based on care received during the year just preceding kindergarten. The effects of prior childcare experience reported in this study are thus over a much shorter duration compared with the most recent NICHD report, which summarized care quantity throughout the first five years to predict academic and social characteristics six years later (Belsky et al., 2007). The small size of the effects of prior care experience in the Dmitrieva study is indeed somewhat surprising in light of the brief duration between childcare and kindergarten, and it is difficult to know whether it provides any guidance concerning how to interpret the equally small effects of childcare history over the much longer duration of the NICHD SECCYD. Moreover, the ECLS-K does not have measures of childcare quality or of parenting sensitivity with which to compare the effects of childcare duration or to add to predictive regressions. These findings, therefore, are just suggestive (as Belsky notes) and we must await the generation of research with longer-term follow-up and more comprehensive predictive measures.

Becoming a Classroom Learner

Another important comparison between the Dmitrieva et al. (2007) findings and the Belsky et al. (2007) NICHD ECCRN study to which Belsky (this issue) generalizes are the relative ages of the children in the two samples. The kindergarteners studied by Dmitrieva and her colleagues may well have manifested in their kindergarten classrooms the individual effects of their childcare experiences just a year earlier—as well as, one would expect, the influences of parenting, neighborhood quality, and other experiences. Moreover—and more germane to Belsky's provocative formulation—the classroom environment constituted by these primary school initiates may well have reflected the different aggregate experiential (including childcare) histories reflected in the mixture of children assigned to each classroom. Kindergarteners are notorious for many things, but social competence and self-regulation are not among these qualities. The idea is reasonable that these young children generalized the social tendencies adopted from their care settings to the kindergarten classroom, and in some ways, conformed the classroom to their pre-existing dispositions.

Not so for sixth-graders, who are experienced at the differences (and transitions) between primary grade classrooms, know the rules of classroom comportment, and have far greater self-regulatory skill. By the time they have reached sixth grade, moreover, children have had considerable experience with multiple peer environments that are different from the social ecologies of childcare. The problem, therefore, is understanding why childcare experiences that are receding into developmental history would not only exert an enduring effect but would increasingly disseminate into the peer culture when new peer experiences and new social competencies are emerging.

Any developmental analysis of peer group socialization must take into consideration significant changes in the social processes of the peer group with age that may alter any growth trajectories inaugurated by early childcare experience. How children respond to peers is affected by the increasing complexity, differentiation, and self-selection of

peer networks with increasing age, along with the changing behavioral norms of the group and gender differences in these normative expectations (see Stormshak et al., 1999). It is not really clear why children's prior childcare experience—rather than the influences of parenting quality or neighborhood safety—would uniquely shape peer experience for years after childcare has ended. In a developmental context, children's behavior not only reflects the effects of multiple social ecologies but their behavior is also more complexly evaluated by peers whose social appraisals, self-regulatory capacities, relational experience, and evaluative judgments are developing rapidly. By middle childhood, the legacy of childcare experiences six years earlier, if that legacy endures at all, is complexly determined.

A similarity between the samples studied by Belsky et al. (2007) and Dmitrieva et al. (2007), however, may also be instructive. In each case, selection criteria and/or attrition over time yielded samples that were higher in socioeconomic status (SES) and had fewer at-risk families than were originally included in the NICHD SECCYD or the ECLS-K. In the study by Dmitrieva and colleagues this resulted from the selection criteria required to yield a sample of children in classrooms with 50 percent or more students in the ECLS-K study; in the NICHD SECCYD this derived both from the initial selection criteria and the natural selective attrition of longitudinal studies. As the attachment literature has shown, SES can moderate the effects of early developmental influences on child outcomes (Thompson, in press). As Dmitrieva et al. (2007) note, the extent to which the behavioral characteristics of children with extensive early childcare experience is similarly predictive in more sociodemographically diverse samples (particularly samples with higher proportions of at-risk families) remains to be seen.

Conclusion

What to make of small effects? Sometimes they are just small and diminishing effects, a reminder that development is complex, cumulative, and often difficult to predict. Researchers are wise to keep alert for sleeper effects, evidence for heterotypic continuity, or (as Belsky does) the aggregation of early developmental influences in social group functioning. But sometimes, small effects should not be studied in isolation from other small effects. The NICHD SECCYD was designed to enable researchers to distinguish and independently evaluate the longitudinal outcomes of specific features of early childcare experience, but the most important consequences may arise from constellations of effects arising from the timing, quality, continuity, and family and neighborhood context of childcare experience.

Thus, one must agree with Belsky (this issue) that the issue of group-level influences arising from childcare experience must remain open to investigation, especially in a country where the modal quality of care is not good, and children at greatest risk for developmental difficulties experience the poorest quality of care, and this kind of care has become normative. Although scientific caution compels reservations about the strength of the current evidence for Belsky's view, one cannot afford to be sanguine about the consequences of the experience of young children in childcare in this country.

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