



Maximizing the potential of early childhood education to prevent externalizing behavior problems: A meta-analysis

Holly S. Schindler^{a,1}, Jenya Kholoptseva^b, Soojin S. Oh^b, Hirokazu Yoshikawa^c, Greg J. Duncan^d, Katherine A. Magnuson^e, Jack P. Shonkoff^b

^a University of Washington, College of Education, Miller Hall, Box 353600, Seattle, WA 98195, USA

^b Harvard University, USA

^c New York University, USA

^d University of California, Irvine, USA

^e University of Wisconsin–Madison, USA

ARTICLE INFO

Article history:

Received 20 January 2014

Received in revised form 8 April 2015

Accepted 8 April 2015

Keywords:

Early childhood education

Prevention

Externalizing behavior problems

Meta-analysis

Child social skills training

ABSTRACT

Early childhood education (ECE) programs offer a promising mechanism for preventing early externalizing behavior problems and later antisocial behavior; yet, questions remain about how to best maximize ECE's potential. Using a meta-analytic database of 31 studies, we examined the overall effect of ECE on externalizing behavior problems and the differential effects of 3 levels of practice, each with increasing specificity and intensity aimed at children's social and emotional development. In short, we found that each successive level of programs did a better job than the prior level at reducing externalizing behavior problems. Level 1 programs, or those without a clear focus on social and emotional development, had no significant effects on externalizing behavior problems relative to control groups ($ES = .13 SD, p < .10$). On the other hand, level 2 programs, or those with a clear but broad focus on social and emotional development, were significantly associated with modest decreases in externalizing behavior problems relative to control groups ($ES = -.10 SD, p < .05$). Hence, level 2 programs were significantly better at reducing externalizing behavior problems than level 1 programs ($ES = -.23 SD, p < .01$). Level 3 programs, or those that more intensively targeted children's social and emotional development, were associated with additional significant reductions in externalizing behavior problems relative to level 2 programs ($ES = -.26 SD, p < .05$). The most promising effects came from level 3 child social skills training programs, which reduced externalizing behavior problems half of a standard deviation more than level 2 programs ($ES = -.50 SD, p < .05$).

© 2015 Society for the Study of School Psychology. Published by Elsevier Ltd. All rights reserved.

1. Introduction

In recent years, there has been a growing interest in early childhood intervention strategies to prevent externalizing behavior problems (Farrington & Welsh, 2007). In childhood, externalizing behavior refers to a cluster of aggressive and disruptive behaviors including fighting, arguing, throwing tantrums, disturbing activities, or harming others (Achenbach & Edelbrock, 1978; Campbell, 1995; Duncan & Magnuson, 2011; Hinshaw, 2002; Zachrisson, Dearing, Lekhal, & Toppelberg, 2013). These behaviors emerge nearly universally in infancy, peak between ages 2 and 4, and then optimally decline (Keenan & Wakschlag, 2000; Shaw, Lacourse, & Nagin,

E-mail address: hschindl@uw.edu (H.S. Schindler).

Action Editor: Patricia Manz.

¹ Tel.: +1 206 616 0853.

2005; Tremblay, 2010; Tremblay et al., 1999). Yet, there is great variability in children's trajectories, with a concerning number leading to later antisocial and criminal activity (Campbell, Spieker, Burchinal, Poe, & NICHD Early Child Care Research Network, 2006; Moffitt, 1993; Tremblay, 2010; Tremblay et al., 2004). Approximately one third of children who display high levels of early externalizing behavior problems continue on a trajectory of problem behavior through adolescence (Loeber, Farrington, & Waschbusch, 1998; Losel & Bender, 2003, 2012). Young children who display high levels of early externalizing behavior problems are also at risk for a host of subsequent academic issues, including school retention, school dropout, and lower school engagement (Bub, McCartney, & Willett, 2007; Bulotsky & Fantuzzo, 2011; Duncan & Magnuson, 2011; Fantuzzo et al., 2007; Raver, 2002). Furthermore, externalizing behavioral concerns in early primary classrooms take up significant portions of teachers' time and efforts, thereby undermining the learning experience for all students (Houts, Caspi, Pianta, Arseneault, & Moffitt, 2010).

In response, a range of approaches for improving externalizing behavior prior to formal school entry have been developed and tested. These approaches have been heavily influenced by ecological models of development (Campbell, Shaw, & Gilliom, 2000). Specifically, Bronfenbrenner's (1977) ecological model suggests that variability in children's developmental trajectories is the result of different interactions between a child and a complex web of settings that span from immediate contexts (e.g., family and school contexts) to more distal ones (e.g., neighborhood, cultural, and political contexts). During the early childhood years, the characteristics of these nested contexts and the connections among them are thought to influence whether or not children's behavior improves as they learn to engage in more positive and less negative ways of interacting with others, or alternatively persist into middle childhood and even later (Campbell et al., 2000; Moffitt, 1993). Indeed, within children's immediate environments, many theorists and empiricists have documented a link between early harsh, inconsistent, and coercive caregiver–child relationships and higher levels of externalizing behavior problems (e.g., Hirschi, 1969; Patterson, DeBaryshe, & Ramsey, 1989; Smith et al., 2014; Tolan, Dodge, & Rutter, 2013). At more distal levels, poverty, high-crime neighborhoods, and persistent discrimination have also been linked to externalizing behavior problems (Campbell et al., 2000). In accordance with these findings, early prevention programs have operated in a number of different contexts, including families' homes, childcare and preschool centers, clinics, and communities (Losel & Bender, 2012).

One prevention approach that deserves greater scrutiny is early childhood education (ECE), defined as center-based education for children from birth to age 5. The number of children attending ECE programs has grown rapidly in recent years (Burgess, Chien, Morrissey, & Swenson, 2014), with programs reaching an unprecedentedly large proportion of low-income children, who are at an increased risk for displaying externalizing behavior problems (Huaqing Qi & Kaiser, 2003; Mattered, Lloyd, Fishman, & Bangser, 2013). This growth makes widespread early prevention within an ECE context more feasible but also raises important questions about best practices. As policymakers, educators, and researchers increasingly consider the merits of ECE programs, the time is right to take stock of what we know about their capacity to address externalizing behavior problems and to identify which program features are associated with the most beneficial effects.

In this study, we employ meta-analytic techniques to conduct a systematic analysis of what we know about how ECE programs affect externalizing behavior problems in young children, and to better understand how externalizing behavior problems might vary as a function of ECE practices.

2. Background

2.1. ECE and externalizing behavior problems: an overview

Despite several decades of evaluation research, it has been difficult to draw conclusions about ECE programs' effects on externalizing behavior problems. Theoretical and empirical research can be found to support both a positive and a negative relationship.

On the one hand, ECE programs theoretically offer a unique opportunity to target several early protective factors associated with lower externalizing behavior problems, including children's early cognitive abilities (particularly verbal abilities), self-regulation, and social skills; and caregiver warmth, responsiveness, and behavioral management techniques (Schindler & Yoshikawa, 2012; Yoshikawa, Schindler, & Caronongan, 2009). Some empirical studies have supported this view, finding that participation in ECE programs resulted in reductions in externalizing behavior problems. Perry Preschool is a well-known example of a high-quality ECE program for 4- and 5 year-olds implemented in the 1960s that successfully reduced externalizing behavior problems and later criminal and antisocial activity (Schweinhart et al., 2005). In addition, two reviews of evaluations of center-based preschool programs for 3 to 5 year olds found small, positive effects on social and emotional outcomes, though neither included evaluations of programs for younger children or examined externalizing behavior problems separately (Camilli, Vargas, Ryan, & Barnett, 2010; Nelson, Westhues, & MacLeod, 2003).

On the other hand, some theoretical perspectives argue for ECE increasing externalizing behavior. It is possible that ECE programs do not promote protective factors and instead may increase exposure to some risk factors, such as aggressive peers. The prolonged group interactions that are common in ECE settings may also increase children's physiological stress and thereby negatively impact their development, particularly for children under age 3 (Vermeer & van IJzendoorn, 2006). Several empirical investigations have supported a positive association between ECE enrollment and higher levels of externalizing behavior problems. Coley, Votruba-Drzal, Miller, and Koury (2013) examined a nationally representative sample of 6000 children from the Early Childhood Longitudinal Study- Birth Cohort. They found that center-based preschool for 4-year-olds predicted heightened externalizing behavior problems in kindergarten relative to children who had remained in parental care. ECE during infancy and toddlerhood showed no independent associations but did exacerbate the negative relationship between preschool and externalizing behavior problems. Two other studies came to similar conclusions about preschool using another nationally representative longitudinal dataset (Early Childhood

Download English Version:

<https://daneshyari.com/en/article/363474>

Download Persian Version:

<https://daneshyari.com/article/363474>

[Daneshyari.com](https://daneshyari.com)