

Organized Afterschool Activities as a Developmental Context for Children and Adolescents

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ABSTRACT

The last 40 years have been marked by a growing appreciation of organized afterschool activities as a developmental context, with evidence that these activities are linked to academic, social, and behavioral outcomes at least in the short term. In this chapter, we focus on research that builds on these earlier advances to extend afterschool research in two areas that are critical to the future of this field. First, we feature research that examines organized activities longitudinally from kindergarten through the end of high school, enabling us to study organized activities in relation to academic, social-emotional, behavioral, and health outcomes in both the short-run and long-run, including into adulthood. We then turn to a second advance: research focused on organized activities that serve minoritized children and adolescents. These studies identify the barriers minoritized youth often face and how activities can be designed to support their positive development, including efforts to provide culturally responsive programming. Promising directions for future research are presented in a third section.

Organized Afterschool Activities as a Developmental Context for Children and Adolescents

The afterschool hours offer an array of experiences for young people including coming home and spending time with family members, spending time alone, and hanging out with friends away from adult supervision. In addition, many children and adolescents spend some of their non-school hours in *organized activities* that have several features in common: they are led by adults, are voluntary (or at least not mandatory), and occur outside of the regular school day. The last 40 years have been marked by a growing appreciation of organized activities as a developmental context and its importance for young people's academic, social, behavioral, and physical well-being. Efforts to summarize and synthesize this now substantial body of research can be found in an earlier volume of the *Advances in Child Development and Behavior* (Vandell, Pierce, & Dadisman, 2005) as well as various handbook chapters (see Mahoney, Vandell, Simpkins, & Zarrett, 2009; Vandell, Larson, Mahoney, & Watts, 2015; Vandell, Simpkins, & Wegemer, 2019).

The advances described in the earlier reviews addressed several issues around participation and quality of organized activities, including (a) conceptualization of *program dosage* as measured by the frequency and duration of organized activities in relation to child outcomes over time, (b) consideration of the developmental affordances of *different types of activities* such as organized sports, volunteering, debate for children and adolescents, (d) studies of effects of *breadth or variety of activities* on youth functioning, and (e) identification of key *markers of the quality* of afterschool activities and their relations with child outcomes. Taken together, the accumulated evidence has shown organized activities to be linked to young people's academic, social, and behavioral outcomes at least in the short term.

In this chapter, we focus on research that builds on these earlier advances to extend afterschool research in two key areas. First, we feature research that has investigated organized activities longitudinally from kindergarten through the end of high school, enabling us to study organized activities in relation to academic, social-emotional, behavioral, and health outcomes in both the short-run and long-run. These longitudinal analyses illuminate some of the developmental processes and pathways by which organized activities serve both promotive and protective functions. We then turn to a second advance: research focused on organized activities serving minoritized children and adolescents to identify their access and participation in activities, the barriers they face, and how activities can support their positive development, including efforts to offer culturally responsive programming. In the third and final section of the chapter, we propose what we see as promising directions for future research.

But, first, we provide a brief overview of participation in organized activities in the United States.

Organized Afterschool Activities

Organized activities include both afterschool programs and extracurricular activities. *Afterschool programs* are typically offered daily and provide a mix of activities: snacks at the end of the regular school day, art projects, outdoor recreation, sports, music, homework help. Some afterschool programs feature enrichment activities such as hands-on science experiments, opportunities to build socio-emotional skills, or experiences in a second language. Others feature community service activities. Afterschool programs are often located at school sites. A national survey, collected in early 2020 prior to the COVID-19 pandemic, found some 7.8 million youth, primarily elementary school children ages 5 to 11, were enrolled in afterschool programs in the U.S. (America After 3 PM, 2021). Most of the programs were funded by fees paid by families

who reported they were looking for a safe place and supervised enrichment experiences for their children during the period between school dismissal and the end of the parents' workday.

Although the majority of young people who attend afterschool programs are from middle-income households, there have been concerted efforts to expand the number of afterschool programs serving low-income students. The largest such effort is the 21st Century Community Learning Center (21CCLC) program, which is attended by 1.5 million children and adolescents. This federally funded afterschool program has an explicit goal of supporting educational outcomes for economically disadvantaged students (U.S. Department of Education, 2021). In addition, some states provide funds to support afterschool programs in schools serving low-income students (California Department of Education, 2024; Massachusetts Department of Elementary and Secondary Education, 2024). Some school districts also use Title I funds from the Elementary and Secondary Education Act to help fund afterschool programs in schools serving low-income students (Peterson & Vandell, 2022). Taken together, these efforts have expanded opportunities for low-income students to participate in afterschool programs at their schools.

Extracurricular activities are a second broad category of organized activities. Like afterschool programs, they are led by adults and attendance is voluntary, but they differ from afterschool programs in having a particular content focus such as organized sports, music, or special interest clubs (e.g., academic clubs, service clubs). Extracurricular activities also vary from afterschool programs in terms of how often they meet, which can vary by seasons or meet periodically (e.g., once a month).

Organized sports are the most popular type of extracurricular activity in the United States with more than half of American youth ages 6 to 17 participating in them (Black, Terlizzi, &

Vahratian, 2022), followed by one-third participating in arts activities and lessons afterschool, and over one-quarter participating in clubs like Girl Scouts, Key Club, and 4H. Many children and adolescents participate in more than one organized activity sometimes combining afterschool programs with extracurricular activities or combining several extracurricular activities (Gülseven, Simpkins, Jiang, & Vandell, under review; Vandell, Simpkins, et al., 2022).

A consistent observation is that participation in extracurricular activities reflects substantial income disparities, with stark differences evident in U.S. Census data collected from 1998 through 2020 (Black, Terlizzi, & Vahratian, 2022). Over this 20-year period, high-income students were more than twice as likely to participate in extracurricular sports (59% vs 24%), music, dance, & language lessons (41% vs 21%), clubs (24% vs 11%), and volunteering (13% vs 6%) than low-income students. Importantly, 43% of low-income students did not participate in any extracurricular activities compared to 14% of high-income students. These discrepancies are driven by multiple factors, including access to high quality activities; the entry fees charged to participants; costs of uniforms, equipment, and materials; and time demands on families. These factors have contributed to persistent inequality in young people's opportunities to participate in extracurricular activities.

These inequities underscore a potential opportunity gap for youth from low-income families during the afterschool hours. Experience sampling studies have been conducted that contrast young people's experiences and feeling states at organized activities with their experiences in other settings (Larson, 2000; Vandell, Shernoff, et al., 2005), finding that these settings provide distinctly different subjective experiences. At school, youth report that they experience little choice and autonomy but that they are putting forth considerable effort. When with friends, youth report more choice, but little engagement or effort. In contrast, while at

organized activities, youth report high levels of choice, effort, and interest, a combination of affective states related to thriving (Csikszentmihalyi, 2020). Extracurricular activities also differ from classrooms because they afford more opportunities to grow in terms of emotion regulation skills, teamwork, and a sense of initiative among other things (Dworkin et al., 2003; Hansen et al., 2003). In the sections that follow, we consider research that asks if organized activities are linked to positive outcomes in the short term and long term.

Organized Activities and Positive Developmental Outcomes in Childhood, Adolescence, and Adulthood

As noted in the opening paragraphs of this chapter, substantial research has documented associations between participation in organized activities and measures of child and adolescent well-being. However, for the most part, this research (including our own research) has been developmentally siloed, focusing on a single developmental period, either childhood (NICHD Early Child Care Research Network, 2004; Posner & Vandell, 1994; Pierce, Bolt, & Vandell, 2010) *or* adolescence (Kataoka & Vandell, 2013; Mahoney et al., 2009; Simpkins, Schaefer, Price, & Vest, 2013). Researchers have rarely investigated linkages across these developmental periods, such as the extent to which participating in organized activities during one developmental period (or across multiple periods) is associated with individuals' functioning in a later developmental period.

Both *bio-ecological theory* (Bronfenbrenner & Morris, 2007) and *life course theory* (Elder, 1998; Elder, Johnson & Crosnoe, 2003) have emphasized the importance of cumulative experiences as drivers of human development, proposing that even small differences accumulate over time and impact individuals' future achievements and well-being. In our research, we have applied these ideas to out-of-school settings by testing how participation in organized activities

(and other out-of-school contexts such as unsupervised time with peers) during elementary school, middle school, and high school functions as social pathways.

To examine these issues, we used the Study of Early Child Care and Youth Development (SECCYD), a prospective longitudinal study involving 1,340 participants who were recruited at 10 research sites shortly after the study participants' births (NICHD Early Child Care Research Network, 2005). Participants' cognitive, social, behavioral, and physical development were assessed at regular intervals beginning at 1 month of age, with data collection continued until the participants were age 26 years (Vandell & Gülseven, 2023). Motivated by Bronfenbrenner's bio-ecological theory and Elder's life-course theory, multiple measures of five developmental contexts (i.e., the home, early childcare and education, K-12 schools, neighborhoods, and afterschool activities) were collected. This longitudinal dataset affords the opportunity to study afterschool activities from kindergarten through the end of high school in relation to well-being in childhood, adolescence, and adulthood. Using this dataset, we also were able to consider linkages between experiences in afterschool activities and other important developmental contexts such as home and school.

Starting in kindergarten and continuing through 5th grade, mothers reported study children's participation in organized afterschool activities two to three times each year (a total of 15 reports). Beginning in 3rd grade and continuing through the end of high school, the study youth self-reported how often they participated in different types of organized activities as well as the quality of their experiences in those activities, including their relationships with adult staff and peers in the activities and their interest and engagement in the program activities. During adolescence (in 6th, 9th, and 12th grades), the youth participants also self-reported how often they spent time unsupervised and in paid employment. We have used these reports, along with other

measures collected as part of the SECCYD, to investigate the effects of organized activities (their quality, intensity, duration) on developmental outcomes during middle childhood, adolescence, and adulthood. Because the SECCYD included extensive measures of young people's development and other developmental contexts including the family and school, the analyses included extensive covariates.

Our findings from the SECCYD dataset can be organized around three broad sets of results: (1) *organized activities in childhood* as they relate to well-being in childhood, adolescence, and adulthood; (2) *organized activities in adolescence* as they relate to well-being in adolescence and adulthood, and finally (3) *developmental pathways* linking early care and education (ECE) and organized activities to educational and social outcomes in middle childhood, adolescence, and adulthood.

Organized Activities in Middle Childhood

The first afterschool paper using the SECCYD dataset (NICHD Early Child Care Research Network, 2004) examined children's participation in extracurricular activities during early elementary school. In this paper, mothers' reports of their children's participation in extracurricular activities during the fall and spring of kindergarten and of 1st grade (4 separate reports) were examined in relation to child functioning. Children who participated consistently in extracurricular activities (i.e. participated for at least 3 of the 4 reports) demonstrated greater gains in Woodcock-Johnson Applied Problems (i.e., math) scores at the end of first grade, controlling for math scores prior to kindergarten and family factors such as income, ethnicity, observed parenting, and observed quality of the home environment. These academic effects emerged across a variety of extracurricular activities, including soccer, gymnastics, dance,

music, and scouting. Few of the children participated in extracurricular activities that had an explicit academic or math focus. This is a theme repeated in subsequent findings.

A follow-up study (Auger, Pierce, & Vandell, 2013) extended these analyses by examining children's participation in organized activities from kindergarten through 3rd grade (a total of 9 time periods called epochs) and then kindergarten through 5th grade (a total of 15 time periods or epochs). Children who participated in more epochs of organized activities during elementary school demonstrated higher math achievement at 3rd and 5th grade, again controlling for children's math achievement prior to kindergarten and family factors. In addition, in 5th grade, the relation between organized activities and math achievement was moderated by family income, with children in low-income households demonstrating larger gains from organized activities than children in middle-income households. As was the case with early elementary school, the organized activities did not have an explicitly academic (or mathematics) focus, but were still related to academic outcomes.

Vandell, Lee et al. (2020) then asked if children's organized activity participation was associated with adolescents' functioning in high school, controlling for multiple aspects of the family context and early care and education. Paralleling the previous findings, more epochs of organized activities between kindergarten and 5th grade predicted higher academic achievement and social functioning at age 15, when participants were 9th grade. In particular, more epochs of organized activities were linked to higher math achievement as measured by the Woodcock Johnson Applied Math scores and higher reading achievement as measured by Woodcock Johnson Passage Comprehension scores as well as greater social confidence in adolescence.

Considered together, these results provide evidence that children's participation in a variety of organized activities across multiple time points in elementary school is linked to their

academic and social competencies in the short term (during middle childhood) and long term (into adolescence). These relations are consistent with Elder's proposal that experiences accumulate over time and can serve as developmental pathways.

Organized Activities During Adolescence

The SECCYD has also afforded the opportunity to study the correlates of adolescents' organized activities. In 6th, 9th, and 12th grade, adolescents reported how often they participated in different types of extracurricular activities (sports, arts, music, drama, service clubs), and the quality of their experiences in these activities, including their relationships with adult leaders, their interactions with peers, and their levels of interest and enjoyment of the activity. Adolescents also reported how often they spent the afterschool hours alone, or caring for younger siblings, or hanging out with unsupervised peers. In 9th and 12th grade, adolescents reported their paid employment. These reports have been used to study adolescents' experiences during the afterschool hours in relation to their adjustment and well-being.

As noted earlier in this chapter, there is a substantial literature linking adolescents' extracurricular activities to their academic and social adjustment (see Mahoney et al., 2009), but the processes contributing to these relations and the long-term correlates are still not well understood. We believe that the SECCYD can help us to better understand both issues.

In one paper, Liu, Simpkins, and Vandell (2021) examined the multiple pathways linking adolescents' organized activities in 6th and 9th grade to their academic performance in 9th and 12th grade. In these analyses, we found evidence that activities in middle school may help pave the way for continued participation in high school, which supported adolescents' academic performance. Specifically, how often adolescents participated in organized activities and the quality of their experiences in these activities in 6th grade predicted adolescents' organized

activities in 9th grade (both their frequency and quality), even after controlling for a host of adolescent and family indicators. Adolescents' activities in 9th grade then served as an indirect path linking 6th grade organized activities to 12th grade academic performance as measured by students' grades and number of advanced classes. Liu et al also found evidence that the quality of adolescents' activities in 6th grade was associated with higher work orientations in 9th grade, which in turn, predicted higher grades and a larger number of advanced classes at the end of high school. These findings help to illuminate some of the processes and pathways by which adolescents' organized activities in middle school can help to prepare adolescents for academic success in high school, via both their participation in organized activities in 9th grade as well as a stronger work orientation in 9th grade.

In other research using the SECCYD, we focused on out-of-school settings in high school in relation to problem behaviors (see Lee & Vandell, 2015; Lee, Lewis, et al., 2018). When study participants were in 9th and 12th grades, adolescents reported how often they participated in four different types of out-of-school settings (organized sports, other organized activities, paid employment, and unsupervised time with peers). They also self-reported how often they drank alcohol, smoked cigarettes, used marijuana, and engaged in various types of risky behaviors. From these reports, Lee and Vandell (2015; 2018) sought to identify *which* out-of-school contexts were associated with different types of substance use and other risky behaviors in high school.

Because previous research examined unsupervised time (Lam, McHale, & Crouter, 2014; Osgood, Wilson, O'Malley, Bachman, & Johnston, 1996), paid employment (Staff & Mortimer, 2024), and extracurricular activities (Barber et al., 2001) in separated analyses that utilized different samples, it was not possible to determine if reported links between unsupervised time

and risky behaviors could be explained by a dearth of organized activities or if high levels of paid employment might co-occur with unsupervised time (and account for some findings). Because the SECCYD included adolescents' reports of amounts of time in all of these contexts (unsupervised time with peers, paid employment, organized sports, and other organized activities), we were able to examine effects associated with each of the contexts controlling for time in other contexts. In addition, because the measures of substance use and risky behaviors were obtained in both 9th grade and 12th grades, we could use fixed effects analyses to disentangle direction of effects between out-of-school contexts and risky behaviors over time. We could ask, for example, if unsupervised time with peers in 9th grade predicted increases in alcohol use in 12th grade or if alcohol use in 9th grade predicted subsequent increases in unsupervised time with peers.

To examine these questions, participation in all four out-of-school contexts was examined in relation to three types of substance use (alcohol, tobacco, and marijuana) in 9th grade (age 15) and 12th grade (age 18; Lee & Vandell, 2015). Consistent with Osgood's original theorizing (Osgood, et al., 1996), unsupervised time with peers in 9th grade increased the odds and amount of tobacco, alcohol, and marijuana use at the end of high school. In addition, consistent with Staff and Mortimer's work (2024), paid employment increased the odds of tobacco and alcohol use. Participating in organized sports increased the odds and frequency of alcohol use but decreased the odds and frequency of marijuana use. We believe these findings underscore the value of considering out-of-school contexts, more broadly, in relation to strategies to promote adolescent health.

Hsieh, Simpkins, and Vandell (2023) extended these analyses to adulthood, asking if the four out-of-school contexts measured in 9th and 12th grades are also linked to substance use in

adulthood. Motivated by life-course theory (Elder, Johnson, & Crosnoe, 2003) and Bornstein's specificity principle (2017), Hsieh et al. asked if time in the four out-of-school contexts (organized sports, other organized activities, unsupervised time with peers, paid employment) in 9th and 12th grade were differentially related to three types of substance abuse at age 26: binge drinking, regular marijuana use, and use of illicit drugs. They found that time in different types of out-of-school settings in high school predicted substance use at age 26, over and above adolescents' substance use in high school and other adolescent and family factors. In particular, more unsupervised time with peers during high school increased both the odds and frequency of binge drinking and regular marijuana use at age 26. In contrast, time in organized activities, such as community service and the arts, lowered the odds and frequency of illicit drug use. Time spent in organized sports in high school increased the odds of binge drinking (but not marijuana or illicit drug use) at age 26. Paid employment in high school was not related to age 26 substance use.

In other work, Simpkins, Vandell, and Liu (2023) used the SECCYD to investigate links between different types of organized activities during adolescence and leisure activities in adulthood. In this work, how often adolescents participated in different types of organized activities (sports, arts, community service, and religious activities) in 6th, 9th, and 12th grades were examined in relation to leisure activities at age 26. How frequently adolescents participated in a particular type of activity such as sports or arts or community service in terms of number of years and days per week predicted both likelihood and frequency of participating in a similar type of activity at age 26. Participating in sports in adolescence predicted sports activities in adulthood. Arts activities in adolescence predicted arts activities at age 26, and so forth. How much adolescents enjoyed a particular activity partially explained these positive relations.

Interestingly, there were not many cross-domain associations where adolescents' participation in one type of activity predicted their participation in a different type of activity at age 26 (e.g., adolescent art participation did not predict their community service at age 26). These findings suggest that adolescents' activities may help build the beliefs, skills, and habits in specific areas that may shape how they choose to spend their time as adults.

In addition, Simpkins et al. found that diversity or breadth of activities in adolescence was related to the breadth or diversity of activities at age 26. Participants who engaged in a broader array of organized activities as adolescents also engaged in a broader array of activities at age 26. Taken together, these findings suggest that organized activities during adolescence can help to set the stage for more healthy lifestyles in adulthood.

Developmental Pathways Linking Early Care and Education (ECE) and Organized Afterschool Activities to Social and Academic Development

Most afterschool studies conducted in our labs and in the field as a whole have focused on young people's experiences in afterschool settings during childhood and adolescence. Rarely have researchers considered organized activities in relation to other formal nonfamilial settings at other developmental periods, such as early care and education, even though both bioecological theory (Bronfenbrenner & Morris, 2007) and life-course theory (Elder, et al., 2003) have highlighted the importance of the interplay between developmental contexts over time, relations that Elder calls *social pathways*. Not only are early care and education and organized afterschool activities two common nonfamilial settings that families utilize to provide care and support, they also may be connected over time, providing a social pathway to positive adjustment in adulthood as Elder theorized. The SECCYD is particularly well-suited for studying social pathways because comprehensive measures of early care and education settings were collected during the

first five years, out-of-school settings were measured during both middle childhood and adolescence, and measures of the family context were collected across all phases of the project.

In one paper (see Vandell, Simpkins & Liu, 2021) investigating potential developmental pathways linking early care and education to later organized activities, children who experienced more time or hours in early care and education (ECE) and children who experienced more center-type care during the first five years were found to also participate in more epochs of organized activities in middle childhood, a pattern consistent with an organized activity pathway from early childhood through middle childhood. Higher participation in organized activities in middle childhood then predicted social and academic outcomes in adolescence and young adulthood. Epochs of organized activities during middle childhood then predicted less impulsivity and less police contact at age 26.

In a second paper, Vandell and Simpkins (2023) examined early care and education during the first five years and organized activities in middle childhood in relation to educational attainment and occupational status in adulthood. In this work, more hours in ECE and more epochs of center-type care predicted more epochs of organized activities during middle childhood, which then predicted higher academic performance in high school, that then predicted higher adult educational attainment and occupational status at age 26. Taken together, these findings underscore the value of studying developmental contexts over time as these experiences serve as social pathways that accumulate in ways that are cumulative and additive.

Studying Afterschool Settings Among Racially/Ethnically Diverse Children and Adolescents

Theoretical Perspectives

As noted earlier in this paper, many studies of afterschool activities are grounded within broad developmental theories, such as bioecological theory and life-course theory. Though these theories often acknowledge that race, ethnicity, and culture influence individuals' development and all of the settings individuals are nested within, they often lack specificity on what matters and the processes by which race, ethnicity, and culture shape development. To gain a deeper understanding of organized activity processes for racially/ethnically minoritized youth, it can be helpful to bridge concepts from theories on organized afterschool activities with frameworks that focus on race, ethnicity, and culture (Leaper, 2011). Garcia Coll's (1996) integrative model of developmental competencies in minority children is an example of a framework that has been used in papers to understand the potential influence of social position factors. According to the integrative model, individuals' race and ethnicity along with other social factors determines their position in society, which in turn, shapes their experiences with discrimination and oppression, as well as their access to resource-rich settings (e.g., schools, neighborhoods, activities). Here, we provide two examples where scholars used concepts from Garcia Coll's integrative model to better understand racially/ethnically minoritized youth's experiences in organized activities.

Williams and Deutsch (2016) drew on multiple theories including Garcia Coll's integrative model (1996) to describe how race, ethnicity, and culture shape the processes discussed in Hirsch's Programs-Activities-Relationships-Culture (PARC) model (Hirsch, Deutsch, & DuBois, 2011). According to the PARC model, the three central components of programs that influence youth development are (a) the activities youth do there, (b) the relationships they have with people in programs, and (c) the culture of the program. Though programs (like all settings) have their own culture and ways of doing things, youth also come to the program with their own culture, an amalgamation of youth culture, local culture, and culture

based on their racial/ethnic heritage. Organized afterschool activities are posited to better support the positive development of all youth if they understand and are responsive to the cultures of their youth participants. Williams and Deutsch provide several examples of how activity staff can be responsive to youth's cultures, including addressing youth-activity cultural gaps; centering youth's cultures in program culture, activities, and relationships; and elevating youth voices. These authors took a deep dive into describing the various ways youth's race, ethnicity, and culture shape their experiences in the organized activities they attend.

A second example is provided by Simpkins and colleagues (2013) who took a broader, complementary approach by describing how socioeconomic status (SES), ethnicity, culture, and immigration influence Latine adolescents' activities. Specifically, they utilized Garcia Coll's integrative model (1996) to describe how social position factors, including SES, ethnicity, culture, and immigration, influenced Latine adolescents' afterschool experiences. Several salient factors emerged that aligned with Garcia Coll's integrative model, including limited access to activities and resources needed to support activities (e.g., discretionary money, parents' tiring and irregular work schedules), differing values of specific activities (e.g., value of religious activities and family time), cultural gaps in parents' language and experience with activities growing up, concerns around documentation and family safety, and experiences with discrimination. Simpkins and her colleagues have continued to interrogate these and other processes through qualitative and quantitative studies, some of which is described below.

Empirical Work

Our empirical work in this area has largely focused on Latine families in two datasets: Vandell's Study of Promising Afterschool Programs and Simpkins' Project Reach. The Promising Programs Study includes quantitative longitudinal data collected at multiple locations

across the U.S., including California, New York, Colorado, and Michigan. Project Reach includes a series of mixed method studies based in Arizona. First, we describe the recent work based on the Promising Programs Study and then the work based on Project Reach.

The Promising Programs Study

The work co-authored by Vandell and Simpkins utilizes data from the Promising Programs Study (Vandell, Reisner, & Pierce, 2007). The goal of that study was to understand the promise of high-quality, low-cost afterschool programs for low-income families with elementary or middle school students. Through a multi-step selection process that included interviews and observations during site visits, the research team identified 19 elementary and 16 middle schools that offered high-quality afterschool programs at low or no cost to families. These schools were located in 14 communities across the U.S. At each school, the study staff recruited students who attended those programs and students who did not attend those programs in order to examine program effects. Of the nearly 3,000 students who participated in the study, 66% were Latine and 10% were Black. In our recent research, we focused on the outcomes associated with youth's participation in the three primary afterschool settings beyond parental care: high quality afterschool programs, a range of extracurricular activities, and various forms of unsupervised time. Parallel to the findings based on SECCYD, examining multiple afterschool settings simultaneously more accurately captures youth's lives and more strongly aligns with tenets of bioecological theory concerning how multiple settings determine development (Bronfenbrenner & Morris, 2007).

Outcomes associated with participating in different patterns of afterschool settings.

In one paper, Vandell, Simpkins, et al. (2022) focused on the afterschool experiences of 1796 elementary school children who were in 3rd or 4th grade. Cluster analyses indicated four unique

reliable patterns of children's participation across afterschool programs, extracurricular activities, and unsupervised time. Children in one group largely participated in the high-quality afterschool program at their school whereas children in a second group regularly participated in the afterschool program combined with some extracurricular activities. A third group was mainly unsupervised during the afterschool hours, whereas the fourth group had low participation in afterschool programs, extracurricular activities, and unsupervised settings, leading us to surmise that they were supervised by adults in informal settings like their homes. Vandell, Simpkins, et al. (2022) found that these patterns were related to child well-being and adjustment. Children who attended the high-quality program alone or in combination with extracurricular activities were reported by teachers to have higher academic performance, work habits, and task persistence, and less aggression towards peers compared to children whose afterschool hours primarily included unsupervised time. Attending high-quality afterschool programs alone or in combination with extracurricular activities also was associated with child self-reports of less misconduct compared to unsupervised time combined with extracurricular activities.

In a follow-up study, Gülseven, Simpkins, Jiang, & Vandell (under review), extended the previous research in two significant ways. First, both children who were attending elementary school (M age = 8.7 years) and young adolescents who were attending middle school (M age = 11.7 years) were included to test age differences in afterschool clusters and their correlates ($N = 2,914$; 53% female, 66% Hispanic, 20% White, 10% Black, and 4% Asian or other). Second, patterns of participation were examined over a 2-year period. Both bio-ecological theory and life course theory would predict that afterschool settings experienced over two years would have larger effects than experiences over one year.

Cluster analyses indicated four unique reliable patterns: (a) participating in the school-

based high-quality afterschool program plus extracurricular activities (*Program + Activities*), (b) participating in a school-based afterschool program plus extracurricular activities and unsupervised time (*Program + Activities & Unsupervised*), (c) mainly unsupervised (*Mainly Unsupervised*), and (d) low participation across all settings (*Supervised Informal*). Within the four clusters, children were more likely to be in the *Program + Activities* and *Supervised Informal* groups, whereas early adolescents were more likely to be in the *Program + Activities & Unsupervised* and *Mainly Unsupervised* groups. Though the prevalence of the four patterns varied by developmental period, the associations between the afterschool patterns and students' adjustment did not vary by developmental period. Over the 2-year period and controlling for functioning at baseline, students in the *Program + Activities* group showed larger residualized gains in work habits, task persistence, and prosocial behaviors and larger residualized reductions in misconduct compared to the *Mainly Unsupervised* group. Interestingly, the findings suggest that the potential benefits of organized activities may be diminished with youth who also spend substantial time unsupervised. Youth in the *Program + Activities & Unsupervised* group attended the afterschool program and extracurricular activities at comparable levels compared to the *Program + Activities* youth; however, the adjustment of the *Programs + Activities & Unsupervised* group was comparable to youth in the *Mainly Unsupervised* group. These findings raise continued concerns about unsupervised time after school during childhood and early adolescence. They also indicate that participating in a combination of high-quality afterschool programs and extracurricular activities can serve a promotive and protective function for ethnically diverse children and early adolescents growing up in low-income families.

Collectively, these two studies suggest that the benefits racially/ethnically diverse low-income youth derived from organized activities depended on their constellation (or pattern) of

activities after school including attending a high-quality program, a variety of extracurricular activities (e.g., sports, lessons), and being unsupervised (e.g., unsupervised with siblings, unsupervised with peers). The findings suggest that elementary school children have stronger outcomes at the end of one year and experience more growth over a 2-year period if they participated primarily in the afterschool program or in the program plus extracurricular activities. Effects emerged for a range of outcomes, including academic performance, work habits, task persistence, and lower misconduct. Middle school adolescents who spent time in programs plus extracurricular activities benefitted in the same ways (Gülseven et al., under review). However, middle school adolescents were more likely to spend more time unsupervised with low or moderate amounts of time in programs and extracurricular activities, which were not associated with youth's positive adjustment.

Project Reach

Findings from Vandell's Promising Programs Study provide evidence of the potential of organized afterschool activities to support positive youth development for racially/ethnically diverse children and adolescents growing up in low-income households (Gülseven et al., under review; Vandell et al., 2007; Vandell et al., 2022). Project Reach findings provide complementary information by taking a deeper look into the predictors of Latine adolescents' participation in organized activities and how to design activities that promote the positive development of Latine adolescents.

Project Reach includes a series of studies focused on Latine families in Arizona, most of whom were Mexican-Origin. At the time of data collection, people in Arizona were debating and the legislature ultimately passed SB1070, a law that gave police officers the right to stop anyone they suspected might not have documentation to be in the U.S. Within this historical period,

Simpkins and colleagues studied the afterschool activities of Latine middle school adolescents using focus groups, 34 qualitative case studies, and over 200 quantitative surveys from parents and their adolescents. Youth and their families were recruited from schools around the Phoenix area that varied in terms of SES, school ethnic composition, and whether the community included more recent immigrants or families who had lived in the area for multiple generations.

Outcomes associated with participating in activities. Mexican-origin parents and adolescents identified many of the same benefits that have been identified in the studies based on SECCYD and the Promising Programs Study, including succeeding in school (e.g., better grades, homework completion), being physically fit, developing interpersonal and intrapersonal skills (e.g., emotion regulation, identity formation, leadership), and staying out of trouble (Lin et al., 2018). The qualitative data revealed that parents and adolescents thought activities also helped youth maintain their Mexican cultural values, such as familism, respeto, and religiosity. Parents were more likely to discuss Mexican cultural values if the children were first generation immigrants, the parents had less than a high school degree, and if they lived in a community with more immigrant families. Much of the literature on activities and youth's adjustment focuses on academic and social indicators; scholars and activity providers might also consider the extent to which activities help sustain individuals' ethnic heritage culture.

Access and other predictors of participation. As discussed earlier, families' access to high-quality organized activities varies along socioeconomic lines. Data from Latine families suggests that families' access also varies by other factors including race, ethnicity, and culture. Many Latine families did not have access to high-quality activities; and, even when families had a high-quality activity nearby, they still needed to overcome significant hurdles, including paying for fees, providing transportation, and ensuring that all youth in their family are supervised after

school (Simpkins et al., 2013). Some Latine parents had to pass up opportunities for their children to attend a high-quality activity because they were concerned about youth's safety walking home from the activity or they could not afford the activity. We found it was not enough to offer activities and assume families would figure out the rest. Issues of access encompass not just having an activity nearby, but also issues of cost, transportation, and the extent to which all children in families have supervised afterschool options.

Though the primary focus of most activities is the youth they serve, families are integral to youth's participation starting with identifying potential activities and enrollment decisions, as well as their motivation, engagement, and continued participation [see Vandell, Simpkins, and Wegemer (2019) for a more extensive discussion of these issues.]. Familism values in Latine culture also underscore the importance of families for Latine youth. Family resources in terms of discretionary funds and transportation are fundamental to facilitate youth's participation in activities as noted earlier; however, it also matters if activities are responsive to the resources and cultural strengths families possess.

Young people's participation in activities can be challenging when the activity and family resources are not aligned. For example, some activities have participation requirements, which may be challenging for Latine parents who hold multiple physically demanding low-wage jobs that have unpredictable schedules (Simpkins et al., 2013). Additionally, some activities are not responsive to the variation in Latine families' preferred language, documentation status, and parents' childhood experiences with activities. In several studies, Latine parents and youth noted concerns about whether documentation or citizenship were required to enroll or if signing up would put a family member without documentation at risk (e.g., Simpkins et al., 2013; Simpkins, Vest, & Price, 2011). We also found that some Mexican-origin parents grew up in places in

Mexico that did not offer organized afterschool activities, or the types of activities were different than those offered in the U.S. (Simpkins, Vest, & Price, 2011). For these families, their children wanted to participate in a setting the parents had no personal experience. To be most effective, activities need to be responsive to and take into account families' resources, concerns, and their prior experience with organized activities.

Family resources also shaped how families made decisions about activities (Lin, Dawes, Simpkins, & Gaskin, 2022). We found there were three general ways Mexican-origin parents and their middle school adolescents made decisions about afterschool activities. One might expect parents and adolescents to make decisions together given adolescents' growing autonomy, and about 25% of families demonstrated this pattern. For another 25% of the families, parents had a slightly stronger role as they had expectations (e.g., the adolescent must participate in one sport each year) or found the activity for their adolescents. Approximately 50% of the families demonstrated decision-making patterns in which the adolescents took the lead in finding the activity, bringing up the conversation with parents, and obtaining all necessary paperwork. Adolescents were more likely to take the lead when they were first generation immigrants, parents' primary language was Spanish, and parents were more orientated toward Mexican culture (i.e., enculturated) but the adolescent was bicultural. In contrast, parent-adolescent co-decision making was more likely to occur when parents were more fluent in mainstream American culture, such as parents' primary language was English and the parent and adolescent were both more acculturated.

Parallel to the broader activity literature, parental support promoted Latine adolescents' motivation to participate in afterschool activities (Camacho & Simpkins, 2022). We looked at three common parenting practices in regard to activities: instrumental support such as paying fees and providing transportation, verbal encouragement, and connections with activities. Though all three parenting practices matter for Latine adolescents' motivation, the findings highlight the importance of parents being connected to their adolescents' activities by talking

with the activity staff and volunteering there. About half of the parents (45%) provided instrumental support and encouragement of their adolescents' activities, but had limited connections to the activities. Adolescents whose parents had limited connections had lower motivation than adolescents whose parents engaged in all three types of support at average or high levels. These findings are reminiscent of family-activity mesosystem connections described in bioecological theory (Bronfenbrenner & Morris, 2007). Unfortunately, parents' ability to connect with activities can be severely hindered due to their work schedules, limited discretionary time, and cultural gaps (e.g., language gaps; Simpkins et al., 2013).

Centering parents' voices and families' ways of doing things (for example, ascertaining the best way to reach parents) can increase the effectiveness of activity outreach to parents and can help to create stronger bi-directional communication between activities and families.

Though parents were Mexican-origin adolescents' primary source of support, siblings were influential as well (Price, Simpkins & Menjivar, 2017). Sometimes siblings were co-participants in the same activity, providing encouragement, serving as role models, and being a source of information about activities. However, siblings can also negatively impact adolescents' activity participation through disparaging comments. Sometimes siblings limited adolescents' ability to participate because the adolescents were needed to babysit a younger sibling or the family did not have enough resources to support every child's activities. Further work is needed to understand how the family system can support or undermine participation in organized activities.

Experiences within activities. As noted at the outset of this paper, organized activities afford opportunities for both positive and negative experiences (Dworkin et al., 2003; Hansen et

al., 2003). The Mexican-origin adolescents and parents who were interviewed by Simpkins and colleagues reported a range of experiences in their organized afterschool activities. During interviews and surveys, some of the Mexican-origin adolescents said they felt respected in activities and that participating in activities helped them learn to respect others in terms of their common humanity, their cultural similarities and differences, and their language differences. In contrast, other adolescents described negative experiences in activities, including peer discrimination and microaggressions (Lin et al., 2016; Ma et al., 2020). Though only a small number of adolescents typically report these negative experiences, the number is likely higher as some adolescents may not feel comfortable reporting them, may struggle to label these experiences, and may have left or never joined activities because of such experiences.

Cultivating Culturally Responsive Programs. One promising strategy to help ensure that organized activities are spaces that promote positive youth development for all is culturally responsive practices. Simpkins and colleagues (2017) propose a framework describing how activities can be culturally responsive drawing on the eight indicators of afterschool program quality that were identified in an influential National Academy of Sciences consensus report (Eccles & Gootman, 2002): (1) physical and psychological safety; (2) appropriate structure; (3) supportive relationships; (4) opportunities to belong; (5) positive social norms; (6) support for efficacy and mattering; (7) opportunities for skill building; and (8) integration of family, school, and community efforts. For example, there are many ways that activities can be culturally responsive in regard to youth's physical and psychological safety, such as ensuring that policies do not marginalize particular groups (e.g., English-only policies), making sure that all groups have equal status in the activity, and having written policies and procedures that youth help develop to address inclusivity and any safety concerns. Though culturally responsive practices

have a long history in some fields, they are newer to the field of afterschool. As such, the authors felt their work was a starting place to inspire much needed conversations around culturally responsive practices in afterschool activities.

The Project Reach research in Arizona shows how culturally responsive activities can enrich the lives of Latine adolescents, but also underscores the harm *unresponsive* activities can cause (Ettetal et al., 2020; Liu, Simpkins, & Lin, 2018). Latine adolescents and parents who experienced culturally *unresponsive* activities recalled times when the activity had a narrow view of their culture (e.g., only playing old, traditional Mexican songs and not more recent popular Mexican songs or songs popular among youth in the US) or an incorrect view of their culture (e.g., not understanding the origins of Cinco de Mayo in Mexican history). These experiences were frustrating to adolescents and parents alike, and sometimes prompted adolescents to quit the activity. These negative experiences were more pronounced and had more adverse effects for individuals with a stronger orientation toward Mexican or Latine culture. Centering youth and family voices in creating culturally responsive activities can help avoid such challenging situations and ensure that the activity is responsive.

Providing culturally responsive activities sounds wonderful in theory, but it is complicated in practice. What advice can we give staff on how to be culturally responsive when interacting with youth? How do we structure learning activities to be culturally responsive? Such practical questions have fueled recent mixed-methods research on cultivating a culturally responsive math enrichment afterschool activity named Math CEO, which is located at the University of California, Irvine. Through a university-community partnership, adolescents from local middle schools that largely serve Latine youth visit campus once a week. During Math CEO, the youth collaborate in groups with peers and undergraduate student mentors, many of

whom are first-generation college students from Latine backgrounds. The goal of the activity is to serve as a structural support for the Latine adolescents by igniting their math motivation and learning, increasing their understanding of the importance of math in their lives, learning about college, and learning about various STEM majors and careers. Research on this activity not only informs our understanding of culturally responsive practices, but is used by Math CEO to improve the culturally responsive practices of the program to support positive development for all who attend (including the undergraduate student mentors).

Through our initial work, we have identified several culturally responsive practices that support adolescents' positive development. Here, we provide three examples. One aspect of the culture at Math CEO that underlies everything they do is centering adolescents and their funds of knowledge (Soto-Lara et al., 2021; Yu, Hsieh, et al., 2022). Who adolescents are, what they know, how they learn, and what they want to be are at the forefront. Adolescents' current knowledge of math and their everyday lives are used as jumping off points to teach adolescents new math strategies. Adolescents' ways of solving the math activities are valued and prioritized over how the undergraduate mentors were taught how to solve the activities during training. Intentionally connecting adolescents' lives to the material better positions them to develop as a person. The mentors also validate and celebrate adolescents' diverse cultural backgrounds and their unique perspectives. Centering adolescents in these ways conveys respect, value of their funds of knowledge, and how much they matter.

A second aspect of the Math CEO program culture is ensuring that they provide an inclusive, safe, and respectful environment (Yu et al., 2021). Adolescents at Math CEO feel like they are supported, that their presence matters, and they are accepted for who they are. They can freely express themselves without being teased or marginalized, such as speaking Spanish and

providing a different opinion than what the adults suggested. This environment is largely facilitated by the undergraduate student mentors and their relationships with the adolescents. Personal conversations and taking the time to get to know one another is essential. Math CEO intentionally creates opportunities to foster the mentor-adolescent relationships as well as relationships among the mentors, such as time for informal conversations, team building activities, and get-to-know-you activities (Soto-Lara et al., 2021).

Finally, the culture at Math CEO helps support adolescents to learn collaboratively, which is a specific strategy to cultivate a culturally responsive activity (Soto-Lara et al., 2021; Yu, Liu et al., 2022). Collaborative learning requires trust, teamwork, and knowing each other well. Given there are numerous ways to solve the math activities, the undergraduate mentors follow adolescents' lead on the strategies they want to use. The culture at Math CEO helps adolescents feel safe to share their ideas, feel comfortable voicing different opinions, and that their ideas will be respected—all of which enable effective collaborative learning experiences. Doing the groundwork in terms of developing relationships and establishing positive norms (e.g., valuing diversity, a teamwork mentality) helps support the specific culturally responsive practices.

Directions for Future Research

As described in the previous sections, we believe that advances have been made in (a) studying the effects of organized activities on children and adolescents in the short-term and long-term, (b) placing organized activities within the broader context of other important microsystems, such as unsupervised time and early care and education, and (c) investigating organized activities for minoritized youth. This research has opened up a number of research questions articulated in the previous sections.

Here, we would like to draw attention to additional areas that we believe will be productive to pursue. For the most part, afterschool research conducted in the United States has relied on correlational designs utilizing quantitative (Durlak, Weissberg, & Pachan, 2020; Vandell et al., 2015) and qualitative data (e.g., Belle, 1999; Dawes & Larson, 2011; Dworkin, Larson, & Hansen, 2003). There is no doubt that these studies have enriched our understanding of organized activities as an important microsystem in young people's lives and have illuminated critical aspects of developmental processes in organized activities such as youth's relationships with adult staff and peers, opportunities for engagement and mattering, and identity development. However, there are other research questions that need our collective attention.

First, experimental and quasi-experimental studies are needed to better establish causal relations between participation in different types of organized activities for varying periods of time and social and academic outcomes for children and adolescents. This type of experimental and quasi-experimental evidence has been important in establishing the positive impacts of early childhood programs on child outcomes in the short term and long term (Campbell, et al., 2012; Reynolds, Au, & Temple, 2018; Schweinhart et al., 2005). This evidence has played a central role in securing public funding for early childhood programs in the United States (Heckman, 2006; Burchinal, et al., 2015) and Europe (Havnes & Mogstad, 2011). In the absence of contemporary experimental evidence, an early evaluation of the 21st Century Community Learning Centers (James-Burdumy et al., 2005) continues to play an outsized role in policy discussions and funding for afterschool programs, even though that early study had serious limitations (Mahoney & Zigler, 2006).

Experimental and quasi-experimental studies of the impacts of contemporary afterschool programs are especially needed to establish that program "effects" are not an artifact of children

differentially selecting into activities or omitted variables. To conduct experimental studies at the individual level, researchers could make use of the waitlists and lotteries to study the impacts of high-quality programs and activities that can provide rigorous experimental evidence of impacts. Afterschool researchers also could expand their analytic tools to utilize quasi-experimental techniques such as propensity-score methods in which the independent variable is modeled as a function of controls, g-computation methods in which the dependent variable is modeled as a function of both controls and the independent variable, and doubly robust estimators that combine models for both independent and dependent variables. Chatton and Rohrer (2024) have provided a discussion of these techniques that can be useful for afterschool researchers.

Afterschool research also will be strengthened by expanding the types of data being collected. Some interesting work has begun to incorporate youth as research partners. In some cases, youth design and conduct interviews in afterschool settings through youth participatory action research (Baldrige et al., 2024). In other research, children have used photographs, journals, and videotapes to record their experiences in afterschool settings (Lehto & Eskelinen, 2020).

Further research is needed to better understand the linkages between organized activities and the family (Vandell, et al., 2019). As Simpkins' research in Arizona has highlighted, youth participation in afterschool activities is influenced by parents' own experiences growing up, work schedules, as well as economic and cultural resources. Much more research is needed to contextualize afterschool activities within economically and racially/ethnically diverse communities and how activities can be more responsive to family strengths and challenges. It will be very helpful for researchers to work with policymakers and educators to systematically

identify and evaluate strategies to expand the availability of high-quality afterschool programs and extracurricular activities to reflect the range and diversity of youth interests.

Finally, research is needed to further explicate linkages between organized activities and the traditional school day. There are strong indications that participating in organized activities (both afterschool program and extracurricular activities) can affect young people's experiences at school including school attendance (O'Hare et al., 2015; Shackelford, 2019), remaining in school (Hagihat & Knifsend, 2019; Palmer et al., 2017), and academic performance or grades (Abizda et al., 2020; Liu et al., 2021; Tan et al., 2021). A better understanding of the processes and experiences occurring within high quality organized activity settings may help to identify practices that can improve youth experiences during the school day.

Conclusions

As researchers who have studied organized activities for many years now, we have appreciated the opportunity this chapter afforded for us to integrate and synthesize findings across multiple publications. Pulling together the findings from longitudinal analyses of the Study of Early Child Care and Youth Development (SECCYD) conducted over a 20-year period, we found evidence that organized activities in middle childhood (i.e., elementary school) are related to academic skills and social-emotional competencies in the short-term (when the study participants were in early elementary school) and in the long-term (when participants were in high school and in adulthood). In addition to the positive relations found for organized activities during middle childhood, we found effects for adolescents' afterschool experiences in 6th, 9th, and 12th grade. Among other findings, organized activities in adolescence predicted higher grades and a work orientation whereas unsupervised time with peers was linked to increased alcohol and marijuana use, with all of these relations carrying over to age 26. Taken together, these findings

underscored the importance of the out-of-school context across childhood and adolescence.

Aligned with this longitudinal research from the SECCYD, findings from the Promising Programs Study have demonstrated the potential of high-quality organized activities in supporting the development of racially and ethnically minoritized youth. Families from diverse communities need access to high quality activities. Data from Project Reach in Arizona provide evidence that location, cost, and quality are central issues when considering access to afterschool programs for Latine adolescents, but access also involved deeper issues, such as whether the activity setting was a welcoming positive setting for all youth and whether the culture and ways of doing things in the activity aligned with families' strengths and lives. Activities will be better poised to ensure continued participation and to positively influence Latine young people when they are responsive to the families they serve and their local community. Best practices in supporting racially/ethnically minoritized youth may also help to inform how to support other minoritized groups, including LGBTQ+ youth and youth with disabilities. This work coupled with the research on long-term effects will help the afterschool field to support positive development for all youth in our increasingly diverse society.

References

- Abizada, A., Gurbanova, U., Iskandarova, A., & Nadirzada, N. (2020). The effect of extracurricular activities on academic performance in secondary school: The case of Azerbaijan. *International Review of Education, 66*(4), 487-507.
- America After 3PM. (2022). Demand grows, Opportunity Shrinks. Afterschool Survey 2020. <https://afterschoolalliance.org/documents/AA3PM-2020/National-AA3PM-2020-Fact-Sheet.pdf>
- Auger, A., Pierce, K., & Vandell, D. L. (2013, April). *Narrowing the Achievement Gap: Consistency and Intensity of Structured Activities during Elementary School*. Presented at the biennial meeting of the Society for Research in Child Development. Seattle, Washington.
- Baldrige, B. J., DiGiacomo, D. K., Kirshner, B., Mejias, S., & Vasudevan, D. S. (2024). Out-of-school time programs in the United States in an era of racial reckoning: Insights on equity from practitioners, scholars, policy influencers, and young people. *Educational Researcher, 53*, 201 - 212.
- Barber, B. L., Eccles, J. S., & Stone, M. R. (2001). Whatever happened to the jock, the brain, and the princess? Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research, 16*(5), 429-455.
- Belle, D. (1999). *The after-school lives of children: Alone and with others while parents work*. Mahwah NJ: Erlbaum Press.
- Black, L. I., Terlizzi, E. P., & Vahratian, A. (2022). Organized sports participation among children aged 6–17 years: United States, 2020. NCHS Data Brief, no 441. Hyattsville,

- MD: National Center for Health Statistics. 2022. DOI: <https://dx.doi.org/10.15620/cdc:119026>.
- Bornstein, M. (2017). The specificity principle in acculturation science. *Perspectives on Psychological Science*, 12(1) 3–45. DOI: 10.1177/1745691616655997
- Bronfenbrenner, U., & Morris, P. A. (2007). The bioecological model of human development. In R. Lerner (Ed.) *Handbook of child psychology*, Vol 1. Theoretical models of human development. Hoboken NJ: Wiley.
- Burchinal, M., Magnuson, K., Powell, D., & Hong, S. S. (2015). Early childcare and education. *Handbook of child psychology and developmental science*, Vol. 4, 223-267.
- California Department of Education (2024). Afterschool Education and Safety Program. <https://www.cde.ca.gov/ls/ex/asesdescrip.asp>
- Camacho-Thompson, D. E., & Simpkins, S. D. (2022). Parental involvement in organized afterschool activities and adolescent motivational beliefs. *Applied Developmental Science*, 26(1), 176-191. <https://doi.org/10.1080/10888691.2020.1750400>
- Campbell, F. A., Pungello, E. P., Burchinal, M., et al. (2012). Adult outcomes as a function of an early childhood educational program: an Abecedarian Project follow-up. *Developmental Psychology*, 48(4), 1033-1043.
- Chatton, A., & Rohrer, J. M. (2024). The causal cookbook: Recipes for propensity scores, G-computation, and doubly robust standardization. *Advances in Methods and Practices in Psychological Science*, 7(1), 25152459241236149.
- Csikszentmihalyi, M. (2020). *Finding flow: The psychology of engagement with everyday life*. Hachette UK.

- Dawes, N. P., & Larson, R. (2011). How youth get engaged: grounded-theory research on motivational development in organized youth programs. *Developmental Psychology, 47*(1), 259-269.
- Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology, 45*, 294-309.
- Dworkin, J. B., Larson, R., & Hansen, D. (2003). Adolescents' accounts of growth experiences in youth activities. *Journal of Youth and Adolescence, 32*(1), 17-26.
- Eccles, J., & Gootman, J. A. (2002). *Community programs to promote youth development*. Washington D.C.: National Academy Press. <https://eric.ed.gov/?id=ED465844>
- Elder, G.H. (1998). The life course as developmental theory. *Child Development, 69*(1):1-12.
- Elder, G.H, Johnson, M.K., & Crosnoe R. (2003). The emergence and development of life course theory. In J.T. Mortimer & M.J. Shanahan (Eds.), *Handbook of the life course*. Boston, MA: Springer.
- Ettekal, A., Gaskin, E., Lin, A., & Simpkins, S. (2015). “You gotta respect”: Mexican-origin adolescents’ perspectives on respect in organized activities. *Journal of Youth Development, 10*(3), 74–88. <https://doi.org/10.5195/JYD.2015.9>
- Ettekal, A. V., Simpkins, S. D., Menjivar, C., & Delgado, M. Y. D. (2020). The complexities of culturally responsive organized activities: Latino parents’ and adolescents’ perspectives. *Journal of Adolescent Research, 35*(3), 395-426. <https://doi.org/10.1177/0743558419864022>

- García Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vázquez García, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*(5), 1891-914. <https://doi.org/10.2307/1131600>
- Gülseven, Z., Simpkins, S.D., Jiang, S., & Vandell, D.L. (under review). *Patterns of afterschool settings: Are they related to changes in academic and social functioning in children and adolescents?* Manuscript submitted for publication.
- Haghighat, M. D., & Knifsend, C. A. (2019). The longitudinal influence of 10th grade extracurricular activity involvement: implications for 12th grade academic practices and future educational attainment. *Journal of Youth and Adolescence, 48*(3), 609-619.
- Hansen, D. M., Larson, R. W., & Dworkin, J. B. (2003). What adolescents learn in organized youth activities: A survey of self-reported developmental experiences. *Journal of Research on Adolescence, 13*(1), 25-55.
- Havnes, T., & Mogstad, M. (2011). No child left behind: Subsidized child care and children's long-run outcomes. *American Economic Journal: Economic Policy, 3*(2), 97–129. <https://doi.org/10.1257/pol.3.2.97>
- Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science, 312*(5782), 1900-1902.
- Hirsch B. J., Deutsch, N. L., & DuBois, D. L. (2011). *After-school centers and youth development: Case studies of success and failure*. Cambridge University Press.
- Hsieh, T-Y, Simpkins, S. D., & Vandell, D. L. (2023). Longitudinal associations between adolescent out-of-school time and adult substance use. *Journal of Adolescence, 95*(1), 131-146. DOI: 10.1002/jad.12104

- James-Burdumy, S., Dynarski, M., Moore, M., Deke, J., Mansfield, W., Pistorino, C., & Warner, E. (2005). When schools stay open late: The National Evaluation of the 21st Century Community Learning Centers Program. Final Report. *US Department of Education*.
- Kataoka, S., & Vandell, D. L. (2013). Quality of afterschool activities and relative change in adolescent functioning over two years. *Applied Developmental Science, 17*(3), 123–134.
- Larson, R. W. (2000). Toward a psychology of positive youth development. *American Psychologist, 55*(1), 170.
- Leaper, C. (2011). More similarities than differences in contemporary theories of social development?: A plea for theory bridging. In J. B. Benson (Ed.), *Advances in child Development and Behavior, Vol. 40*. (pp. 337–378). Elsevier Academic Press. <https://doi.org/10.1016/B978-0-12-386491-8.00009-8>
- Lee, K.T.H., & Vandell, D. L. (2015). Out-of-school-time and adolescent substance use. *Journal of Adolescent Health, 57*(5), 523-529.
- Lee, K. T. H., Lewis, R. W., Kataoka, S. Schenke, K., & Vandell, D. L. (2018). Out-of-school time and behaviors during adolescence. *Journal of Research on Adolescence, 28*(2), 284-293.
- Lehto, S., & Eskelinen, K. (2020). ‘Playing makes it fun’ in out-of-school activities: Children’s organised leisure. *Childhood, 27*(4), 545-561.
- Lin, A., Dawes, N., Simpkins, S. D., & Gaskin, E. (2022). Making the decision to participate in organized after-school activities: Perspectives from Mexican-origin adolescents and their parents. *Journal of Adolescent Research, 37*, 378-408.
<https://doi.org/10.1177/0743558420967116>

- Lin, A. R., Menjívar, C., Vest Ettekal, A., Simpkins, S. D., Gaskin, E. R., & Pesch, A. (2016). “They will post a law about playing soccer” and other ethnic/racial microaggressions in organized activities experienced by Mexican-origin families. *Journal of Adolescent Research, 31*(5), 557–581. <https://doi.org/10.1177/0743558415620670>
- Lin, A. R., Simpkins, S. D., Gaskin, E. R., & Menjívar, C. (2018). Cultural values and other perceived benefits of organized activities: A qualitative analysis of Mexican-origin parents’ perspectives in Arizona. *Applied Developmental Science, 22*(2), 89–109. <https://doi.org/10.1080/10888691.2016.1224669>
- Liu, Y., Simpkins, S. D., & Lin, A. R. (2018). Ethnic cultural features in organized activities: Relations to Latino adolescents’ activity experiences and parental involvement. *Journal of youth and Adolescence, 47*(10), 2243-2260.
- Liu, Y., Simpkins, S. D., & Vandell, D. L. (2021). Developmental pathways linking the quality and intensity of organized afterschool activities in middle school to academic performance at end of high school. *Journal of Adolescence, 92*, 152-164. <https://doi.org/10.1016/j.adolescence.2021.09.002>
- Ma, T.-L., Yu, M. V. B., Soto-Lara, S., & Simpkins, S. D. (2020). Latinx adolescents’ peer ethnic discrimination in after-school activities and activity experiences. *Journal of Youth Development, 15*(6), 195-221. <https://doi.org/10.5195/jyd.2020.938>
- Mahoney, J. L., Vandell, D. L., Simpkins, S., & Zarrett, N. (2009). Adolescent out-of-school activities. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Vol. 2. Contextual influences on adolescent development* (3rd ed). New York: Wiley.
- Mahoney, J. L., & Zigler, E. F. (2006). Translating science to policy under the No Child Left Behind Act of 2001: Lessons from the national evaluation of the 21st-Century

- Community Learning Centers. *Journal of Applied Developmental Psychology*, 27(4), 282-294.
- Massachusetts Department of Elementary and Secondary Education (2024). Afterschool and Out-of-School Time Grant programs. <https://www.doe.mass.edu/asost/>
- NICHD Early Child Care Research Network (2004). Are child developmental outcomes related to before- and after-school care arrangements? Results from the NICHD Study of Early Child Care. *Child Development*, 75(1), 280-295.
- NICHD Early Child Care Research Network. (Eds.). (2005). *Child care and child development: Results from the NICHD Study of Early Child Care and Youth Development*. New York: Guilford.
- O'Hare, L., Biggart, A., Kerr, K., & Connolly, P. (2015). A randomized controlled trial evaluation of an after-school prosocial behavior program in an area of socioeconomic disadvantage. *The Elementary School Journal*, 116(1), 1-29.
doi:<http://dx.doi.org/10.1086/683102>,
- Osgood, D. W., Wilson, J. K., O'Malley, P. M., Bachman, J. G., & Johnston, L. D. (1996). Routine activities and individual deviant behavior. *American Sociological Review*, 635-655.
- Palmer, A. N., Elliott III, W., & Cheatham, G. A. (2017). Effects of extracurricular activities on postsecondary completion for students with disabilities. *The Journal of Educational Research*, 110(2), 151-158.
- Peterson, T. K., & Vandell, D. L. (2021). *The evidence base for summer enrichment and comprehensive afterschool opportunities*. Washington, DC: Collaborative Communications. <https://spark.adobe.com/page/synw23DwBdPms/>

- Pierce, K. M., Bolt, D. M., & Vandell, D. L. (2010). Specific features of after-school program quality: Associations with children's functioning in middle childhood. *American Journal of Community Psychology, 45*, 381-393.
- Posner, J. K., & Vandell, D. L. (1994). Low-income children's after school care: Are there beneficial effects of after-school programs? *Child Development, 65*, 440-456.
- Price, C., Simpkins, S. D., & Menjívar, C. (2017). Sibling behaviors and Mexican-origin adolescents' after-school activities. *Journal of Adolescent Research, 32*(2), 127-154. <https://doi.org/10.1177/0743558415603820>
- Reynolds, A. J., Ou, S. R., & Temple, J. A. (2018). A multicomponent, preschool to third grade preventive intervention and educational attainment at 35 years of age. *JAMA Pediatrics, 172*(3), 247-256.
- Shackelford, D. (2019). The BUDL effect: Examining academic achievement and engagement outcomes of preadolescent Baltimore Urban Debate League participants. *Educational Researcher, 48*(3), 145-157.
- Schweinhart, L.J., Montie, J., Xiang, Z., et al. (2005). *Lifetime effects: The High/Scope Perry Preschool Study through age 40*. Ypsilanti, MI: High/Scope Press; 2005.
- Simpkins, S. D., Delgado, M. Y., Price, C. D., Quach, A., & Starbuck, E. (2013). Socioeconomic status, ethnicity, culture, and immigration: Examining the potential mechanisms underlying Mexican-origin adolescents' organized activity participation. *Developmental Psychology, 49*(4), 706-721. <https://doi.org/10.1037/a0028399>
- Simpkins, S. D., Riggs, N. R., Ngo, B., Vest, A. E., & Okamoto, D. (2017). Designing culturally responsive organized after-school activities. *Journal of Adolescent Research, 32*(1), 11 - 36. <https://doi.org/10.1177/0743558416666169>

- Simpkins, S. D., Schaefer, D. R., Price, C. D., & Vest, A. E. (2013). Adolescent friendships, BMI, and physical activity: untangling selection and influence through longitudinal social network analysis. *Journal of Research on Adolescence*, 23(3), 537-549.
- Simpkins, S. D., Vandell, D. L., & Lui, Y. (2023). Participation and enjoyment of organized activities during adolescence as predictors of activities in adulthood. *Journal of Research in Adolescence*. <https://doi.org/10.1111/jora.12838>
- Simpkins, S. D., Vest, A. E., & Price, C. (2011). Intergenerational continuity and discontinuity in Mexican-origin youths' participation in organized activities: Insights from mixed-methods. *Journal of Family Psychology*, 25(6), 814-824.
<https://doi.org/10.1037/a0025853>
- Soto-Lara, S., Yu, M. V., Pantano, A., & Simpkins, S. (2021). How youth-staff relationships and program activities promote Latinx adolescent outcomes in a university-community afterschool math enrichment activity. *Applied Developmental Science*, 26(5), 1–19.
<https://doi.org/10.1080/10888691.2021.1945454>
- Staff, J., & Mortimer, J. T. (2024). Taking the long view of adolescent work quality. *Journal of Research on Adolescence*. DOI: 10.1111/jora.12915
- Tan, M., Cai, L., & Bodovski, K. (2021). An active investment in cultural capital: structured extracurricular activities and educational success in China. *Journal of Youth Studies*, 1-16.
- U.S. Department of Education. (2021). Nita M. Lowey 21st Century Community Learning Centers (21st CCLC) Overview of the Annual Performance Data: 2019-2020 (16th report). Washington, DC.

- Vandell, D. L., & Gülseven, Z. (2023). The Study of Early Child Care and Youth Development (SECCYD): Studying Development from Infancy to Adulthood. *Annual Review of Developmental Psychology, 5*, 331-354.
- Vandell, D. L., Larson, R., Mahoney, J., & Watts, T. (2015). Children's organized activities. In R. Lerner (Series Ed.) and M. H. Bornstein & T. Leventhal (Volume Eds.), *Handbook of Child Psychology and Developmental Science (7th ed.): Vol. 4. Ecological Settings and Processes in Developmental Systems*. New York: Wiley Inter-science.
DOI: 10.1002/9781118963418.childpsy408
- Vandell, D. L., Lee, K. T. H., Whitaker, A. & Pierce, K. M. (2020). Cumulative and differential effects of early childcare and out-of-school-time activities on adolescent functioning. *Child Development, 91*(1), 129-144. DOI - 10.1111/cdev.13136
- Vandell, D. L., Pierce, K. M., & Dadisman, K. (2005). Out-of-school settings as a developmental context for children and youth. In R. V. Kail (Ed.), *Advances in Child Development and Behavior* (Vol. 33, pp. 43-77). New York: Academic.
- Vandell, D. L., Reisner, E. R., & Pierce, K. M. (2007). *Outcomes Linked to High-Quality Afterschool Programs: Longitudinal Findings from the Study of Promising Afterschool Programs*. Policy Studies Associates.
- Vandell, D. L., Shernoff, D. J., Pierce, K. M., Bolt, D. M., Dadisman, K., & Brown, B. B. (2005). Activities, engagement, and emotion in after-school programs (and elsewhere). *New Directions for Youth Development, 105*, 121–129.
- Vandell, D. L., & Simpkins, S. (2023). Three Developmental Pathways Linking Early Care and Education to Adult Educational Attainment. SRCD Symposium. Salt Lake City Utah.

- Vandell, D. L., Simpkins, S. D., & Liu, Y. (2021). From early care and education to adult problem behaviors: A prevention pathway through children's afterschool organized activities. *Development and Psychopathology*, *33*, 658–669.
- Vandell, D. L., Simpkins, S. D., Pierce, K. M., Brown, B. B., Bolt, D., & Reisner, E. (2022). Afterschool programs, extracurricular activities, and unsupervised time: Are patterns of participation linked to developmental outcomes in middle childhood? *Applied Developmental Science*, *26*(3), 426-442. <https://doi.org/10.1080/10888691.2020.1843460>
- Vandell, D. L., Simpkins, S., & Wegemer, C. (2019). Parenting and children's organized activities. In M. Bornstein (Ed.) *Handbook of Parenting* (3rd Edition). Volume 5. *The Practice of Parenting*. New York: Wiley and Sons. doi: <https://doi.org/10.4324/9780429401695-12>
- Vélez-Agosto, N. M., Soto-Crespo, J. G., Vizcarrondo-Opppenheimer, M., Vega-Molina, S., & García Coll, C. (2017). Bronfenbrenner's bioecological theory revision: Moving culture from the macro into the micro. *Perspectives on Psychological Science*, *12*(5), 900-910. <https://doi.org/10.1177/1745691617704397>
- Williams, J. L., & Deutsch, N. L. (2016). Beyond between-group differences: Considering race, ethnicity, and culture in research on positive youth development programs. *Applied Developmental Science*, *20*(3), 203–213. <https://doi.org/10.1080/10888691.2015.1113880>
- Yu, M. V. B., Hsieh, T., Lee, G., Jiang, S., Pantano, A., & Simpkins, S. D. (2022). Promoting adolescents' math motivational beliefs through competence support: Culturally responsive practices in an afterschool program context. *Contemporary Educational Psychology*, *68*(1), 102028. <https://doi.org/10.1016/j.cedpsych.2021.102028>

- Yu, M. B., Liu, Y., Hsieh, T., Lee, G., Simpkins, S. D., & Pantano, A. (2022). “Working together as a team really gets them fired up”: Afterschool program mentoring strategies to promote collaborative learning among adolescent participants. *Applied Developmental Science, 26*, 347-361. <https://doi.org/10.1080/10888691.2020.1800467>
- Yu, M. B., Soto-Lara, S., Liu, Y., Puente, K., Carranza, P. R., Pantano, A., & Simpkins, S. D. (2021). Culturally responsive practices: Insights from a high-quality math afterschool program serving underprivileged Latinx youth. *American Journal of Community Psychology, 68*(3-4), 323-339. <https://doi.org/10.1002/ajcp.12518>