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Classroom Practices and Academic Outcomes in Urban Afterschool Programs: Alleviating Social-Behavioral Risk

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Abstract

Given the potential of afterschool programs to support youth in urban, low-income communities, we examined the role of afterschool classroom ecology in the academic outcomes of Latino and African American youth with and without social-behavioral risk. Using multireporter methods and multilevel analysis, we find that positive classroom ecology (i.e., social dynamics, responsive instruction, and organized management) positively predicted academic skills and self-concept across 1 year. For academic skills, the association was magnified for students *with* social-behavioral difficulties; for academic self-concept, the association was magnified for students *without* social-behavioral difficulties. No significant relation was found between fall classroom ecology and spring academic engagement; yet in classrooms with more positive ecology, youth with initial social-behavioral risk were more academically engaged. Results suggest the need to consider the role of afterschool classrooms and instructors in promoting supportive interactions and advancing academic outcomes for youth facing distal and proximal risk at the transition to adolescence.

Keywords

afterschool classrooms, social-behavioral risk, academic outcomes, multilevel models

Youth growing up in poor families and communities face risk of underachievement (Magnuson, Duncan, & Kalil, 2006). Ethnic minority and English language learner (ELL) youth disproportionately live in poor families and neighborhoods, yet have greater academic problems than would be predicted by their socioeconomic background alone (Hemphill & Vanneman, 2011). This may be due to limited access to quality education (Gándara, Rumberger, Maxwell-Jolly, & Callahan, 2003), low literacy skills in their second language (Kieffer, 2008), and/or academic discrimination (Schmader, Major, & Gramzow, 2001). Moreover, academic difficulties are magnified in the presence of social and behavioral problems, which dynamically interact with and predict school outcomes over time (Becker & Luthar, 2002). Scholars have long studied the role of education contexts in supporting youth facing sociodemographic (i.e., distal) and social-behavioral (i.e., proximal) risk (Mahoney, Vandell, Simpkins, & Zarrett, 2009). Yet most research has been conducted in day school settings. Because of their unique position at the juncture of school, neighborhood, and home, afterschool programs (ASPs) may be particularly important for youth on a path toward school disengagement and/or antisocial or risky behaviors.

Publicly funded ASPs aim to promote positive youth development through productive, positive interpersonal interactions and engaging, enriching activities (Lerner et al., 2005). Longitudinal and experimental studies suggest attendance in ASPs leads to improved academic behavior (engagement, work habits; Vandell, Reisner, & Pierce, 2007) and test scores (Lauer et al., 2006), particularly among youth facing distal risk (Durlak, Weissberg, & Pachan, 2010). In addition, descriptive studies suggest that quality matters. Durlak and colleagues' (2010) meta-analysis notes the importance of organized, active, focused, and intentional practices in promoting youth engagement and developmental outcomes. An evaluation of Philadelphia's Beacon Centers suggests engagement was heightened when staff encouraged youth collaboration, provided emotional and instructional support, and used effective behavior management (Grossman, Campbell, & Raley, 2007). Yet, most studies on ASP quality focus on program-wide indicators rather than classroom proximal processes that systems

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theories suggest might be particularly potent for youth developmental outcomes (Tseng & Seidman, 2007).

Two frameworks from day schools, each focused on the role of the *classroom ecology* in students' academic and social development, may be relevant for studying the proximal processes in ASP classrooms. The first—*teaching through interactions* (Hamre et al., 2013)—asserts that students benefit from teaching that is sensitive, respectful, and warm (i.e., emotionally supportive), productive and engaging (i.e., organized), and promotive of cognitive development (i.e., instructionally supportive). Research in late elementary and middle schools affirms that these practices do, in fact, predict academic engagement across diverse groups (Reyes, Brackett, Rivers, White, & Salovey, 2012), including Latino and ELL students (Downer et al., 2012). The second framework is that of teachers' *invisible hand* in classroom social dynamics—their largely hidden role in shaping the classroom social structure and relationships (Farmer, Lines, & Hamm, 2011). Studies in day schools indicate that teacher attunement to peer interactions matters for the implementation and impact of interventions to increase social integration, positive relationships, and peer cultures of effort (e.g., social dynamics management; Farmer, Hall, Petrin, Hamm, & Dadisman, 2010; Gest, Madill, Zadzora, Miller, & Rodkin, 2014). Neither framework has yet been applied to afterschool classrooms.

Young people growing up in urban poor communities spend significant time in public ASPs (Afterschool Alliance, 2014). Unlike day schools, which grow increasingly segregated and involve more individual instruction and competitive evaluation as children grow older (Mulkey, Catsambis, Steelman, & Crain, 2005), ASPs are spaces where instructors, often similar to the students in age and background, facilitate positive, productive interactions across heterogeneous groups to enable youth to reach social and academic goals. Both schools and ASPs are primary settings of development; relationships and interactions in one setting have been theorized to spillover to another setting ("shadows of synchrony"; Cairns, Neckerman, & Cairns, 1989; Farmer, Dawes, Alexander, & Brooks, 2016). Applying the *teaching through interactions* and *invisible hand* frameworks to ASPs may support both understanding and alignment of interventions across these key spaces.

Research based in these frameworks suggests that positive classroom ecologies (social dynamics, responsive instruction, and organized management) may be particularly beneficial for youth at risk for emotional and behavioral difficulties (EBDs), which are more commonly identified among youth growing up in urban poor settings (Grant et al., 2004). In a sample of low-income, Latino students, day school classrooms with positive climates were shown to protect students from the negative influence of social difficulties on academic engagement (Kim & Cappella, 2016). When taught by teachers who used positive, respectful, and responsive practices, young students with early adjustment problems (i.e., risk for EBDs), equaled their peers without adjustment problems on achievement test scores at the end of the year (Hamre & Pianta, 2005). Experimental studies show magnified positive effects of interventions to promote teachers' social-emotional attunement or emotional support among the subgroup of students identified with behavioral difficulties (Cappella et al., 2012). None of these studies took place in afterschool classrooms; yet this work suggests the importance of the classroom ecology for promoting academic outcomes and preventing EBDs for students at risk.

Current Study

Given the unique role of ASPs in young people's lives, and the relative lack of research on proximal processes in afterschool classrooms, we apply the *teaching through interactions* and *invisible hand* frameworks to examine the role of afterschool classroom ecology in academic outcomes for youth experiencing distal and/or proximal risk for school disengagement and social-behavioral difficulties. We test the predictive association across one academic year between afterschool classroom ecology and youth academic outcomes in a sample of Latino and African American youth in urban poor neighborhoods. With multireporter methods and multilevel analysis, we assess whether (1) afterschool classroom ecology predicts (a) academic skills, (b) academic engagement, and (c) academic self-concept; and (2) the positive association between classroom ecology and academic outcomes is magnified for youth with social-behavioral risk. For the short term, we aim to identify the role of the afterschool classroom ecology in promoting academic outcomes and alleviating social-behavioral risk. For the long term, we aim to determine malleable targets for aligned programs to promote academic competence among youth facing distal and proximal risk at the transition to adolescence.

Method

Setting

Data were derived from a larger project examining youth development in afterschool academic or social-emotional learning (SEL) activities. Five school-based afterschool sites administered by one large nonprofit organization participated. Sites serve low-income (87.1% eligible for free/reduced lunch), ethnic minority youth in one urban area. Youth attend daily, participate in various activities, and may have multiple instructors. For this study, each youth is associated with one unique afterschool instructor in an academic enrichment or SEL activity.

Participants

Participants were recruited from 18 afterschool groups for third through eighth graders across the five sites. Two

hundred fifty-six youth in 11 elementary and seven middle school groups participated, with ages ranging from 7 to 15 ($M = 10.1$ years, $SD = 1.7$), and equal proportions of boys and girls (see Table 1). Participants were predominately Latino (75.8%; family origin: Dominican Republic, Mexico, and Puerto Rico) and African American (22.7%). Nearly 37% of youth were classified as ELLs based on multiple sources of information, including administrative data and staff/student-report of youth needing additional language support. The 18 afterschool staff were Latino (67%) or African American (33%); a majority ($n = 13$) were 30 years of age or younger; 10 were female. Most of the afterschool staff grew up in the local community and 38.9% were ELL as youth. The majority of staff (72.2%) had four or fewer years of experience at their current afterschool site. Most classrooms ($n = 11$) had 20 or more students in the group, and the mean class size in the analytic sample was 14.2 students.

Some measures were collected from all 256 youth; others were collected from a stratified random subsample of 161 youth to minimize data collection interruptions and ease burden. Given the smaller number of middle school sites, all participating youth in these classrooms were included in the subsample. In each elementary group, eight students were selected to be part of the intensive data collection subsample. Approximately equal proportions of boys and girls were selected, and ELLs were oversampled. There were no differences in gender, race/ethnicity, or free/reduced lunch status between students selected and not selected for the subsample.

Table 1. Participant Demographic and Afterschool Classroom Characteristics.

Variable	*n*	%
Level 1 (*N* = 256)		
Female	128	50.0
English language learner	94	36.7
Grade 3	39	15.2
Grade 4	67	26.2
Grade 5	78	30.5
Grade 6	29	11.3
Grade 7	25	9.8
Grade 8	18	7.0
Level 2 (*n* = 18)		
Staff years of experience at current afterschool site		
0–1 years	7	38.9
2–4 years	6	33.3
5+ years	5	27.8
Small class size (fewer than 20)	7	38.9
Large class size (20+ students)	11	61.1

Measures

Academic outcomes, assessments, and youth and staff surveys were completed in fall and spring. Afterschool classroom ecology was measured with systematic observations in the fall.

Youth academic outcomes. *Academic skills* were measured with easyCBM (Alonzo, Tindal, Ulmer, & Glasgow, 2006), an individually administered, curriculum-based measure of oral reading fluency strongly associated with reading comprehension and academic achievement (Reschly, Busch, Betts, Deno, & Long, 2009). Youth in the subsample read three leveled reading passages aloud for 1 min each, while a trained assessor tracked errors to obtain the total number of correct words read per minute (Alonzo & Tindal, 2009). Scores on the three probes were strongly intercorrelated ($\alpha = .98$). Analyses used the median score across the three probes, as this improves predictive validity (Duesbery, Braun-Monegan, Werblow, & Braun, 2012).

Academic engagement was measured via the Student Engagement subscale of the *Academic Competence Evaluation Scale* (ACES; DiPerna & Elliott, 1999), completed by afterschool instructors about each student in the subsample. Language on this eight-item, 5-point scale was slightly modified to fit the afterschool context. Sample questions include "assumes leadership in group situations" and "participates in class discussions" ($\alpha = .93$).

Academic self-concept was assessed with the Scholastic Competence subscale of the *Self-Perception Profile for Children* (SPPC: Harter, 2012; for Spanish translation: Broc, 2014). On the SPPC, youth first select one of two opposite statements that is the "most like them" and then determine whether that statement is "really true" or "sort of true," yielding responses on a 4-point scale. This six-item subscale measures youths' perception of academic ability related to schoolwork (e.g., "some kids do very well at their classwork BUT other kids don't do very well at their classroom"). Current study internal consistency reliability was adequate ($\alpha = .62$).

Afterschool classroom ecology. Afterschool classroom ecology was measured with the *Promising Practices Rating Scale* (PPRS; Vandell et al., 2005/2012), an observational tool assessing the extent to which classrooms are positive, responsive, and organized. Eight of the nine original PPRS items were utilized: supportive relations with adults, supportive relations with peers, student engagement in activities, opportunities for cognitive growth, mastery orientation, appropriate program structure, setting chaos, and staff overcontrol. Productive homework time, the ninth item, was not applicable. Observations were conducted by two trained observers and occurred when the consented instructor taught a typical lesson. In the fall, rather than rating multiple activities to generate an index of overall program quality (Vandell et al., 2005/2012), observers conducted three 15-min observations during the same 45 to 60 min activity. Observers kept a running log for each cycle; each of the PPRS items

was scored at the end of the cycle on a 4-point Likert-type scale (1 = *highly uncharacteristic*, 4 = *highly characteristic*). A mean score for each item across the three cycles was calculated; a summary score was calculated by averaging the mean scores for each of the eight items (chaos and staff overcontrol were reverse coded). The summary score remains on the original 4-point scale with higher scores indicating a more positive classroom ecology.

Social-behavioral risk. To investigate interactions between afterschool classroom ecology and youth social-behavioral risk, a risk score was developed. This score is a composite of four subscales collected in the fall via youth self-report. First, the Social Competence subscale from the SPPC (Harter, 2012) assesses youth perception of their social skills (e.g., "some kids find it hard to make friends BUT other kids find it's pretty easy to make friends"; six items; $\alpha = .57$). Second, the SPPC Behavioral Conduct subscale captures youths' views on their ability to avoid trouble and act appropriately (six items; $\alpha = .62$). Third, the Peer Affiliation subscale from the *Elementary and Middle School Student Survey* (EMSSS; Vandell et al., 2004) is a five-item, 4-point scale assessing youths' perception of their closeness to and relationships with peers (sample item: "I can really trust the other kids at my after-school program"; $\alpha = .71$). Fourth, the 11-item, 4-point Misconduct subscale from the EMSSS (Vandell et al., 2004) assesses the frequency of aggressive actions or misbehaviors such as "gotten into a fight at school" ($\alpha = .82$).

The overall *social-behavioral risk score* was an average of *z* scores from the four subscales, with social competence, behavior conduct, and peer affiliations reverse coded. Higher scores on the risk index represent students with greater social-behavioral risk.

Youth covariates. In addition to baseline academic outcomes, youth covariates included demographic variables (gender, ELL status, and grade) and social network ties (degree centrality). Grade level was specified with a set of dummy variables to capture developmental differences, including any nonlinear differences. Peer connectedness was measured in the fall using youth reports of their own and classmates' afterschool connections via a cognitive social structures approach (Neal, 2008). Participating youth viewed a list of the names of all students in their afterschool group and indicated who they "hang out with often." Youth reported this for each student in their afterschool group, indicating the presence/absence of a tie between each possible dyad. Following established procedures (Cappella & Neal, 2012; Neal, 2008), social network data were symmetrized, aggregated, and binarized using a binomial test to determine whether a social tie was present beyond random chance. Normed degree centrality (Freeman, 1978–1979), or the number of social ties for a particular individual in the afterschool group divided by the total number of possible ties, was calculated using UCINET 6 (Borgatti, Everett, & Freeman, 2002) to capture each youth's peer connectedness in the afterschool classroom.

Classroom covariates. Classroom-level characteristics were assessed to further isolate the association between classroom ecology and youth academic outcomes. Classroom size was skewed, and thus included as a dichotomous variable (0 = less than 20 youth in the classroom, 1 = 20+ youth in the classroom). Instructors' years of experience at the site was included, with novice instructors (0 or 1 year of experience) as the reference group ($n = 7$; see Table 1).

Procedures

Research assistants administered all written surveys and assessments. Youth completed surveys via paper and pencil with the exception of the social network surveys, which were administered on electronic tablets. Data collection occurred during the target activity or during homework, snack, or another activity. Parental consents and paper–pencil surveys were available in English and Spanish. Bilingual researchers provided direct support to Spanish-speaking students during data collection. Prior to data collection, the PPRS manual (Vandell et al., 2005/2012) was reviewed and piloted to determine alignment with the current population. Study observers attended an initial 2-hr training, classroom videos were coded and discussed in weekly 2-hr meetings for 4 weeks, and live afterschool classroom observations were coded to establish interrater reliability. During the training period, discrepancies were discussed until consensus was achieved. To prevent drift, videos were co-observed and scored by raters throughout the data collection period; a minimum of 75% agreement was necessary to obtain and maintain proficiency. All research activities were conducted in accordance with protocols approved by the university institutional review board.

Missing Data and Analytic Plan

The analytic sample included 256 youth who had data on at least one of the three outcomes. Due to stratified random sampling, there was planned missingness in the data collection and a small amount of other missingness, resulting in values missing at random (MAR; Rubin, 1976). Missingness ranged from 1.24% to 19.88% within the subsample and 2.34% to 6.64% in the whole sample; there was no missingness on classroom-level variables. Full information maximum likelihood (FIML) estimation was used to account for missingness in the predictors and outcomes under the MAR assumption (Enders & Bandalos, 2001).

Because data are nested (youth in afterschool groups), multilevel mixed regression models were fitted in Mplus 6.12 (Muthen & Muthen, 2011) using a robust maximum likelihood (MLR) estimator. Although the 18 analytic classrooms were grouped into five afterschool sites, a three-level

Table 2. Descriptive Results for Key Level 1 and Level 2 Covariates.

Variable	*n*	*M*	*SD*	Minimum	Maximum
Level 1					
Social-behavioral risk	250	0.00	0.63	−1.35	1.95
Normed degree centrality	246	0.20	0.13	0.00	0.63
Baseline academic skills	153[a]	112.43	41.87	15.00	206.00
Baseline academic engagement	159[a]	3.42	0.83	1.88	5.00
Baseline academic self-concept	250	2.85	0.67	1.17	4.00
Level 2					
Afterschool classroom ecology	18	2.58	0.79	1.46	3.94

[a]Planned missingness. These measures were only collected for the students in the intensive data collection subsample.

model was unnecessary as school-level variance was close to zero after accounting for classroom random effects. Continuous Level 1 predictors (baseline level of the outcome, risk composite, degree centrality) were group mean centered; the continuous Level 2 predictor (classroom ecology score) was grand mean centered.

To examine the dependent variables, three different models were fitted. The composite model displayed below can be generalized for the outcome of interest:

$$Y_{ij} = \beta_0 + \beta_1 \text{ Risk}_{ij} + \beta_2 \text{ Classroom Ecology}_j + \beta_3 \text{ Risk}_{ij} \times \text{Classroom Ecology}_j + \lambda s_{ij} + \gamma c_j + \eta_j + \varepsilon_{ij}.$$

The outcome (academic skills, academic engagement, academic self-concept) is represented as Y_{ij} for student *i*, in classroom *j*, which is predicted by the following: β_1 student's risk score, β_2 afterschool classroom ecology, β_3 the cross-level interaction of risk and classroom ecology, λ represents a vector of student covariates (female, ELL, degree centrality, dummy coded grade, and baseline assessment of the outcome), γ is a vector of classroom covariates (class size and instructor years of experience), η_j the variance of the classroom-level random intercept, and ε_{ij} the residual variance. Theoretically salient Level 1 and Level 2 covariates were included as fixed effects to address concerns of omitted variable bias.

Results

Descriptive Statistics

Means, standard deviations, and ranges of continuous covariates are reported in Table 2. Baseline risk scores ranged from −1.35 to 1.95 (*M* = 0.00, *SD* = .63), with scores above zero indicting above average levels of misconduct and social difficulties within this sample. A mean normed degree centrality of .20 indicates that youth hang out with one fifth of the other youth in their afterschool group (i.e., approximately four classmates). The median oral reading fluency (academic skills) for the sample was 112 correct words read per minute; however, the difficulty of the passage, youth fluency, and thus curriculum-based measurement scores, vary by grade. When comparing our sample with a normed national sample, on average youth in this study had a mean proficiency level below the 30th percentile (Anderson et al., 2014). Mean staff-reported student engagement (*M* = 3.42, *SD* = .83) was between "average" and "above average." The mean afterschool classroom ecology score (2.58) shows moderate levels of quality interactions and management, and the range (1.46–3.94) indicates variability (see Table 2). Descriptive findings for our outcome variables assessed in spring are: median spring oral reading fluency = 128 correct words read per minute (*SD* = 42.4); mean academic engagement = 3.42 (*SD* = .86); and mean academic self-concept = 2.73 (*SD* = .72).

Multilevel Models

Multilevel models were fitted to examine the predictive relations between individual-, classroom-, and cross-level interactions of youth risk and afterschool classroom ecology on each academic outcome: academic skills, academic engagement, and academic self-concept.

In Model 1 (see Table 3), fall afterschool classroom ecology had a significant unique positive association with spring academic skills ($b = 7.95$, $p < .01$) beyond baseline skills and other covariates. A one point, positive difference in classroom ecology was associated with a positive difference of eight words read correctly. No main effect was found for social-behavioral risk on spring academic skills ($b = -.2.04$, $p = .28$); however, the interaction of risk and classroom ecology was statistically significant ($b = 6.69$; $p < .01$). This means that after adjusting for youth and classroom covariates, the association of classroom ecology and academic skills varied by initial levels of youth social-behavioral risk. Figure 1 displays fitted plots for academic skills for youth with lower risk (1 *SD* below the mean) and higher risk (1 *SD* above the mean) in classrooms with a less positive ecology (a classroom 1 *SD* below the mean equates to a PPRS score of 1.82, which is essentially "somewhat uncharacteristic" of positive ecology on a 1–4 scale) and

Table 3. Fixed and Random Effects Predicting Spring Academic Outcomes.

	Model 1: Academic Skills		Model 2: Academic Engagement		Model 3: Academic Self-Concept	
Predictors and Covariates	*b*	*SE*	*b*	*SE*	*b*	*SE*
Fixed effects: Fall Level 1 predictors						
Female	4.09	3.12	0.13	0.10	−0.11	0.09
English language learner	−2.40	3.65	0.22*	0.09	−0.07	0.10
Baseline score of outcome	0.96***	0.04	0.67***	0.12	0.45***	0.10
Social-behavioral risk	−2.04	1.89	−0.13	0.12	−0.16*	0.07
Normed degree centrality	8.28	12.81	0.41	0.41	−0.18	0.27
Grade 4	6.41	12.86	−0.12	0.33	0.00	0.12
Grade 5	24.36	25.07	0.07	0.28	0.26†	0.13
Grade 6	9.71	16.15	0.24	0.30	−0.15	0.16
Grade 7	23.46	15.68	0.02	0.28	0.22†	0.12
Grade 8	18.21	17.82	−0.07	0.41	0.03	0.14
Intercept	111.65***	17.38	3.42***	0.30	2.92***	0.14
Fixed effects: Fall Level 2 predictors						
Afterschool classroom ecology	7.95**	2.46	0.00	0.10	0.13**	0.04
Larger class size	−5.68	4.88	−0.16	0.14	−0.23*	0.10
Staff 2–4 years of experience	5.22	4.88	0.16†	0.09	0.07	0.06
Staff 5+ years of experience	7.69	6.72	−0.09	0.19	−0.13	0.15
Fixed effect: Fall cross-level interaction						
Risk × Classroom Ecology	6.69**	2.45	0.29**	0.09	−0.11*	0.05
Random effects						
Classroom random intercept (Level 2)	63.87	109.06	0.01	0.02	0.00	0.01
Residual variance (Level 1)	251.02***	53.22	0.39***	0.07	0.35***	0.03

Note. Female, English language learner, grade levels (third grade is the reference group), class size, and staff years of experience (0–1 years is the reference group) were dummy coded and untransformed.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

classrooms with a more positive ecology (*M* PPRS score = 3.35). As shown, in less positive classrooms, higher risk youth underperform in comparison with their lower risk peers; but in more positive classrooms, higher risk youth no longer lag behind their lower risk peers. The post hoc simple slope test for lower risk students did not demonstrate a difference from zero, $b = 4.14$, $t(116) = 1.39$, $p = .17$; for higher risk students, the simple slope was statistically positive, $b = 11.76$, $t(116) = 4.40$, $p < .001$.

In Model 2, we examined afterschool instructors' assessment of youth academic engagement in the afterschool group (see Table 3). There was a positive main effect of ELL status on spring academic engagement after adjusting for baseline covariates ($b = .22$, $p < .05$). No significant main effects were detected for fall levels of afterschool classroom ecology or social-behavioral risk. However, a significant effect was detected for the cross-level interaction ($b = .29$, $p < .01$). As seen in Figure 2, youth with higher social-behavioral risk in the fall demonstrate greater gains in instructor-reported academic engagement when in a more positive afterschool classroom than do their peers with lower initial risk. Post hoc tests did not reveal that the

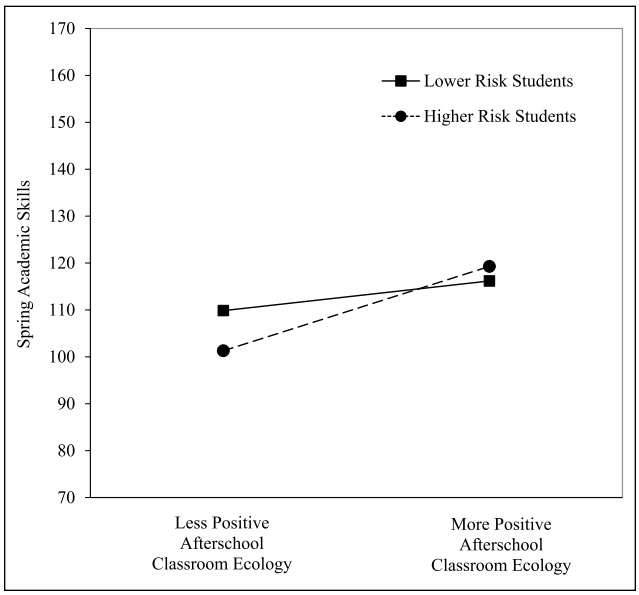

Figure 1. Individual social-behavioral risk moderating the relation between spring academic skills (i.e., oral reading fluency) and fall afterschool classroom ecology.

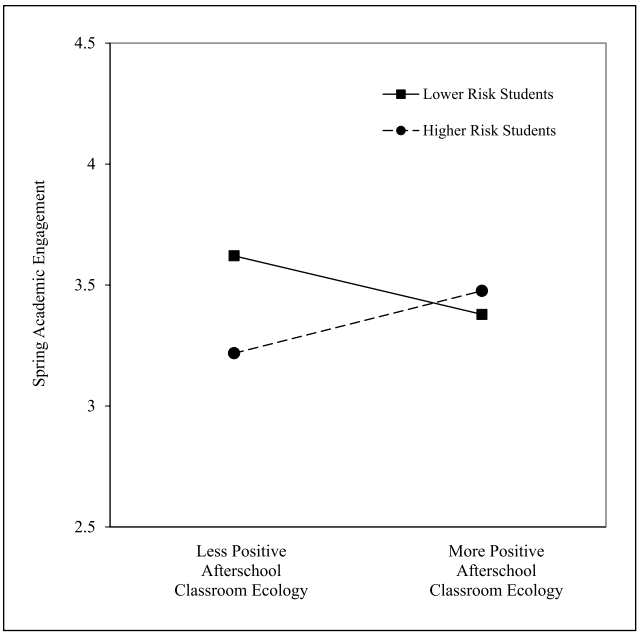

Figure 2. Individual social-behavioral risk moderating the relation between spring academic engagement (staff-reported) and fall afterschool classroom ecology.

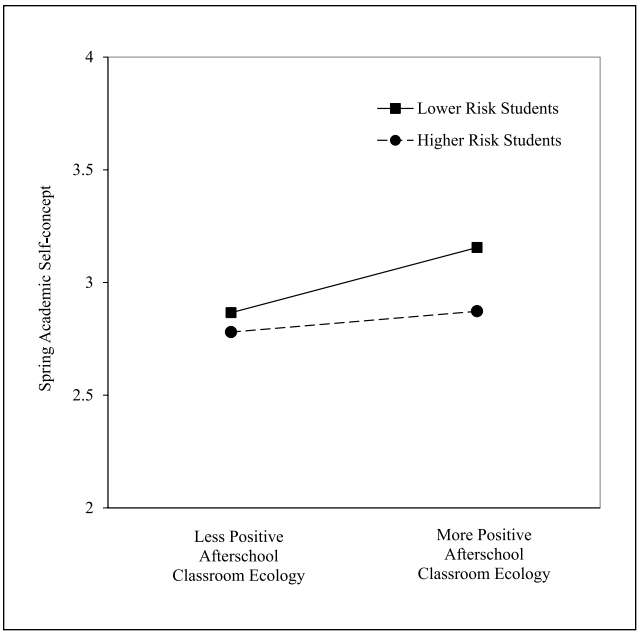

Figure 3. Individual social-behavioral risk moderating the relation between spring academic self-concept and fall afterschool classroom ecology.

respective simple slope tests were significantly different from zero, lower risk: $b = -.16$, $t(146) = -1.37$, $p = .17$; higher risk: $b = .17$, $t(146) = 1.55$, $p = .12$.

Model 3 focuses on youth-reported academic self-concept (see Table 3). Being in a larger class had a negative association with spring academic self-concept ($b = -.23$, $p < .05$). As expected, classroom ecology as a fixed effect demonstrated a significant positive association with academic self-concept ($b = .13$, $p < .01$), and youth self-reported risk was negatively associated with spring academic self-concept ($b = -.16$, $p < .05$), after adjusting for baseline covariates. In addition, the significant cross-level interaction between risk and classroom ecology reveals that this association is driven by students with lower initial levels of social-behavioral risk ($b = -.11$, $p < .05$), such that in less positive afterschool classrooms, higher risk youth report lower academic self-concept than do their lower risk counterparts (see Figure 3). Counter to expectations, this gap is magnified in more positive classrooms where lower risk youth have mean academic self-concept of 3.16 (range = 1–4), whereas higher risk youth have a mean of 2.87. To probe further, the simple slope test for lower risk students was statistically significant, $b = .19$, $t(226) = 3.87$, $p < .001$; the simple slope for higher risk students was not significantly different from zero, $b = .06$, $t(226) = 1.23$, $p = .22$.

Discussion

Given the potential of ASPs to support youth in urban, low-income communities, the current study applied the *teaching through interactions* (Hamre et al., 2013) and *invisible hand* (Farmer et al., 2011) frameworks to examine the contribution of the afterschool classroom ecology to academic outcomes among Latino and African American youth with varying levels of social-behavioral risk. Results indicated that classroom ecologies (i.e., positive social dynamics, responsive instruction, and organized management) in afterschool academic and SEL activities predicted academic skills and self-concept across 1 year. For academic skills, the association was magnified for students *with* initial social-behavioral difficulties; for academic self-concept, the association was magnified for students *without* social-behavioral difficulties. No significant association was found between fall classroom ecology and spring academic engagement. However, in classrooms with more positive ecologies, youth with higher levels of social-behavioral risk were more engaged. Findings were present beyond youth and classroom covariates, with multireporter methods. Results from this sample of low-income, ethnic minority youth suggest the need to consider afterschool classrooms as a potential lever through which to align interventions that target academic development for youth facing distal and proximal risk in urban school–community contexts.

The predictive association between fall classroom ecology and spring academic skills is supported by existing day school literature on teaching interactions (Downer, Rimm-Kaufman, & Pianta, 2007; Hamre et al., 2013) and social dynamics management (Farmer et al., 2010; Gest et al., 2014). Although other studies examine overall ASP quality (Durlak et al., 2010), few focus on the specific context of classrooms. ASPs are natural spaces where the youth interact in heterogeneous groups toward social, and often

academic, goals. Afterschool classrooms differ in structure and composition from day school classrooms and have instructors with varied educational and life experiences (Yohalem, Pittman, & Moore, 2006). Beyond these differences, however, afterschool classrooms observed to be positive, responsive, and organized had youth with greater academic skill development. With youth in the current study averaging an oral reading fluency below the 30th percentile in national norms, the potential boost may be critical.

Moreover, youth with initial social-behavioral risk experienced magnified growth in oral reading fluency when in more positive, responsive, and organized afterschool classrooms. This finding mirrors work in day schools suggesting the role of classroom interactions in protecting students with adjustment problems from poor academic outcomes (Hamre & Pianta, 2005). However, this is one of the few studies to examine, in a population facing both distal risk and proximal risk, this association in ASPs. Given that social-behavioral and academic adjustment dynamically interrelate over time (Becker & Luthar, 2002), and that youths' interactions and adjustment in one setting are often intertwined with experiences in another setting (e.g., "shadows of synchrony"; Cairns et al., 1989; Farmer et al., 2016), understanding factors in both school and out-of-school settings that protect against these combined social-behavioral and academic risks is important.

The overall classroom ecology also mattered for academic self-concept. One's confidence as a learner and identity as a student grows increasingly important in late childhood and early adolescence (Wigfield & Wagner, 2005). After controlling for multiple covariates, spring academic self-concept was lower for students reporting higher initial social-behavioral risk. Although the same reporter is used for each measure, which may partially account for this link, it indicates that students with social-behavioral difficulties see slower growth or even declines in their academic competence, suggesting both cross-domain and across-time risk. Surprisingly, the association between classroom ecology and academic self-concept was magnified for youth *without* social-behavioral risk. This is the only instance where youth experiencing proximal risk were at a disadvantage in positive, responsive, and organized classrooms. Participation in these classrooms may enable youth to see one's own abilities in relation to one's peers. Thus, it may be important to find ways to help youth who are struggling socially and behaviorally to perceive their academic competence in ways that matches their corresponding growth in academic skills.

We did not detect a significant association between fall classroom ecology and spring academic engagement. We measured engagement via instructor reports and it is possible that afterschool instructors compared students with one another rather than an external standard (e.g., leading to more within-classroom differences than between-classroom differences). In addition, afterschool instructors who create more positive classroom ecologies may, on average, hold higher expectations for youth engagement than instructors who do not. Interestingly, ELLs had higher spring engagement than non-ELLs after adjusting for covariates. It is possible that afterschool classrooms provide a space in which ELLs, in particular, can take an active role in social and academic activities with diverse peers. Such opportunities may be important given the constrained opportunities to learn with non-ELL peers that ELLs often experience in day schools (Gándara et al., 2003). More research is needed to confirm whether and to explore how ELLs benefit from the opportunities available in afterschool settings; for example, whether specific classrooms support ELLs' participation in academic discussions or social relationships with non-ELL peers.

Finally, although no main effect was found, youth with proximal risk were more engaged in more positive, responsive, and organized afterschool classrooms. In fact, in these classrooms, they looked similar to peers without proximal risk in terms of academic engagement. It may be that the dynamics present in these classrooms engage youth with social-behavioral needs whereas other classrooms maintain engagement only for more well-adjusted youth. Although engagement is important to learning outcomes (Fredricks, Blumenfeld, & Paris, 2004), equitable engagement across peers is also critical (Cappella, Kim, Neal, & Jackson, 2013).

Limitations and Implications

These findings must be considered within study limitations. First, measurement was strong and varied but we had the same reporter for social-behavioral risk and academic self-concept, used staff-report of academic engagement, and had only one assessment of academic skill. Other measures are needed in future work. Second, although youth were not purposefully sorted into afterschool classrooms based on prior characteristics, and we included multilevel covariates in our models, we cannot assume a causal pathway between classroom ecology and youth outcomes. Third, with two time points of data, regression to the mean could be a concern when examining a low group at baseline. It is unlikely this explains the interactions, especially given one reversed result, but is important to acknowledge. Fourth, we focus on afterschool classrooms. Because this is the primary space in which youth receive academic and social-emotional curricula, and the ASPs are run by the same community organization with similar resources, organization, and activities, and without observable site-level differences, we are confident this is the right level of focus and enables us to capture the classroom ecology at a granular level. Yet, future research that deeply assesses classroom social and instructional dynamics across multiple spaces will be an important addition. Finally, there are sample limitations. We do not have statistical power to test all interactions of interest, including grade or gender differences. We also cannot generalize beyond urban Latino and African American youth facing socioeconomic disadvantage. Future work with larger, more diverse samples is needed.

Even with these limitations, the current study has implications for policy and practice. Afterschool classrooms characterized by positive social dynamics, responsive practices, and organized management may be a critical complement to strong day school classrooms, and thereby lead to more synchronized and positive outcomes for youth facing socioeconomic and social-behavioral risk. Taken together with related findings, this study suggests the need to strengthen and align professional development targeting positive classroom ecology for the range of staff who serve youth with and without EBDs in and after school. Surrounding youth with more spaces that provide opportunities for social and academic development may advance academic behaviors and competence at the critical transition to adolescence and prevent and alleviate emotional and behavioral problems for students facing distal and proximal risk.

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