UNIFIED EXTRACURRICULAR ACTIVITIES AS A PATHWAY TO SOCIAL INCLUSION IN HIGH SCHOOLS

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Abstract

The present study examined how a multicomponent intervention embedded in a high school's extracurricular framework impacts students' acceptance of peers with intellectual disability (ID). Data were collected from eight high schools, three of which implemented the Special Olympics Unified Champion Schools (UCS) program, involving inclusive sports, clubs, and schoolwide events, and five of which did not. A pretest-posttest survey design was used to measure students' attitudes, perceptions, and interactions (n = 1,230). Lagged dependent variable modeling revealed that UCS participation significantly predicted improved attitudes toward peers with ID and perceptions of school social inclusion, as well as increased social interactions with peers with ID. Unified extracurricular activities may be the next step forward in promoting an inclusive school culture.

Keywords: intellectual disability, inclusion, intervention research, extracurricular activities

1. Introduction

The paradigmatic shift that has taken place in the education of students with intellectual disability (ID), fueled by the civil rights movement of the 1950s and 1960s, is coming to fruition. Students with ID are physically present in schools, not only in the hallways, but in classrooms alongside their peers without ID. The movement to "mainstream" students with ID was driven, in part, by the assumption that "there would be a reduction in the unfamiliarity that existed between" students with and without ID if they had regular opportunities to interact during the school day (Gottlieb, 1981, p. 119). In other words, social inclusion was thought to be a natural outcome of physical inclusion. However, there is little empirical evidence that this is true. In a 2007 study of over 5,000 middle school students across the country, only 10% reported having a friend with ID at school (Siperstein, Parker, Bardon, & Widaman, 2007). This finding is no different than what Johnson first observed in the 1950s in a study of "inclusive" elementary school classrooms: although children with ID were physically present in these classrooms, they were not socially accepted as part of the class by their peers (Johnson, 1950). Clearly, though the mainstreaming movement was a critical prerequisite, schools must go beyond the physical inclusion of students with ID to truly "fulfill the promise" of social inclusion (Gottlieb, 1981, p. 115).

As defined by Simplican, Leader, Kosciulek, and Leahy (2015), the social inclusion of people with ID involves two key factors: interpersonal relationships and community participation. In an educational context, then, the social inclusion of students with ID involves meaningful relationships with students without ID and full participation in their school community, beyond the classroom, through opportunities like extracurricular activities (i.e., non-academic activities that take place during and after school; Siperstein, Summerill, Jacobs, &

Stokes, 2017). Importantly, the opportunities that students with ID have to develop relationships and participate in their school can be facilitated or impeded by conditions at various ecological levels, such as the attitudes of their peers without ID (interpersonal level) and the extent to which their school's leadership prioritizes social inclusion (organizational level; Simplican et al., 2015; Siperstein et al., 2017). Following Simplican et al.'s (2015) ecological approach, programs designed to foster social inclusion should operate at various ecological levels by involving "multiple stakeholders (e.g., students, teachers, administrators) within multiple school contexts (e.g., classroom, cafeteria, clubs, sports)" (Siperstein et al., 2017, p. 174). However, most of the existing social inclusion interventions have a structured, narrow scope with singular objectives, such as increasing disability awareness among students without ID, or expanding the social networks of students with ID. For example, in one disability awareness program, students without ID engage in a range of structured activities that include visiting special education classrooms, listening to guest speakers with disabilities, and doing arts and crafts or cooking with their peers with ID (Rillotta & Nettelbeck, 2007). In other programs, like the Circle of Friends Program, students without ID are assigned as "buddies" to students with ID. By establishing these dyads of students with and without ID, the program aims to "link" their social networks and "create a widening circle of relationships" for students with ID (Calabrese et al., 2008, pp. 21, 26).

The Special Olympics Unified Champion Schools program ("UCS program") is unique in that it promotes the social inclusion of students with ID at multiple ecological levels using a schoolwide approach. For high schools, the UCS program was designed to fit into the normative high school culture, refocusing the foundational elements of the high school experience—sports, clubs, and schoolwide events—on the inclusion of students with ID (Parker, Corona, & Cahn,

2013; Quinn, Edwards, & Parker, 2014). Furthermore, UCS program activities are strategically

interrelated, incorporating both relationship development and school participation, the two key

factors that characterize successful social inclusion within the school context. The idea behind

the specific UCS program activities is that Unified Sports and Unified Club facilitate meaningful

relationships among students with and without ID, and these relationships are promoted when the

school community comes together for Whole School Engagement events. Through Unified

Sports and Unified Club, students with and without ID interact and work together as teammates

and fellow club members, and school staff coach, advise, and facilitate these student groups.

Whole School Engagement events involve a wider range of students and staff in a variety of

contexts, such as a pep rally for the Unified Sports team during homecoming week.

Recent evidence about the UCS program demonstrates the promise of a schoolwide

approach. One study (Siperstein, Albert, Jacobs, Osborne, & Stokes, 2018) examined the impact

of the UCS program on students' bystander behavior against the use of the word *retard* ("the r-

word"). The results showed that students who participate in Unified Club and the R-word

Campaign (a Whole School Engagement event) are more likely to intervene in situations where

they hear the r-word used. Additionally, a cross-sectional study of 11 high schools (Siperstein et

al., 2017) found that participation in the UCS program leads to more opportunities for students

with and without ID to socially interact and, as a result of these opportunities, students without

ID develop more positive perceptions of school social inclusion and more positive attitudes

toward the inclusion of their peers with ID in the classroom. Consistent with Simplican et al.'s

(2015) ecological approach, students' positive attitudes and perceptions are important indicators

of—and necessary for—social inclusion, and it is not uncommon that positive changes in

attitudes and perceptions stem from increased social interactions between individuals with and

without ID (e.g., Armstrong, Rosenbaum, & King, 1987; Newberry & Parish, 1987). As such, assessing social interactions, attitudes, and perceptions has become a widespread approach in documenting and evaluating the effectiveness of social inclusion interventions (Siperstein, Norins, & Mohler, 2007).

The present study builds upon these findings and approaches by employing a methodology driven by the structure of the UCS program. As explained by Odom and colleagues (2005), to provide educators with the information they need to identify and implement effective programs, program evaluations must be rigorously designed and contextually applied. For example, because the UCS program is introduced in schools at the beginning of the school year and implemented throughout the remainder of the year, a pretest-posttest design was used in this study to assess change in students over a school year. Furthermore, because the program is self-selective, it was important to document and account for what participating students initially brought to the program, such as their prosocial tendencies and existing perceptions and attitudes. Finally, the range of UCS program activities called for an examination of the differential impacts of varying levels of participation in the program, including a comparison of non-participants from schools that did and did not implement the program. In these ways, by intentionally linking the methodological approach to the program's characteristics, this study serves to demonstrate that the UCS program is an evidence-based intervention.

2. Method

2.1 Schools

Twelve high schools from three states in different regions of the U.S. (Midwest, South, and West) participated in the study. The schools were representative of a range of locales (urban, suburban, and rural) and student enrollments (371 to 1,918). The Special Education program at

each school served between 20 and 217 students, and these students made up approximately 5%

to 15% of the student body. None of the schools had programming that directly addressed the

social inclusion of students with disabilities before participating in the study. However, several

of the schools did implement other schoolwide programming focused on diversity awareness,

bullying prevention, and suicide prevention.

Each school was assigned to one of two conditions: the Intervention School condition

("Intervention Schools") or the Control School condition ("Control Schools"). Intervention

Schools implemented the UCS program throughout the school year, while Control Schools did

not. Five of the schools were assigned to conditions based on preference expressed by school

administrators and staff—four were ready to implement the UCS program and requested the

Intervention School condition, and one was not ready to implement the program and requested

the Control School condition. The remaining seven schools were assigned to conditions

randomly, as their administrations did not have strong feelings or preferences about when they

implemented the UCS program. Each condition had six schools, two from each state. All schools

assigned to the Control School condition agreed to implement the intervention during the

following school year.

2.2 Intervention

As a schoolwide social inclusion intervention, the goal of the UCS program is to bring

students with and without ID together through sports, leadership, and awareness activities "that

occur within the normative contexts of the school" (Siperstein et al., 2017). The program is

designed to be flexible, as schools can adapt the activities to fit their unique structures, policies,

and student populations. For this study, Intervention Schools implemented a specific model of

the UCS program that included at least one Unified Sports team, a Unified Club, and at least one Whole School Engagement event.

Unified Sports fosters teamwork and equitable peer relationships through sports teams that students with and without ID play on together. Under the implementation model used in this study, Unified Sports teams followed one of two styles: *Competitive*, in which teammates are of similar sports ability and no rule modifications are made, or *Player Development*, in which teammates of higher abilities mentor those of lower abilities and rule modifications are permitted. The Unified Club promotes inclusion in the school community by bringing students with and without ID together as members of a school club. Club members often take the lead in supporting Unified Sports teams (e.g., attending games, encouraging other students to attend games, making banners), and the Unified Club is responsible for organizing socially inclusive school events, such as Whole School Engagement events. Whole School Engagement events involve a wider range of students than Unified Sports and Unified Club, providing all students in the school with an opportunity to support and participate in the UCS program. Under the implementation model used in this study, there were three Whole School Engagement events: the R-word Campaign, Fans in the Stands/Unified Sports Pep Rally, and fundraising. The R-word Campaign is a school assembly or activity that spreads awareness about inclusion, acceptance, and respect for students of all abilities and about the negative impacts of using the r-word ("retard(ed)"; see Siperstein et al., 2018). Fans in the Stands/Unified Sports Pep Rallies are events where students cheer for athletes with ID and Unified Sports teams, often using posters, chants, and songs to show their support. Fundraising events are activities or projects (e.g., Polar Plunge, Minute that Matters, walkathons) that help raise money to support Unified Champion Schools activities or Special Olympics at the school.

Although the UCS program activities were open to all students in each school, participation was voluntary. In a recent study of the UCS program, on average, approximately 11% of students participate in Unified Sports, 10% participate in Unified Clubs, and 50% participate in Whole School Engagement events (Siperstein et al., 2017).

2.3 Intervention Fidelity

Implementation of the Unified Champion Schools program took place under the direct supervision of a designated staff member in each school (the "liaison"). To monitor fidelity of implementation, specific school staff were asked to complete an online survey on a monthly basis. These staff included the liaison, at least one other special or general education teacher, and at least one administrator from each school. School staff reported on the frequency, extent, and nature of activities and events that were implemented as part of the intervention. Twice during the year, a phone interview with the liaison was conducted to clarify information provided by school staff. In addition to the monthly monitoring online and over the phone, site visits to each school were conducted at the end of the school year. The purpose of the site visits was to interview administrators, teachers, and other staff to further document how the intervention was implemented.

Because all three components of the UCS program (i.e., Unified Sports, Unified Club, and Whole School Engagement) are integral to its full implementation and impact on students, schools were required to implement all of these activities, and the absence of any one of these activities was considered a lack of intervention fidelity. Based on the information provided by school staff throughout the year, four of the six Intervention Schools implemented the intervention with fidelity. The other two schools lacked fidelity because they were not able to implement all three components of the intervention, as one did not implement Unified Sports and

one did not implement a Unified Club. Therefore, these two Intervention Schools were excluded
from the study.

2.4 Procedures

In addition to overseeing implementation of the UCS program, the liaison in each school
collaborated with other members of the school community to coordinate data collection
procedures. In both Intervention Schools and Control Schools, two surveys were administered to
students: one at the beginning of the school year (baseline survey) and one at the end of the
school year (follow-up survey). In Intervention Schools, the baseline survey was administered
before any Unified Champion Schools activities were implemented, and the follow-up survey
was administered after the intervention activities had been implemented. Using a pretest-posttest
design, students who participated in the baseline survey at the beginning of the school year also
participated in the follow-up survey at the end of the school year.

Before the baseline survey, parental consent forms were distributed to participating
students. The baseline survey was administered by school staff using a paper and pencil
Scantron® format. Staff were provided with instructions regarding survey administration
procedures and the handling and mailing of surveys. Each survey had a unique identification
number, and students filled out a separate contact form with their name and email address that
also contained this identification number. The student contact information linked to identification
numbers was kept in a secure location, so each student's baseline survey could be paired with
their follow-up survey. These administrative procedures were repeated for the follow-up survey
at the end of the school year.

A representative sample of the student body at each school was obtained through a
random selection of classrooms at the beginning of the school year. The liaison in each school

provided a list of all classes offered in the fall within a required, year-round academic subject (e.g., English, Social Studies/History), or all classes taught during one period of the school day (e.g., all 4th period classes). The number of classrooms selected in each school was based on the size of the student body and the average class size. In Intervention Schools, students who joined a Unified Sports team or Unified Club at the beginning of the school year also participated in the surveys. The goal of these procedures was to sample approximately 20-25% of the total student population.

Two schools (one Intervention School and one Control School) were not able to complete the data collection activities as described and were therefore excluded from the study.

2.5 Measures

The measures included in the surveys assessed students' helping and empathic tendencies, perceptions of the inclusive environment of their school, attitudes toward their peers with ID, awareness of and social interactions with peers with ID at school, and participation in the intervention activities. Unless otherwise noted, all measures were administered to students in both Intervention Schools and Control Schools in the baseline survey (with questions referring to the previous school year) and in the follow-up survey (with questions referring to the current school year). Additionally, in the baseline survey, students were asked to report demographic information (i.e., gender, age, grade, race/ethnicity), whether they were involved in any extracurricular school activities, and whether they had a family member with ID or knew someone else with ID outside of school.

2.5.1 Student Prosocialness Scale

To assess students' prosocialness (i.e., their inclination to behave with the intention of helping, caring for, and/or in a way that benefits others), a nine-item scale modified from the 16-

item *Prosocialness Scale for Adults* was used (Caprara, Steca, Zelli, & Capanna, 2005). The

Student Prosocialness Scale was administered only in the baseline survey. The scale was

modified because Caprara and colleagues (2005) found that six of the items contributed less to

the scale than the other items, so these six items were removed, as well as one other item to

ensure comprehension with a high school population. Students were presented with a series of

statements such as, "I try to help others," and "I try to console those who are sad." Students rated

how true they felt each statement was on a 5-point scale (1 = *never true*, 5 = *always true*).

Possible sum scores ranged from 9 to 45, with higher scores indicating more prosocialness (α =

0.89).

2.5.2 School Social Inclusion Scale

To assess students' perceptions of the extent to which students with ID are included in

the school, a 12-item scale adapted from the *Inventory of School Climate–Student Scale* (ISC-S)

was used (Brand, Felner, Shim, Seitsinger, & Dumas, 2003). Students were presented with a

series of statements such as, "Students in your school liked participating with students with

intellectual disabilities during school activities," and "Students with intellectual disabilities in

your school were treated the same way as students without intellectual disabilities." Students

responded on a 4-point scale (1 = *never*, 4 = *often*). Sum scores ranged from 12 to 48 (seven

items reverse coded), with higher scores indicating more positive perceptions about social

inclusion in the school (α = 0.87).

2.5.3 Adolescent Attitudes toward Peers with Intellectual Disability Scale

To measure students' affective attitudes toward their peers with ID, a six-item revised

version of the *Chedoke-McMaster Attitudes toward Children with Handicaps Scale* (CATCH)

was used (Rosenbaum, Armstrong, & King, 1986; see also Bossaert & Petry, 2013). Items were

removed or revised to reflect the modern contexts of inclusion, and to ensure relevance to and comprehension with a high school population. Students were presented with a series of statements such as, "I would feel uncomfortable if a student with an intellectual disability was in my class," and "If a student with an intellectual disability asked me for my phone number, I would give it to him or her." Students rated how true they felt each statement was for themselves on a 4-point scale (1 = *not true*, 4 = *very true*). Possible sum scores ranged from 6 to 24 (four items reverse coded), with higher scores indicating more positive attitudes toward students with ID ($\alpha = 0.63$).

2.5.4 Visibility of and Social Interactions with Students with Intellectual Disability

To assess the extent of social interactions between students with and without ID, students were first provided with a description of the characteristics of a student with ID in terms that were understandable within a school context. Students were then asked about the visibility of students with ID in the school and about their social interactions with them in school. Students who reported that they saw students with ID in school were asked to indicate all the places they saw them and whether they socially interacted with them in these locations (e.g., hallway, cafeteria, academic classes, extracurricular activities). Visibility and social interactions were measured on a 4-point scale (1 = *never*, 4 = *every day*). Possible sum scores for visibility ranged from 7 to 28, and possible sum scores for social interactions ranged from 5 to 20. Higher scores indicated higher visibility of and more frequent interactions with students with ID.

2.5.5 Student Involvement in the Unified Champion Schools Program Questionnaire

To assess student participation in the UCS program, students in Intervention Schools were asked in the follow-up survey to indicate whether they had participated in the three intervention activities: Unified Sports, Unified Club, and Whole School Engagement. Each of

the three Whole School Engagement events (i.e., the R-word Campaign, Fans in the

Stands/Unified Sports Pep Rally, and fundraising) were asked about separately, and all

participation questions were dichotomous "yes/no" questions. During data analysis, the three

questions about Whole School Engagement events were combined into a single variable

representing overall Whole School Engagement participation (i.e., participation in any number of

events) in a dichotomous "yes/no" format. The resulting information was used to create three

levels of participation in the intervention: no participation (did not participate in any intervention

activities), moderate participation (participated in one intervention activity), and intense

participation (participated in two or more intervention activities, at least one of which was

Unified Sports or Unified Club).

2.6 Participants

Across the three Intervention Schools and five Control Schools, data were collected from

1,854 students, representing approximately 20% of the total student population. Approximately

one-quarter of students were in each of the four grades, half were female (48%), and 81% were

White. See Table 1 for more demographic information about the students who were surveyed.

Due to the nature of the survey measures, the analytic sample does not include all 1,854

students. Specifically, because several of the measures in the baseline survey asked about the

previous school year, 9th graders were not included in the analyses (n = 584). Additionally,

students who could not be categorized into one of the three participation levels due to missing

data were not included in the analyses (n = 40). The resulting analytic sample includes 1,230

10th-12th grade students from the eight schools. The demographic characteristics of these students

are similar to the demographics of all students who were surveyed (see Table 1).

2.7 Analytic Strategy

The majority of students (68%) had complete data for all measures included in the analyses. Listwise samples for the final analytic models ranged from 909 (74%) to 941 (77%) out of the total sample of 1,230 students. The measure with the greatest missingness was *Social Interactions with Students with Intellectual Disabilities* in the follow-up survey, for which 10% of students lacked valid data. Missing data diagnostics revealed no clear patterns of missingness; therefore, multiple imputation by chained equations was used to address missing data, with all outcome measures and predictors included in the equations (Johnson & Young, 2011). Analyses using listwise deletion produced similar substantive results. Imputed analyses were preferred and are presented in the results that follow in order to incorporate data from all students and reduce any potential non-response bias.

Multilevel lagged dependent variable (LDV) models were used to address the research questions. Because students were nested within schools, multilevel modeling was required to account for non-independence of observations in the data. Additionally, the pretest-posttest design of the study allowed for a two-wave longitudinal assessment—rather than a cross-sectional assessment (or one-time snapshot)—of associations between participation in the UCS program and student social inclusion outcomes, tracking changes in students over time. The social inclusion outcomes of interest were perceptions of school social inclusion, attitudes toward peers with ID, and social interactions with students with ID. In the LDV modeling used in the analyses, each outcome measured at the end of the school year (in the follow-up survey) was regressed on predictors measured at the beginning of the school year (in the baseline survey), including baseline levels of the outcome measure itself. This accounted for stability in the outcome over time, as well as for students' self-selection into participating in the UCS

program, based on values of the outcome (e.g., students with more positive attitudes toward

peers with ID may have been more likely to participate in the program). That is, coefficients for

predictors refer to change in the outcome from the beginning of the school year to the end of the

school year, rather than to stable or average levels of the outcome at any given time. Due to

evidence of regression to the mean in each of the three outcome measures analyzed, LDV

modeling was preferable to a change-score approach (Allison, 1990).

3. Results

3.1 Descriptive Results

Across the eight schools, before the UCS program was implemented, almost all students

saw students with ID in school (95%). Most students saw their peers with ID in the hallway

(94%) and cafeteria (85%), while, as expected, fewer saw students with ID in their academic

classes (38%) and in extracurricular activities (41%). Despite high visibility in some areas of the

school, social interactions often did not go beyond saying "hello." Only 32% of students who

saw students with ID in the cafeteria reported a personal interaction with them there (i.e., eating

lunch together). Interestingly, while academic classes were not a common place for students to

see their peers with ID, 74% of students who did see them there reported socially interacting

with them. In contrast, despite similar visibility in extracurricular activities, only 15% of students

who saw students with ID take part in extracurricular activities reported interacting with them in

those activities. Any social interactions that did occur happened during the school day, as a

preponderance of students reported "never" hanging out outside of school (80%) or texting/using

social media (87%) with a student with ID. Figure 1 shows the visibility of students with ID in

various school contexts and, correspondingly, the level of social interactions with those students

in each context. Visibility and social interactions were similar across Intervention and Control

Schools at the beginning of the school year.

In terms of student participation in the Unified Champion Schools program, across the

three Intervention Schools, 162 students (31%) did not participate in the UCS program, 250

students (47%) participated moderately (i.e., participated in one intervention activity), and 115

students (22%) participated intensely (i.e., participated in two or more intervention activities, at

least one of which was Unified Sports or Unified Club). For the students who participated

moderately, almost all (96%) were involved in a Whole School Engagement event.

3.2 Analytic Results

Table 2 displays the results of three multilevel LDV models, showing the impact of

participation in the UCS program on the three student social inclusion outcomes: perceptions of

school social inclusion, attitudes toward peers with ID, and social interactions with students with

ID.

Focusing on perceptions of school social inclusion, baseline levels of the outcome

significantly predicted perceptions at the end of the school year ($B = 0.47$, $p < .001$), indicating

stability in students' perceptions of school social inclusion. Prosocialness ($B = 0.03$, $p < .05$) and

students' extracurricular involvement ($B = 0.48$, $p < .01$) both significantly predicted more

positive perceptions of school social inclusion at the end of the school year. Further, and most

importantly, both moderate ($B = 1.30$, $p < .001$) and intense ($B = 1.22$, $p < .01$) participation in

the UCS program significantly predicted more positive perceptions of school social inclusion at

the end of the school year, even after accounting for students' baseline perceptions. That is,

involvement in UCS program activities predicted greater improvement in students' perceptions

of school social inclusion than would be expected given their baseline characteristics. Lastly,

average trajectories of school social inclusion differed in Control and Intervention Schools, such that students in Control Schools showed significantly less improvement in their perceptions of school social inclusion over the course of the year than did students from Intervention Schools, taking into account students' participation in the UCS program. In other words, students in Intervention Schools—whether they participated in UCS program activities or not—showed more improvement in perceptions of school social inclusion than their Control School counterparts. This suggests a possible "spillover" effect of the Unified Champion Schools program in that the program may provide benefits to all students in Intervention Schools, even those who did not individually participate.

Similar findings were observed regarding students' attitudes toward peers with ID. First, baseline attitudes significantly predicted attitudes at the end of the school year ($B = 0.46$, $p <$ .001), indicating stability in students' attitudes toward their peers with ID. Among control variables, students' social interactions ($B = 0.07$, $p < .05$), prosocialness ($B = 0.03$, $p < .01$), and non-family ("other") contact with a person with ID ($B = 0.35$, $p < .05$) all significantly predicted more positive attitudes toward peers with ID at the end of the school year. Both moderate ($B = 0.90$, $p < .001$) and intense ($B = 1.07$, $p < .001$) participation in the UCS program significantly predicted more positive attitudes at the end of the school year, reflecting the influence of the intervention. That is, participants in the UCS program showed greater improvement in attitudes than non-participants. Control School condition was also significant, but in this case attending a Control School significantly predicted more positive student attitudes at the end of the school year ($B = 0.55$, $p < .01$). Interestingly, the average improvement among students in Control Schools was greater than that of non-participants in Intervention Schools. This is suggestive of a self-selection effect whereby students in Intervention Schools who choose *not* to participate in

the UCS program showed little to no improvement in their attitudes toward peers with ID

compared to the "average" student (or overall trend) in Control Schools, while participants

showed greater improvement than average.

Regarding social interactions with students with ID, baseline values were also predictive

of values at the end of the school year ($B = 0.44$, $p < .001$), again indicating stability in the

outcome. Prosocialness ($B = 0.04$, $p < .01$) and visibility of students with ID in school ($B = 0.06$,

$p < .05$) both significantly predicted increased social interactions at the end of the school year.

Prosocialness consistently predicted greater improvement for all three outcomes, suggesting that

prosocial students may be more open to new experiences and to engaging with their peers with

ID, resulting in greater increases in their perceptions of school social inclusion, attitudes toward

peers with ID, and social interactions with peers with ID. Visibility of students with ID was also

an expected predictor of social interactions, since visibility is not only a requirement for

engaging in social interactions, but may also measure the extent to which students *notice* peers

with ID who remain "invisible" to, or ignored by, others. No other individual control measures

were significant predictors. Both moderate ($B = 1.06$, $p < .001$) and intense ($B = 2.21$, $p < .001$)

participation in the UCS program significantly predicted increased social interactions with

students with ID. Unique to this outcome, however, is the effect of intense participation, which

was more than twice as large as the effect of moderate participation, and this difference was

significant (i.e., their 95% confidence intervals do not overlap). That is, while both moderate and

intense participation predicted increases in social interactions over the course of the school year,

intense participation predicted a much larger increase than did moderate participation. Lastly,

Control School condition was significant, again suggesting a self-selection effect ($B = 0.60$, $p <$

$.05$). As with attitudes toward peers with ID, this result indicates that participants in the UCS

program showed especially large increases in social interactions with peers with ID, whereas students in Intervention Schools who chose *not* to participate showed less growth than the average student in Control Schools.

4. Discussion

The present study continued to document the positive impact of the UCS program on high school students' acceptance of their peers with ID. The results offer clear and consistent evidence that participation in UCS program activities leads to improvements and increases in students' perceptions of school social inclusion, attitudes toward peers with ID, and social interactions with students with ID over the course of a school year. The use of lagged dependent variable modeling controlled for baseline levels of these outcomes at the beginning of the year, as well as for additional individual characteristics (e.g., prosocialness, extracurricular involvement, contact with people with ID outside of school). This approach specifically accounted for what students brought to their participation in the program by self-selecting into each UCS program activity (e.g., their existing attitudes toward people with ID, the extent of their prosocial tendencies). Furthermore, the analysis of data at two timepoints allowed for a focus on change in students over time, as well as clarity in the directionality of these effects. Thus, the results expand on findings from previous studies, which were cross-sectional in nature, and indicate with greater certainty that participation in the Unified Champion Schools program drives positive changes in students' perceptions, attitudes, and behaviors. The results also confirm the relevance and applicability of Simplican et al.'s (2015) ecological approach to social inclusion.

In today's high schools, students with ID are physically present in most school contexts: hallways, cafeterias, non-academic classes, and academic classes. However, the visibility that

comes with this physical inclusion does not necessarily translate into social inclusion. In the present study, visibility of students with ID was not a predictor of the perceptions, attitudes, or behaviors of students without ID. This confirms what has been documented over the past six decades, from Johnson (1950) to Siperstein, Parker, et al. (2007): that the physical presence of students with ID, by itself, often has little substantive impact on their social inclusion within the school. Despite the physical proximity of students with and without ID in various school contexts, these students rarely socially interact with each other beyond "hello" in the hallway. Students without ID reported interacting with their peers with ID in academic and non-academic classes, but not in the less structured settings of the cafeteria and extracurricular activities. In fact, less than two out of ten students who participated in an extracurricular activity with a student with ID socially engaged with that student.

For many students, extracurricular activities like school sports and clubs are part of the typical high school experience and an important facet of overall school engagement (Appleton, Christenson, Kim, & Reschly, 2006; National Center for Education Statistics, 2016). Moreover, participation in extracurricular activities offers myriad benefits for students, such as an increased sense of school belonging, higher self-esteem, and lower rates of depression (Feldman & Matjasko, 2005; Fredricks & Eccles, 2005). The present study sheds a different light on the value of extracurricular activities—as a platform for intentionally designed, multi-tiered interventions (i.e., involving multiple stakeholders within multiple school contexts) that refocus a school's extracurricular framework on deliberate outcomes benefitting individual students and the culture of the school as a whole. Specifically, the UCS program uses the inherently collaborative nature of school sports and clubs to create opportunities for positive social interactions between students with and without ID. Different from other situations in a typical school day in which

students with and without ID are physically together, like in math class or band, Unified Sports

and Unified Clubs are intentionally structured to unite diverse students around common goals

and messages, thus propelling them to interact, communicate, and learn about each other. The

success of these interactions—whether it be athletes with and without ID playing together on a

Unified Sports team or Unified Club members planning and organizing a fundraiser—is then

broadcasted to the larger school community through schoolwide events. Notably, the present

study suggests that the benefits of a multi-tiered approach reach beyond the students who directly

participate. When compared with students in Control Schools, students in Intervention Schools

showed improvement in their perceptions of school social inclusion, even if they did not directly

participate in Unified Champion Schools activities. This finding reflects the mechanisms behind

a schoolwide approach—using a range of school contexts to maximize awareness of the program

across the school community and signal that inclusion is the norm, which in turn influences the

extent to which all students perceive the school as an inclusive environment.

  While the value of the UCS program manifests in a variety of ways and reaches an array

of students, the most substantial benefits stem from Unified Sports and Unified Club in

particular. For example, when students without ID were involved in a Unified Sports team or

Unified Club, the impact of participation in the UCS program on their social interactions with

peers with ID was twice as large as for students who participated in only Whole School

Engagement events. However, by nature, Unified Sports and Unified Club can only

accommodate a limited number of students, and the students who self-select to participate in

these activities often already perceive their school and peers with ID positively. These factors are

inherent in the UCS program; it is a multicomponent program that is embedded in a school's

extracurricular framework and, by definition, extracurricular activities are driven by student

choice. The conundrum, therefore, is how does a school make UCS program activities available to students in a manner consistent with its other extracurricular activities, while at the same time reaching those students who may directly benefit most from inclusive experiences—those who are typically *not* engaged in their school?

One strategy may be to place more emphasis on Whole School Engagement events like pep rallies, fundraisers, and awareness campaigns. These activities are designed to bring the concept of inclusion to the entire school community by showcasing the mutual benefits of students with and without ID working and playing together. To enhance the efficacy of Whole School Engagement events, schools should consider focusing on the power of "social referents"—students who "provide normative cues regarding what is acceptable and desirable" for other students (Paluck & Shepherd, 2012, p. 900). A social referent is uniquely influential in a particular network because of the extent of his or her social ties. In the context of high school, social referents may be "widely known" students who are "personally connected" to many members of the school community, or students who are leaders of the various "cliques" at their school (Paluck & Shepherd, 2012, p. 900). Involving social referents in schoolwide events has been effective in reducing harassment behavior and promoting anti-harassment behavior at the high school level (Paluck & Shepherd, 2012), and may be a viable approach to promoting the collective social norm of accepting differences. For example, to take advantage of the status that social referents hold in the school, these students could be recruited and given visible, interactive roles in UCS program activities, like hosting a Unified Sports Pep Rally or asking students in the cafeteria to sign a pledge of respect like the R-word Campaign. Because social referents have enhanced "psychological salience" with their peers (Paluck & Shepherd, 2012, p. 911), they will more effectively reach other students in demonstrating and communicating the inherent value of

inclusion. As shown in the present study, students embrace the notion of a socially inclusive

school environment through participation in Whole School Engagement events alone. For

example, at the beginning of the school year, 36% of students felt that their peers "often" liked

participating with students with ID during activities; by the end of the year, after participating in

one or more Whole School Engagement events, 57% of students felt this way. Overall, by

focusing on schoolwide events and involving social referents in the UCS program, schools could

naturally attract the attention and engagement of a broader range of students, thereby capitalizing

on the benefits of the program to create more widespread positive changes toward an inclusive

school culture.

       While the impact of participation in the UCS program is clear, the importance of student

characteristics in predicting attitudes, perceptions, and behaviors cannot be overlooked. In the

present study, students who had a non-family acquaintance with ID outside of school had more

positive attitudes toward their peers with ID at school. Furthermore, students who were involved

in any extracurricular activities at school (including but not limited to UCS program activities)

viewed their school more positively in terms of how welcoming it is to students with ID. Finally,

students with greater prosocial tendencies (e.g., trying to help others, empathizing with those in

need) viewed their school more positively, had more positive attitudes toward their peers with

ID, and interacted with these peers more often. Building on past studies, these findings confirm

the connection between individual-level characteristics and common social inclusion outcomes,

like attitudes toward people with ID (Scior, 2011; Siperstein, Norins, & Mohler, 2007;

Siperstein, Parker, et al., 2007). Importantly, however, the results of the present study

demonstrate that participation in the UCS program predicts students' attitudes, perceptions, and

social interactions *above and beyond* their individual characteristics. In other words, even for

students who are engaged in extracurricular activities, know people with ID outside of school, and have prosocial tendencies before becoming involved in the UCS program, the program fosters more inclusive thoughts and behaviors.

4.1 Limitations and Future Directions

Implementing a schoolwide program, particularly one that is multi-tiered and has multiple interconnected components (e.g., a Unified Club planning a Fans in the Stands event at a Unified Sports game), is not without its challenges. Intervention Schools were asked to implement specific UCS program activities in the span of one academic year, which was beyond the capabilities of two of the schools. With more time and preparation, some schools may be able to overcome the range of challenges that accompany implementation, as one of the two schools was able to implement the program with fidelity in the academic year following the study. During the study, this school established a basketball team for students with ID, but because students without ID only helped as volunteers and did not play in games alongside their peers with ID, this team did meet the Unified Sports requirements for the study. In the subsequent year, the school successfully transformed their basketball team into a Unified Basketball team, with students with and without ID playing together in regular practices, games, and some tournaments.

It is worth noting that when first being evaluated, interventions often begin with an implementation team comprised of the outside researchers conducting the evaluation, who serve to guide and ensure fidelity of the intervention. In the present study, one of the implied goals was to explore the ability of schools to implement the UCS program with fidelity, using a prescribed model and guidelines, but with limited involvement from the research team so that the conditions in which the program was implemented were as natural as possible (see Odom et al., 2005).

Encouragingly, three Intervention Schools successfully implemented the program in one academic year following this approach. Moreover, all three of these schools were able to sustain the program in the year following the study.

Moving forward, it will be important to gain a deeper understanding of what constitutes "school readiness" for implementing a schoolwide, multi-tiered intervention like the UCS program. A worthwhile first step is to acknowledge the common structures and characteristics of the three schools that successfully implemented the UCS program in the present study. Anecdotally, these schools embraced the program from the beginning as a shared, schoolwide effort, with buy-in not only from the liaison but also from other special education staff, general education staff, and administrators. In addition, these schools' extracurricular frameworks were central to their school culture and, consequently, there was strong extracurricular engagement by students before the UCS program was introduced. These factors likely played a role in spreading awareness of the new program and activities across the school and creating buy-in from students, as well as ensuring a leadership base of staff and students that was resilient to turnover. Understanding the "prerequisites" that contribute to schools being ready to implement and sustain programs like the UCS program represents a critical last step in the continuum of educational science—"to determine the factors that lead to adoption of effective practices in typical school systems under naturally existing conditions" (Odom et al., 2005). As shown in this study, for schools that are ready, and for schools that could become ready, the payoff would follow in an array of positive results.

Findings from the present study are based on information from a range of students without ID—those who did and did not participate in the UCS program from schools that did and did not implement the program. Making up the majority of the student body, these students were

able to provide a detailed picture of the inclusion of their peers with ID across many school

contexts. To complement the perspectives of students without ID, future studies should focus on

the perspectives of students *with* ID. As part of a larger, ongoing evaluation of the UCS program,

interviews with students with ID and their teachers have begun to shed light on the direct impact

of the program on students with ID. In the words of one of these students, as a Unified Sports

athlete, she feels like she belongs in her school:

> [Other students] come up to me and give me high fives, and they talk to me. Sometimes
>
> they'll sit with me at lunch. It's usually some of the popular kids will talk to me since
>
> they kind of know that I'm on the Unified team. They like to talk to me about the games
>
> and stuff like that. (Anonymous, 2017b)

Similarly, teachers have observed differences in students with ID before and after they

participated in the UCS program:

> In past years, oftentimes [students with ID] were just walking back to their room with
>
> their head down and just looking at their food or looking at the floor, and now they are
>
> looking up. It's a small thing, but I think that that has a lot to do with the fact that they
>
> know so many more people in the hallways. (Anonymous, 2017a)

Building on this preliminary evidence, it will be important to identify methodologies that can be

used in subsequent studies of the UCS program to capture the thoughts and feelings of students

both with *and* without ID. A comprehensive understanding of the experiences of students with

ID would not only complete the picture of inclusion in today's high schools, but may also inform

the development, implementation, and evaluation of other multi-tiered interventions like the

UCS program that could benefit all members of diverse school communities.

4.2 Conclusion

In the paradigmatic shift in the education of students with ID, inclusive extracurricular activities are the next step forward. It is not the specific activities *per se*, but the concept of an intentionally designed, multicomponent, schoolwide intervention, and the fact that there is accumulating evidence that this concept leads to tangible changes in the school culture. The extracurricular framework that is at the heart of the UCS program serves as the normative context by which to demonstrate the mutual benefits of inclusion for students with and without ID and for the school as a whole. In answering to Gottlieb (1981), it has taken more than 50 years, but we are now closer than ever to "fulfilling the promise."

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Table 1. Student demographics

Variable	N/n	%	M (SD)	Range
Overall	1,854			
Gender				
Male	950	52%		
Female	878	48%		
Age			15.5 (1.2)	13-19
Grade				
9th	512	29%		
10th	457	25%		
11th	442	25%		
12th	371	21%		
Race/Ethnicity[i]				
White	1,289	81%		
Hispanic	458	26%		
Black	218	14%		
Other	199	13%		

[i]Percentages add up to more than 100% because students could select more than one race/ethnicity.

Table 2. Multilevel LDV models concerning student participation in the UCS program and

student social inclusion outcomes at the end of the school year (N = 1,230)

	Perceptions of school social inclusion	Attitudes toward peers with ID	Social interactions with students with ID
	B (SE)	B (SE)	B (SE)
Predictors at baseline			
Perceptions of school social inclusion	0.47*** (.03)		
Attitudes toward peers with ID		0.46*** (.03)	
Social interactions with students with ID			0.44*** (.03)
Gender (female)[i]	0.07 (.16)	0.22 (.14)	-0.27 (.15)
Grade (11th)[ii]	0.05 (.17)	0.05 (.16)	0.07 (.18)
Grade (12th)[ii]	0.09 (.19)	-0.00 (.16)	0.32 (.20)
Prosocialness	0.03* (.01)	0.03** (.01)	0.04** (.01)
Extracurricular involvement	0.48** (.15)	0.24 (.13)	0.15 (.15)
Family contact[iii]	-0.31 (.22)	0.38 (.19)	0.04 (.20)
Other contact[iii]	-0.03 (.17)	0.35* (.15)	0.20 (.17)
Visibility in school	0.03 (.02)	0.00 (.02)	0.06* (.03)
School condition (Control)[iv]	-0.58** (.22)	0.55** (.19)	0.60* (.24)
Moderate participation[v,vi]	1.30*** (.26)	0.90*** (.22)	1.06*** (.26)
Intense participation[v,vi]	1.22** (.35)	1.07*** (.28)	2.21*** (.31)
F; df	52.53***; 13	51.60***; 13	51.70***; 12

Table 2 (continued)

$* p < .05, ** p < .01, *** p < .001$

[i]Reference group is Male.

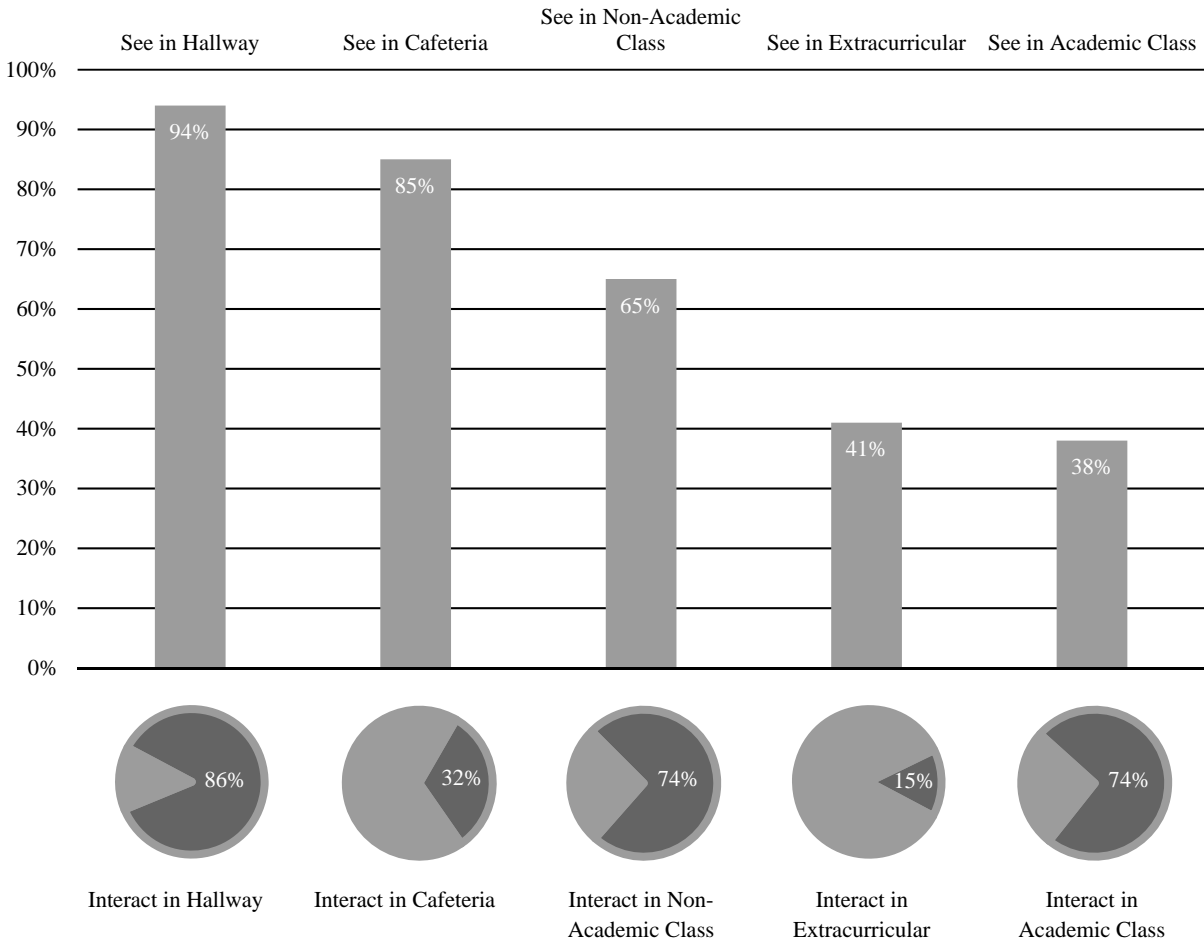[ii]Reference group is 10th grade.

[iii]Reference group is No contact.

[iv]Reference group is Intervention School.

[v]Reference group is No participation.

[vi]Measured at the end of the school year (in the follow-up survey).

Figure 1. Visibility of and social interactions with students with ID in school[i]

[i]Pie charts depict percentage of students who interacted with peers with ID out of students who saw peers with ID in each setting.